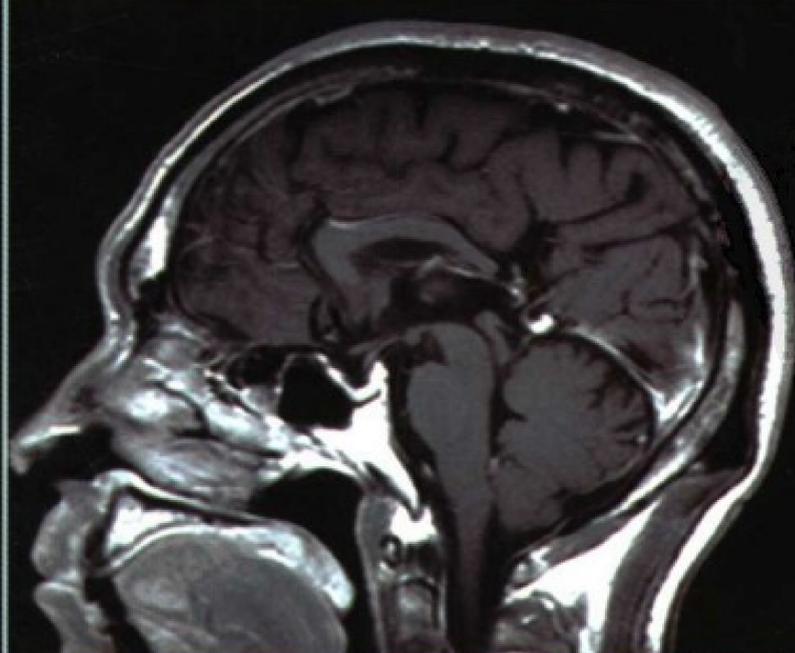
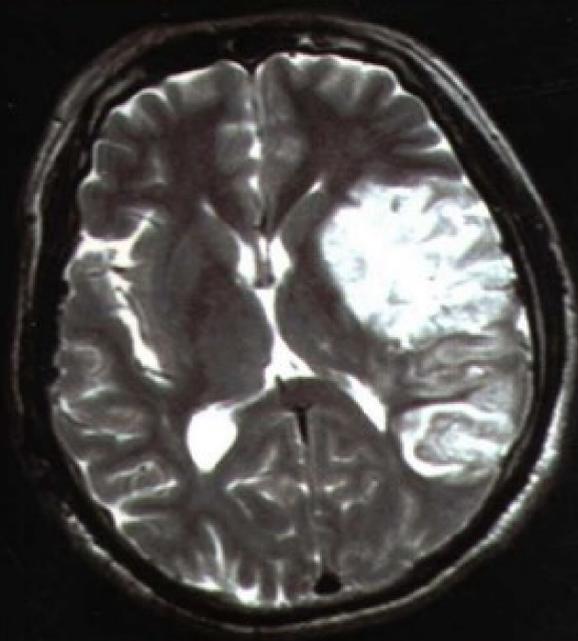


# 医学影像学

## 诊断图谱 和报告

——中、英文对照

主编 武乐斌 王锡明 孙丛 王涛



军事医学科学出版社

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# 医学影像学 诊断图谱和报告

YIXUE YINGXIANGXUE ZHENDUAN TUPU HE BAOGAO

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本书共四章，内容包括普通X线、CT、MRI和DSA等方面的影像诊断，并配有大量的典型病例的图片资料。中、英文词汇检索涉及各个系统的疾病诊断。本书对规范中、英文报告的书写具有示范作用，对提高专业读片能力和影像诊断能力有一定的价值。本书既可当作诊断用书，又可当作工具用书。适于影像专业的大学生、研究生及影像专业医师使用。



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## 内容提要

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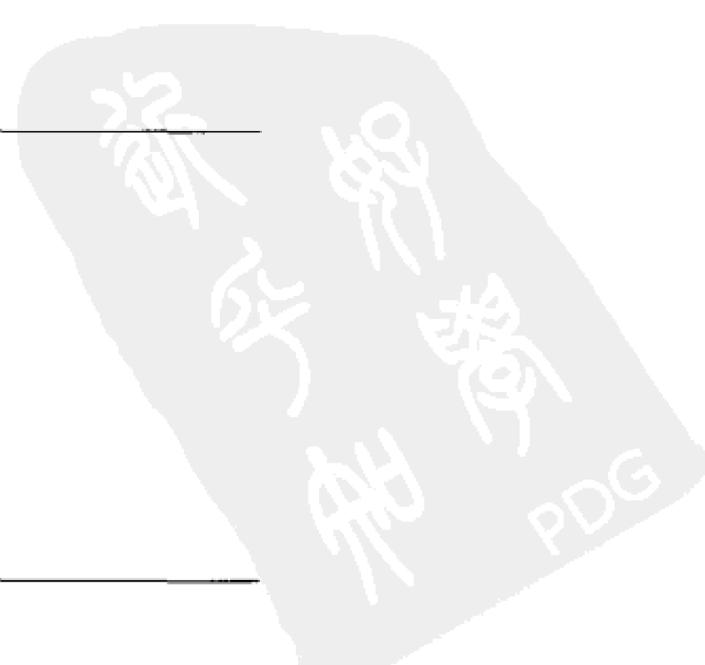
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# 《医学影像学诊断图谱和报告 ——中、英文对照》编委会

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# 序

随者现代科学的迅猛发展,医学影像学出现了很大的飞跃,与国外的学术交流也日益增加。为了提高广大影像学医师的业务水平及英文报告书写能力,武乐斌教授等主编了《医学影像学诊断图谱和报告——中、英文对照》一书。

全书共四章,10余万字,300余幅图片,并附有近600个中英文词汇的检索,全书覆盖面广,从普通X线诊断到CT、MRI及DSA诊断,从正常影像学表现到各种常见病的影像学诊断,同时,还有较新的、常见的影像学特殊检查技术的应用,如CTA、MRA等。报告书写规范,涉及面广,内容丰富、翔实,为正确书写中英文医学影像学报告提供了有价值的参考。

本书内容丰富、全面、新颖、实用,层次清楚,文字简练,图文并茂,是影像学医师及临床医师,尤其是医学影像学硕士、博士研究生的必备用书。深信该书出版后,定会得到广大同道们的欢迎。祝贺本书的出版。

吴恩志

2006年6月

# 前 言

近年来,随着医学科学技术的不断发展,医学影像诊断学新理论和新技术不断涌现,同时与国外的学术交流也日益增加,对医学影像诊断专业人员的专业水平和素质的要求日益提高。其中,提高医学影像诊断医师的读片及中、英文读写能力尤为迫切和重要。因此,我们编写了《医学影像学诊断图谱和报告——中、英文对照》一书。

本书共四章,10余万字,其中包括300余幅图片,并附有近600个中英文词汇的检索。内容涉及面广,包括普通X线、CT、MRI和DSA等方面的影像学诊断,主要涵盖了目前临床上常见疾病以及影像学诊断新技术,突出实用性和基础性。典型的影像图片清晰、精致,简明的文字突出描述了影像学特点,对规范中、英文报告的书写具有示范作用,并且对提高影像学诊断能力也有一定的价值。本书既可当作诊断用书,又可当作工具用书。

作为影像诊断学的专业书籍,本书主要是供医学影像诊断医师、相关专业学生,以及临床医师等参考。对广大硕士、博士考生提高入学考试英文读片能力亦有重要参考价值。

本书是山东省医学影像学研究所各位学者多年来临床经

验和教学知识的积累和总结,得到了山东省医学影像学研究所领导的大力支持,谨表深深的谢意!

限于学识水平和能力,本书的错误和不足之处,敬请各位同仁批评指正,以便进一步修改。

编者

2006年2月

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# 第一章 X线

## 一、平片

### 1. 正常胸部平片



图 1-1 后前位胸部平片

Fig 1 · 1 Posteroanterior chest plain film



图 1-2 左侧位胸部平片

Fig 1 · 2 Left-lateral chest plain film

**检查名称:**胸部平片。

**检查方法:**后前位及左侧位投照。

**检查所见:**胸廓对称, 双侧肺野清晰, 肺纹理走行自然, 肺内未见具体病变; 双肺门不大, 纵隔不宽, 心影大小、形态尚好, 膈肌及所见肋骨未见异常。

**诊断意见:**胸部平片未见明显异常。

**Name of examination:** Plain chest radiography.

**Technique:** Posteroanterior and left-lateral projection.

**Findings:** The contour of the chest is symmetric. Both sides of lung fields are clear. The lung-markings are natural. No lesion is found in lungs. The lung hila are not big. The mediastinum is not wide. The shape and size of the heart are normal. The diaphragm and the visible ribs are unremarkable.

**Diagnosis:** Normal chest plain film.

## 2. 周围型肺癌

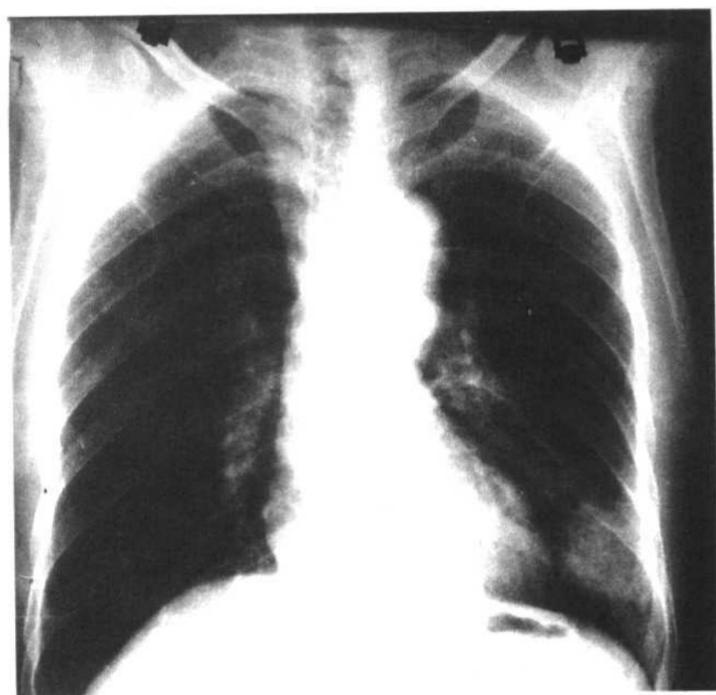


图 1-3 后前位胸部平片

Fig 1·3 Posteroanterior chest plain film



图 1-4 左侧位胸部平片

Figure 1·4 Left-lateral chest plain film

**检查名称:**胸部平片。

**检查方法:**后前位及左侧位投照。

**检查所见:**左下肺后基底段可见一大小约 4.0 cm × 3.0 cm 的类圆形团块状影,密度均匀,边缘分叶,边界清楚。所见肋骨及胸椎未见病变,心影及膈肌未见异常。

**诊断意见:**左下肺肿块,肺癌可能性大,建议 CT 检查。

**Name of examination:** Plain chest radiography.

**Technique:** Posteroanterior and left-lateral projection.

**Findings:** There is a round-shaped mass in the post-basic segment of the right lung, with a size of 4.0 cm × 3.0 cm, a lobulated-edge, well-defined margin and a homogeneous attenuation. The ribs and thoracic vertebrae seem to be normal. The shadow of heart and diaphragms demonstrate no abnormal sign.

**Diagnosis:** Left low-lobe lung mass, most possibly be lung cancer, chest CT is suggested.

### 3. 右上肺中心型肺癌并肺不张

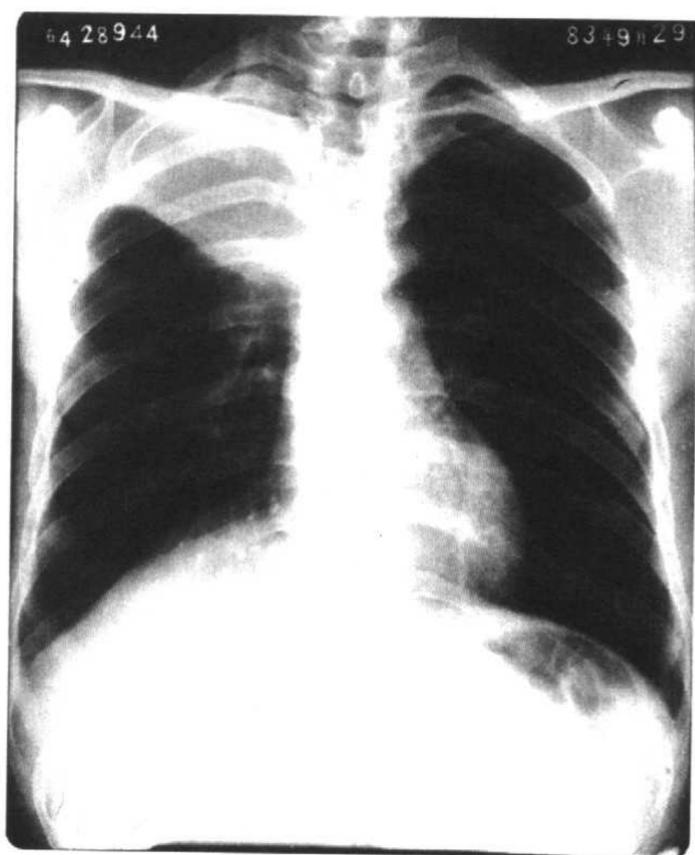


图 1-5 胸部后前位平片

Fig 1 · 5 Posteroanterior plain film of chest

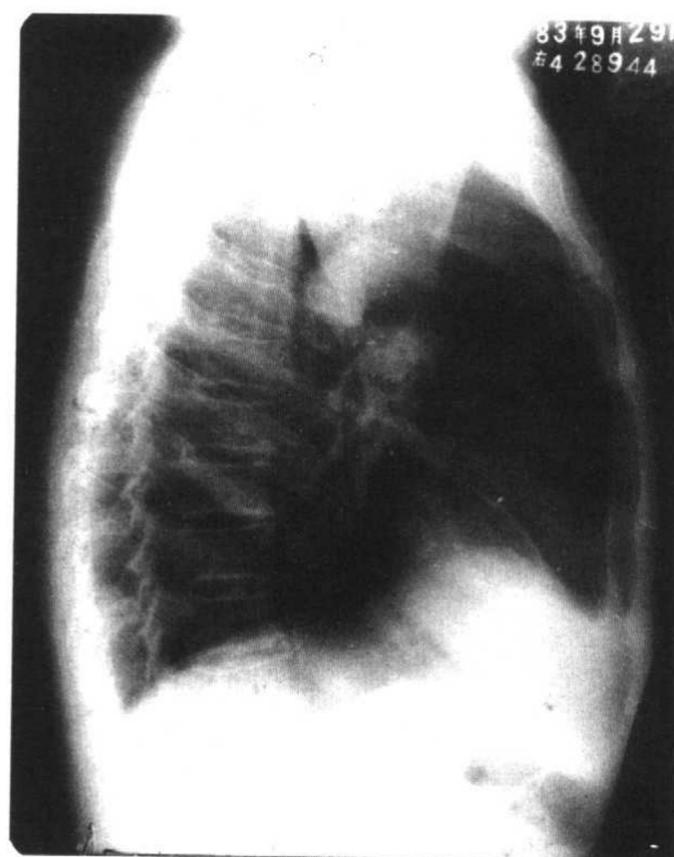


图 1-6 胸部右侧位平片

Fig 1 · 6 Right-lateral plain film of chest

检查名称：胸部平片。

检查方法：后前位及右侧位投照。

检查所见：右肺门区可见团块状影，上缘显示不清；右上叶肺不张并向上收缩，其下缘与肿块形成“倒 S”形外观。右肺门上提；左肺未见异常。所见肋骨及胸椎未见病变，心影及膈肌未见异常。

诊断意见：右上肺中心型肺癌并肺不张。

**Name of examination:** Plain chest radiography.

**Technique:** Posteroanterior and right-lateral projection.

**Findings:** There is a mass in the hilar of the right lung with ill-define upper margin. Obstructive atelectasis can be seen in the upper lobe of right lung. The lower margin of the atelectasis and the mass demonstrate a sign of “reversal S”. The shadow of right lung hilar is elevated. The ribs and thoracic vertebraes seem to be normal. The shadow of heart and diaphragms demonstrate no abnormal sign.

**Diagnosis** Lung cancer of right upper lobe (central type with atelectasis).

#### 4. 双侧肺水肿

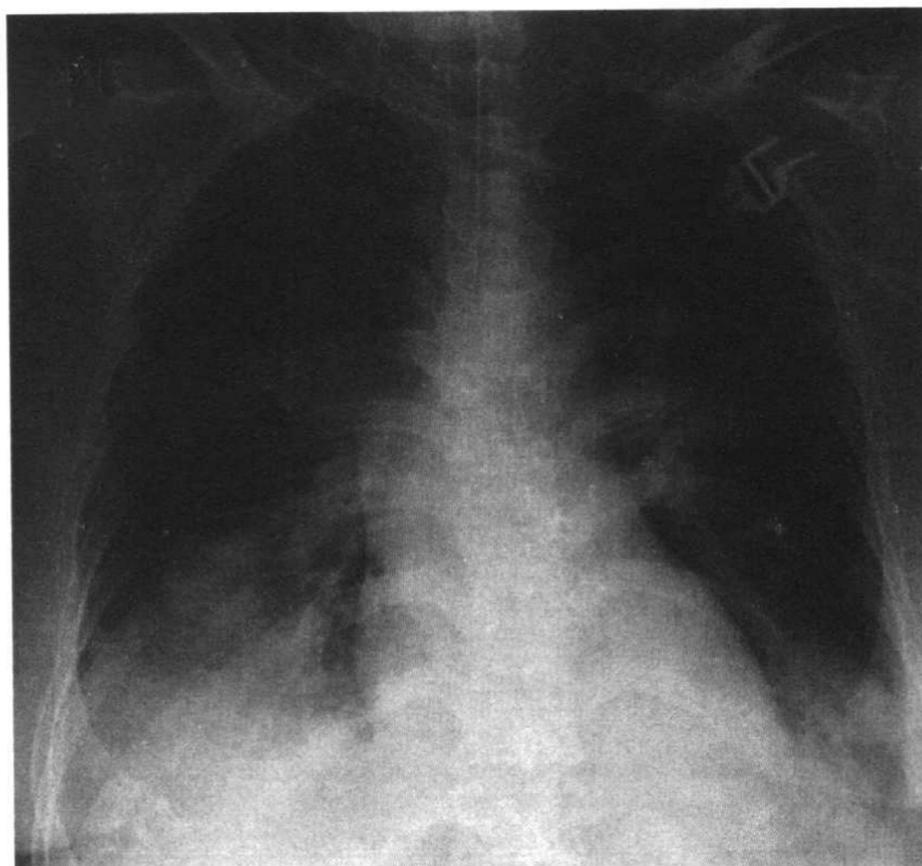


图 1-7 胸部后前位平片

Fig 1·7 Posteroanterior plain film of chest

**检查名称:** 胸部平片。

**检查方法:** 后前位投照。

**检查所见:** 双侧肺野下部可见大片密度增高区域,以右下肺为著,双肺门区可见片状高密度,双侧较对称;上述病变边缘模糊,密度不均匀;双侧膈肌显示不清,心影显示尚正常,胸廓未见异常。

**诊断意见:** 双侧肺水肿。

**Name of examination:** Plain chest radiography.

**Technique:** Posteroanterior projection.

**Findings:** There are cloud-shaped areas in the lower part of the bilateral lungs, and the right lung is remarkable. Symmetric piece-like high attenuation can be seen in the hilar region of the bilateral lungs. The lesions mentioned above are inhomogeneous, with a vague margin. The bilateral diaphragms can't be seen clearly. The heart shadow is normal. No abnormal sign of the chest contour can be seen.

**Diagnosis:** Bilateral pulmonary edema.

5. 急性粟粒性肺结核

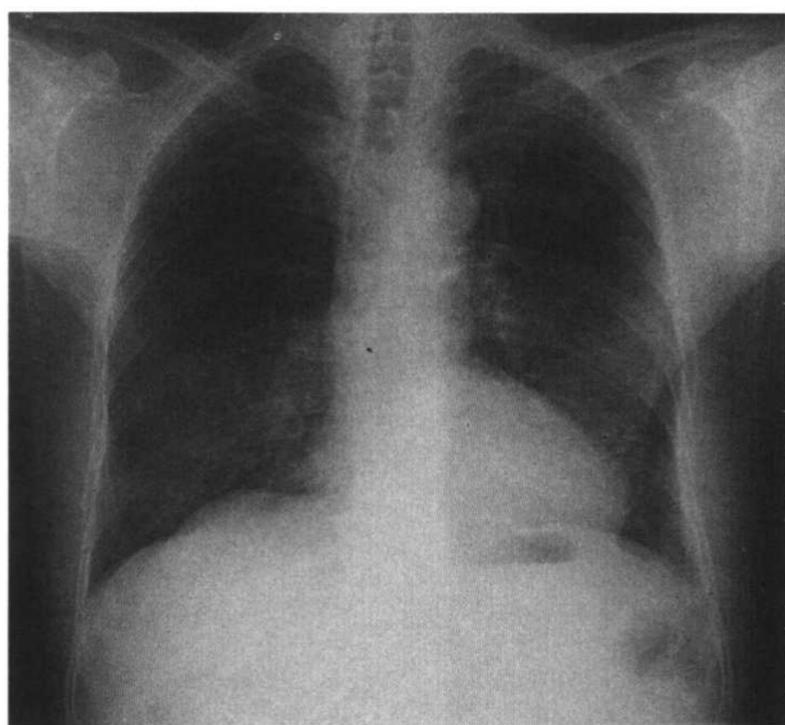


图 1-8 胸部后前位平片

Fig 1·8 Posteroanterior plain film of chest

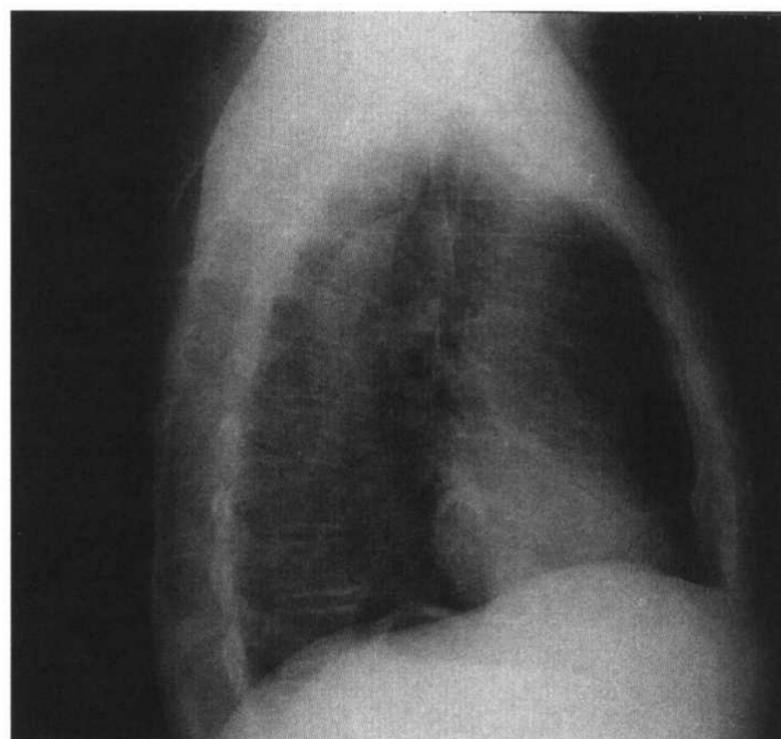


图 1-9 胸部左侧位平片

Fig 1·9 Left-lateral plain film of chest

**检查名称:**胸部平片。

**检查方法:**后前位及左侧位投照。

**检查所见:**双侧肺野内可见弥漫分布多数小结节影,直径约 1.5 mm,大小、密度、分布均匀一致;胸廓对称,双肺门不大,纵隔不宽,心影大小、形态尚好,膈肌及所见肋骨未见异常。

**诊断意见:**急性粟粒性肺结核。

**Name of examination:** Plain chest radiography.

**Technique:** Posteroanterior and left-lateral projection.

**Findings:** There are a lot of small nodes with a diameter of 1.5 mm in the both sides of lung fields, whose size, density and distribution are homogeneous. The contour of the chest is symmetric. The bilateral lung hila are not big. The mediastinum is not wide. The shape and size of the heart are normal. The diaphragms and the visible ribs have nothing remarkable.

**Diagnosis:** Acute miliary tuberculosis in bilateral pulmonary.

6. 正常腹部平片

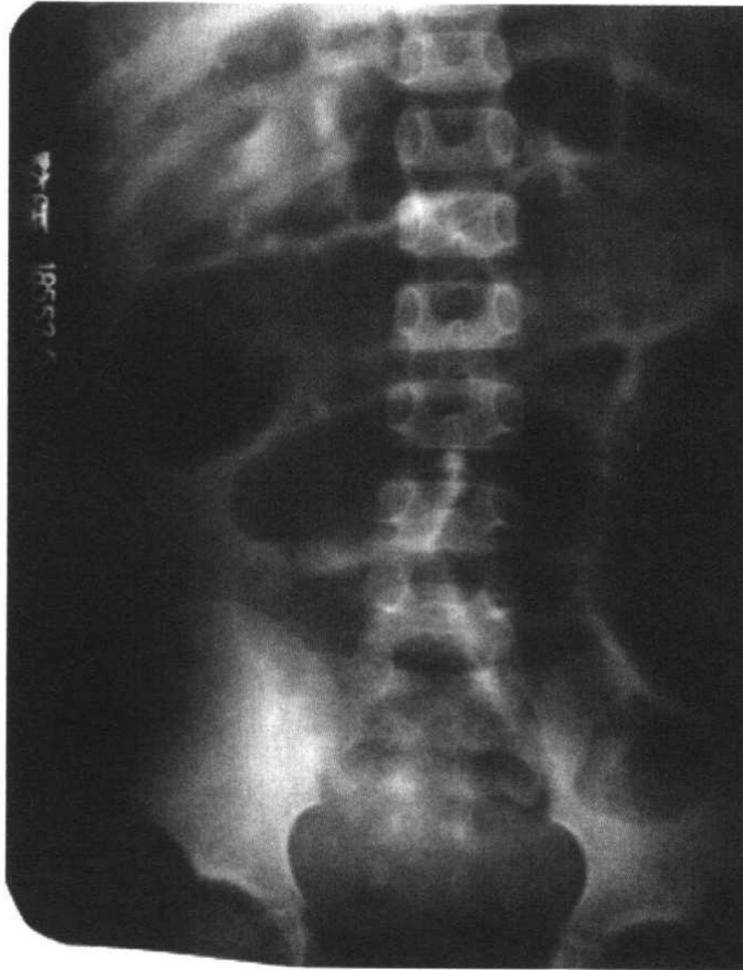


图 1 - 10 前后位腹部平片

Fig 1 · 10 Anteroposterior abdomen plain film

**检查名称:**腹部平片。

**检查方法:**仰卧前后位投照。

**检查所见:**腹部未见明显不透光异物,肝胆肾区未见高密度结石;肠腔未见明显扩张,未见明显气液平面,膈下未见游离气体。所见腰椎及骨盆未见明显骨质异常。

**诊断意见:**腹部平片未见明显异常。

**Name of examination:** Plain abdomen radiography.

**Technique:** Supine overhead projection.

**Findings:** There is no radiopaque foreign body seen in abdomen; no high-attenuation stone can be seen in the regions of liver, gallbladder and kidney. Bowels do not appear distension. No free gas is demonstrated under the diaphragm. The vertebrae and pelvis bone seem not to be abnormal.

**Diagnosis:** No abnormality is revealed in the abdomen plain film.

7. 髋关节结核



图 1 - 11 骨盆平片

Fig 1 · 11 Plain film of pelvis

**检查名称:**骨盆平片。

**检查方法:**骨盆前后位投照。

**检查所见:**左髋臼关节面模糊,可见小的骨质破坏区;股骨头关节面不规则;髋关节间隙变窄,关节周围骨质疏松。右髋关节未见明显异常,骨盆余部未见骨质异常。

**诊断意见:**左髋关节结核。

**Name of examination:** Plain film of pelvis

**Technique:** Anteroposterior projection

**Findings:** The surface of the left acetabulum in hip joint is vague, and there are many small zones of bone destruction. The surface of left femoral head is irregular, and the left hip joint space is narrow. Osteoporosis can be seen around the left hip joint. The right hip joint is normal. There is no lesion in the other regions of the pelvis.

**Diagnosis:** Tuberculosis of left hip joint.

## 8. 正常肘关节平片



图 1 - 12 前后位肘关节平片

Fig 1 · 12 Anteroposterior elbow plain film

**检查名称:** 双侧肘关节平片。

**检查方法:** 前后位投照。

**检查所见:** 双侧肱骨下端及尺、桡骨上段未见明显骨质破坏或骨质硬化, 未见明显骨膜反应, 肘关节未见间隙狭窄或脱位, 周围软组织未见肿胀。

**诊断意见:** 双侧肘关节平片未见明显异常。

**Name of examination:** Plain film of bilateral elbow.

**Technique:** Anteroposterior projection.

**Findings:** There is no bone destruction or osteosclerosis seen on humerus, ulna or radius bone. No periosteal reaction is found. The joint is not dislocated, and its space is not narrow. The soft tissue around the joint is not swelling.

**Diagnosis:** Normal elbows plain film.

9. 胫骨骨折



图 1-13 左胫、腓骨下段前后位及左侧位平片

Fig 1 · 13 Anteroposterior and left-lateral plain film of lower part of left tibia and fibula

**检查名称:** 左侧胫、腓骨下段平片。

**检查方法:** 前后位及侧位投照。

**检查所见:** 左侧胫骨下段骨皮质不连续,可见斜形骨折线,未见明显错位,未累及踝关节;腓骨下段未见异常。

**诊断意见:** 左侧胫骨下段骨折。

**Name of examination:** Plain film of the lower part of left tibia and fibula.

**Technique:** Anteroposterior and lateral projection.

**Findings:** The cortex of the left lower part of tibia is not continuous. An oblique fissure can be seen, but there is no obvious angle formation or abnormal removing of the breaking ends. The ankle joint is not affected. The lower part of left fibula is normal.

**Diagnosis:** Fracture of the lower part of left tibia.

## 10. 急性骨髓炎

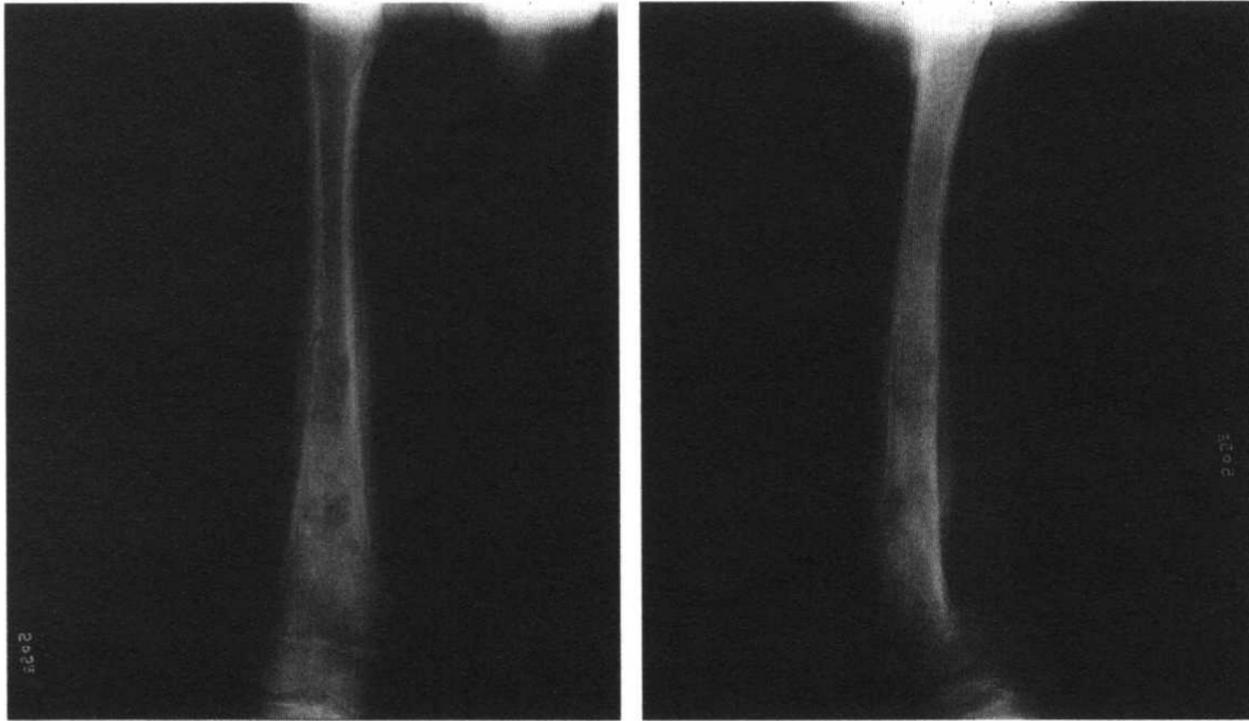


图 1-14 右股骨前后位及侧位平片

Fig 1 · 14 Anteroposterior and lateral plain film of right femur

**检查名称:**右股骨平片。

**检查方法:**右股骨前后位及侧位投照。

**检查所见:**右股骨中下部及干骺端可见长约 16 cm 之不规则病变区域,边界不清,其内可见多发骨质破坏及骨质硬化区域,边缘可见层状或线状骨膜反应,周围组织明显肿胀。骨骺及关节未见受累。

**诊断意见:**右股骨中下段急性骨髓炎。

**Name of examination:** Plain film of right femur.

**Technique:** Anteroposterior and lateral projection.

**Findings:** There is a irregular zone of lesion in the middle-low segment and metaphysis of right femur with a longitude of 16 cm and a vague margin; there are multiple regions of bone destruction and osteosclerosis in it; slice-like and linear periosteal proliferation can be seen, the soft tissue around the bone swells obviously, the epiphysis and the knee joint are not involved.

**Diagnosis:** Acute osteomyelitis in the middle-low part of right femur.

## 11. 骨巨细胞瘤



图 1-15 左膝关节前后位平片



图 1-16 左膝关节左侧位平片

Fig 1 · 15 Anteroposterior plain film of left knee

Fig 1 · 16 Left-lateral plain film of left knee

**检查名称:**左膝关节平片。

**检查方法:**左膝关节前后位及左侧位投照。

**检查所见:**左股骨下端可见大小约 5.0 cm × 5.0 cm × 4.0 cm 之类圆形骨质破坏区,其内可见多数分隔,骨皮质明显膨胀变薄,局部区域骨皮质中断,周围可见软组织肿块;病变上端与正常骨质交界清楚,病变下端抵达关节面,但关节未见受累。

**诊断意见:**左股骨下端骨巨细胞瘤。

**Name of examination:** Plain film of left knee.

**Technique:** Anteroposterior and lateral projection.

**Findings:** There is a round-like zone of bone destruction in the lower end of left femur, with a size of 5.0 cm × 5.0 cm × 4.0 cm, in which several septa can be seen. The bone cortices distend and become thin, and some region of local bone cortices can be seen disrupted, around which soft mass is demonstrated. The upper end of the lesion is clear, and the lower end reaches to the level of the knee joint, but the knee joint is not involved.

**Diagnosis:** Giant-cell tumor of left femur in the lower end.

## 12. 骨肉瘤

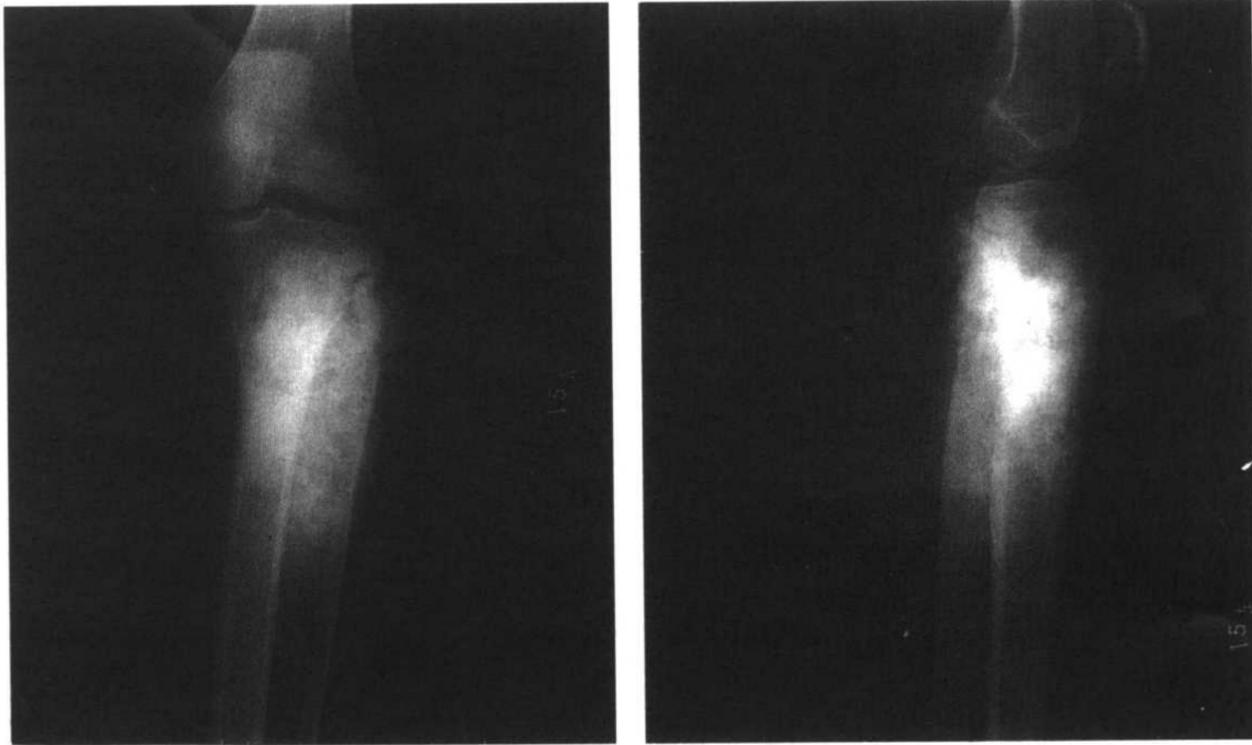


图 1-17 左膝关节前后位及侧位平片

Fig 1 · 17 Anteroposterior and lateral plain film of left knee

**检查名称:**左膝关节平片。

**检查方法:**左膝关节前后位及侧位投照。

**检查所见:**左胫骨上部干骺端可见大小约 7.0cm × 6.0cm × 5.0cm 之不规则骨质密度增高区域,边界不清,可见针状骨膜反应及大量肿瘤骨形成并向周围软组织内延伸,局部可见明显软组织肿块,骨质破坏不明显,关节未见受累。

**诊断意见:**左胫骨骨上端骨肉瘤。

**Name of examination:** Plain film of left knee.

**Technique:** Anteroposterior and lateral projection.

**Findings:** There is an irregular zone of osteosclerosis, with a size of 7.0 cm × 6.0 cm × 5.0 cm and a vague margin in the upper metaphyseal end of tibia; needle-like periosteal proliferation and large amount of tumor bone are formed and stretch into the soft tissue, and obvious soft tissue mass can be seen around it. There is no remarkable bone destruction. The knee joint is not involved.

**Diagnosis:** Osteosarcoma of left tibia in the upper end.

## 二、消化道钡餐检查

### 1. 正常上消化道钡餐

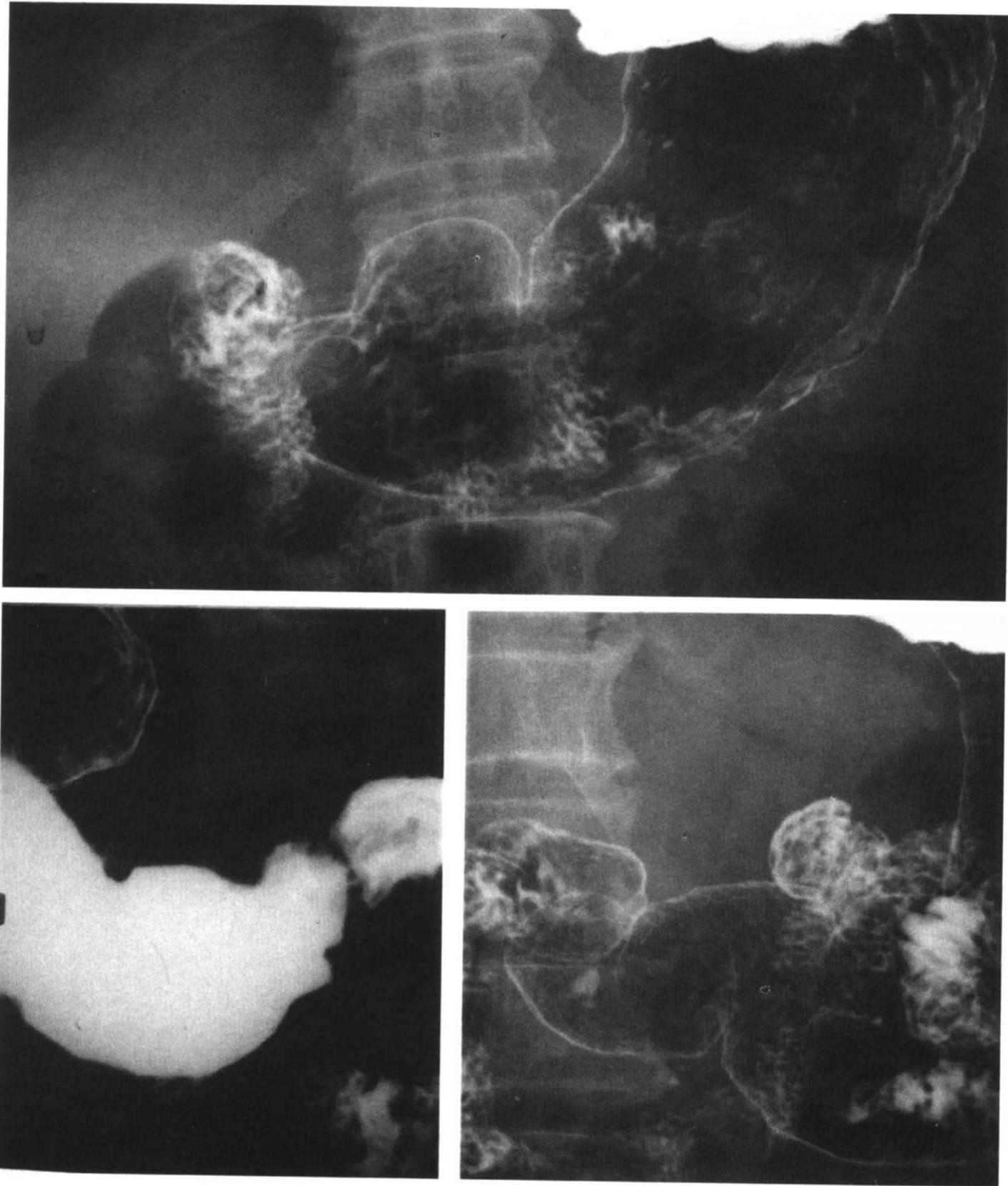


图 1 - 18 上消化道钡餐造影摄片

Fig 1 · 18 Upper gastrointestinal barium meal examination and photograph

**检查名称:**上消化道钡餐造影检查。

**检查方法:**常规方法。

**检查所见:**食管黏膜连续,管壁柔软,蠕动及排空正常;胃黏膜连续、规则,胃壁光滑柔软,未见龛影,胃腔未见狭窄或充盈缺损,胃蠕动及动力未见异常;十二指肠球及肠圈无异常表现。

**诊断意见:**上消化道钡餐造影检查未见异常。

**Name of examination:** Upper gastrointestinal barium meal examination.

**Technique:** Routine.

**Findings:** The folds of esophagus are continuous, the wall is soft, the peristalsis and evacuation are normal; the folds of stomach are continuous and regular, the wall is smooth and soft, no niche is seen, no stenosis and filling defect is found, peristalsis and dynamics are normal. No abnormality is found in duodenal cap and loop.

**Diagnosis:** No abnormality is found in the upper gastrointestinal barium meal examination.

2. 胃窦炎

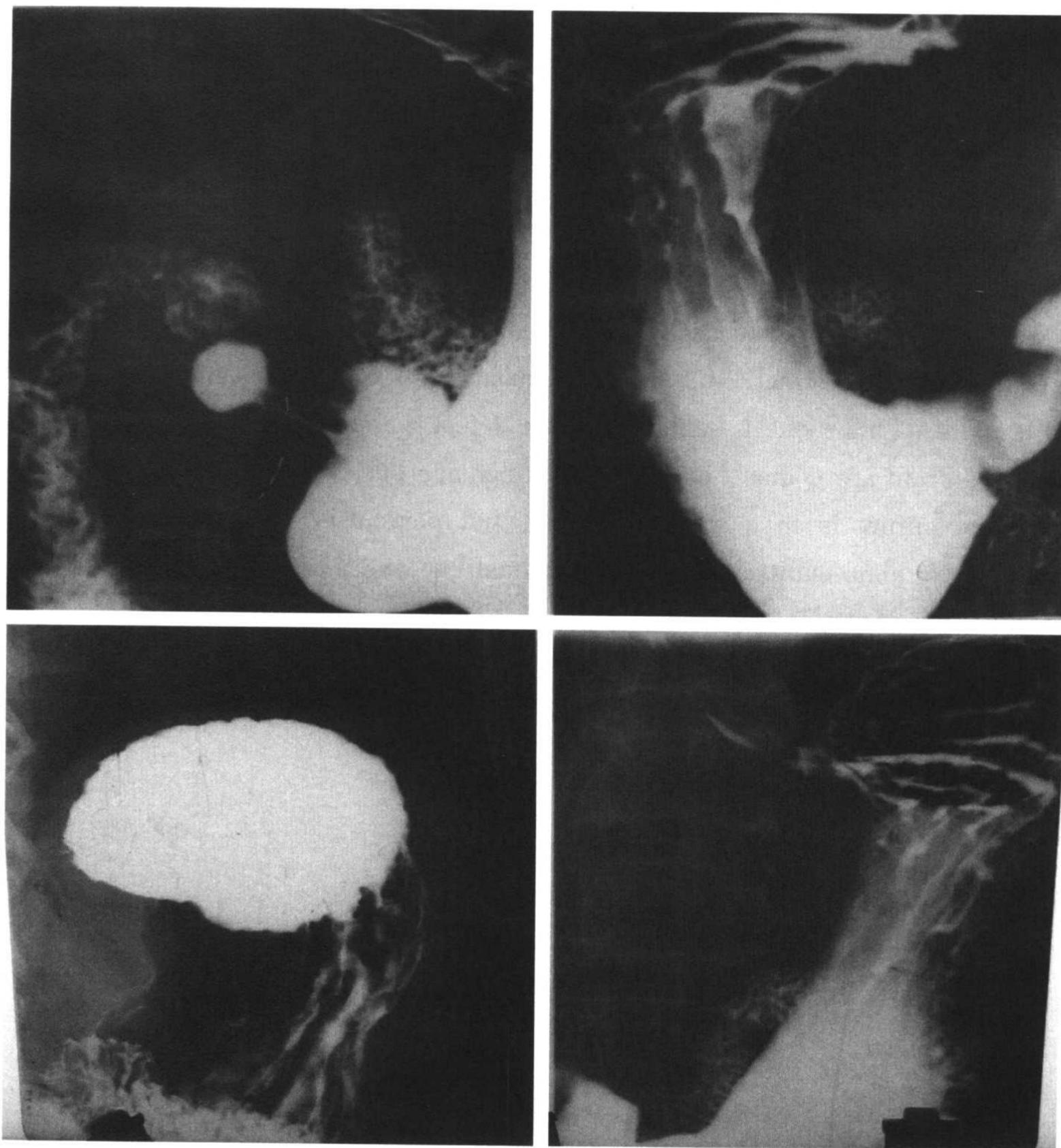


图 1 - 19 上消化道钡餐造影摄片

Fig 1 · 19 Upper gastrointestinal barium meal examination and photograph

**检查名称:**上消化道钡餐造影检查。

**检查方法:**常规方法。

**检查所见:**食管黏膜连续,管壁光滑柔软,蠕动及排空正常;胃黏膜连续、规则,胃壁光整柔软,未见龛影,胃腔内未见充盈缺损,胃窦黏膜结节状增粗,不规则,但柔软形态可变;胃窦呈痉挛状态,但可见蠕动波通过;十二指肠球及肠圈无异常表现。

**诊断意见:**胃窦炎。

**Name of examination:** Upper gastrointestinal barium meal examination.

**Technique:** Routine.

**Findings:** The folds of esophagus are continuous, the wall is soft, the peristalsis and evacuation are normal; the folds of stomach are continuous and regular, wall is smooth and soft, no niche is seen, no filling defect is found; some of the mucosal folds of gastric antrum are coarse, nodular and irregular, but they are soft and changeable. The gastric antrum is in a state of spasm, but peristalsis waves can be seen going through it. No abnormality is found in duodenal cap and loop.

**Diagnosis:** Antral gastritis.

### 3. 食管中段憩室

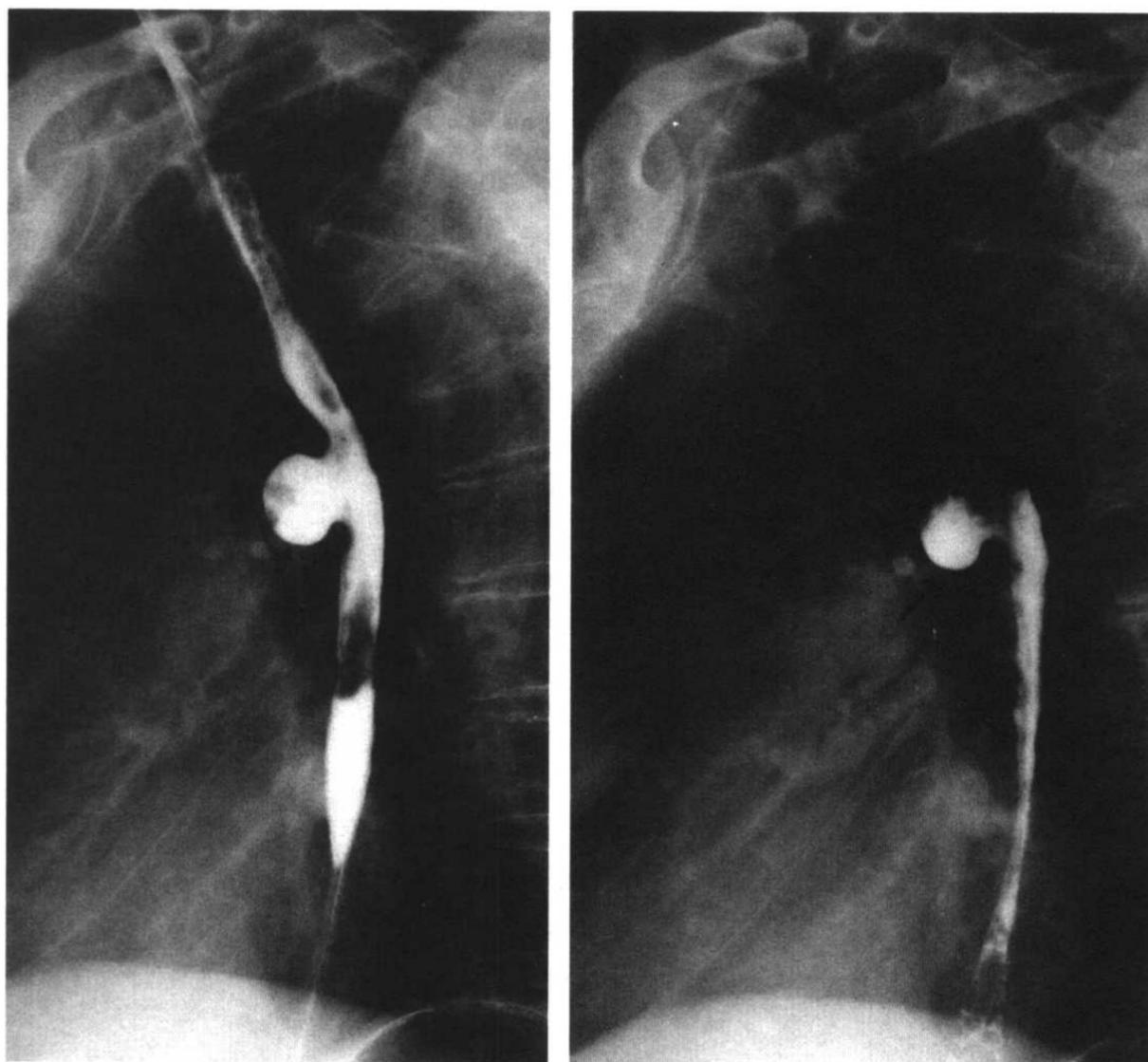


图 1-20 食管钡餐造影摄片

Fig 1 · 20 Barium meal examination of esophagus and photograph

**检查名称:**食管钡餐造影检查。

**检查方法:**常规方法。

**检查所见:**食管中段前壁可见大小约 2 cm × 2 cm 之囊袋状影向前方突出,其颈部宽约 1 cm,其内可见钡剂进出,囊内未见充盈缺损。食管壁光滑柔软,蠕动及排空正常。

**诊断意见:**食管中段憩室。

**Name of examination:** Barium meal examination of esophagus.

**Technique:** Routine.

**Findings:** There is a pouch with a size of 2 cm × 2 cm and a neck width 1 cm stretching from the front wall of the middle part of the esophagus, barium can be seen going in and out it. No filling defect can be found in the pouch. The esophagus wall is soft, and its peristalsis and evacuation are normal.

**Diagnosis:** Diverticulum of mid esophagus.

4. 十二指肠球部溃疡

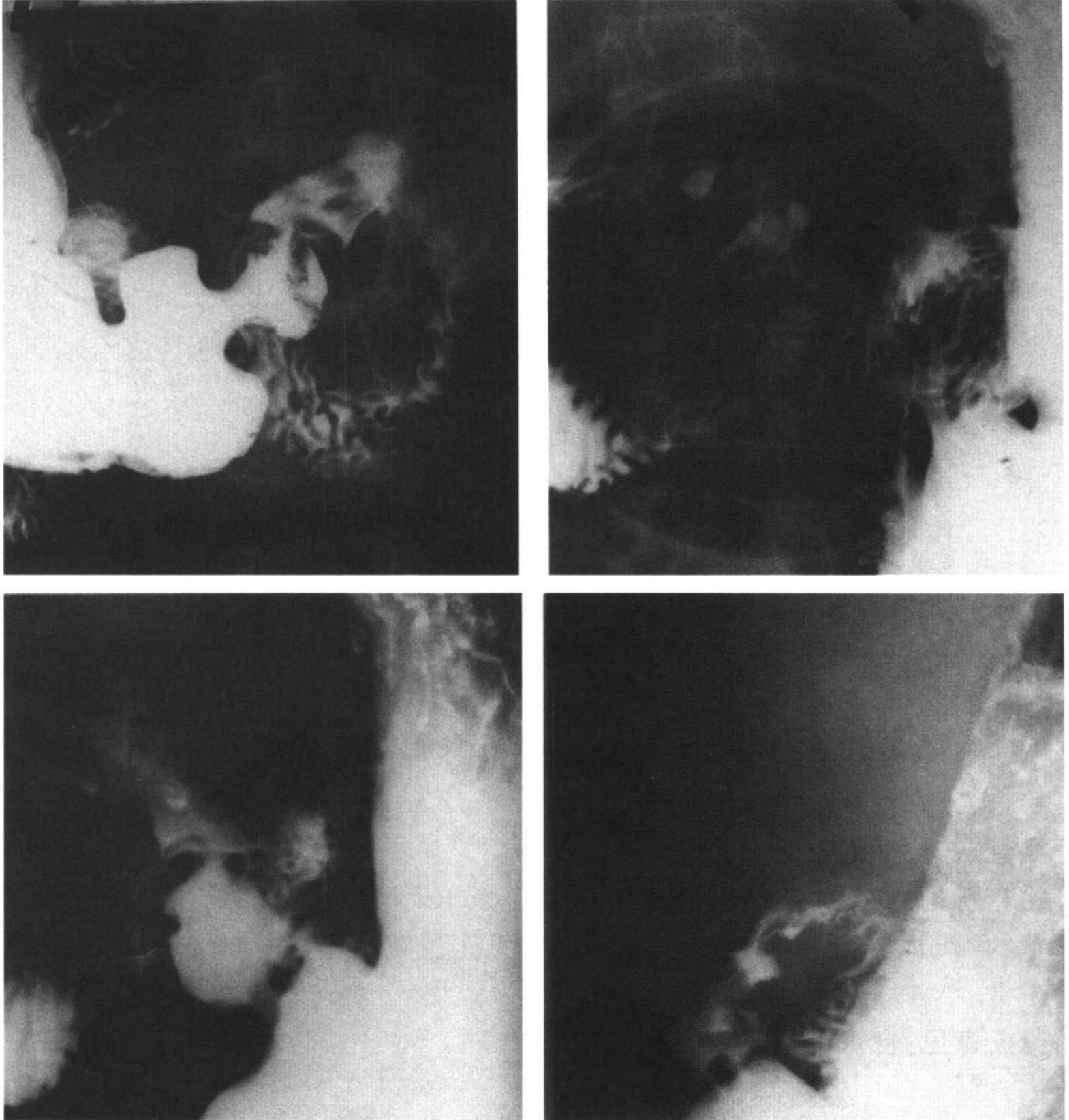


图 1 - 21 上消化道钡餐造影摄片

Fig 1 · 21 Upper gastrointestinal barium meal examination and photograph

**检查名称:**上消化道钡餐造影检查。

**检查方法:**常规方法。

**检查所见:**食管黏膜连续,管壁柔软,蠕动及排空正常;胃黏膜连续、规则,胃壁光滑柔软,未见龛影,胃腔未见狭窄或充盈缺损,胃蠕动及动力未见异常;十二指肠球部变形,钡剂通过迅速,局部加压后其内可见直径约0.6 cm之小圆形钡斑存留,周围黏膜聚拢,十二指肠圈无异常表现。

**诊断意见:**十二指肠球部溃疡。

**Name of examination:** Upper gastrointestinal barium meal examination.

**Technique:** Routine.

**Findings:** The folds of esophagus are continuous, the wall is soft, the peristalsis and evacuation are normal; the folds of stomach are continuous and regular, the wall is smooth and soft, no niche is seen, no stenosis and filling defect is found, peristalsis and dynamics are normal. The duodenal cap is deformed, barium can be seen going through it with a high speed, a round shaped barium filled spot and the mucous folds converging can be seen during palpation. No abnormality is found in duodenal loop.

**Diagnosis:** Peptic ulcer of duodenal bulb.

## 5. 胃穿透性溃疡



图 1 - 22 上消化道钡餐造影摄片

Fig 1 · 22 Upper gastrointestinal barium meal examination and photograph

**检查名称:**上消化道钡餐造影检查。

**检查方法:**常规方法。

**检查所见:**食管黏膜连续,管壁柔软,蠕动及排空正常;胃体部小弯侧可见一大小约 2.5 cm × 2.2 cm 之囊袋状龕影向胃腔外突出,颈部较窄,其内部可见钡剂存留及气钡平面,局部胃壁软,蠕动存在,胃腔未见狭窄或充盈缺损。十二指肠球及肠圈无异常表现。

**诊断意见:**胃穿透性溃疡(胃体小弯侧)。

**Name of examination:** Upper gastrointestinal barium meal examination.

**Technique:** Routine.

**Findings:** The folds of esophagus are continuous, the wall soft, the peristalsis and evacuation normal; There is a pouch-like crater with a narrow neck and a size of 2.5 cm × 2.2 cm stretching outside the lesser curvature of the stomach, in which barium-gas plane can be seen. The local stomach wall is soft, peristalsis and evacuation of stomach normal. And no filling defect can be found. No abnormality is seen in duodenal cap and loop.

**Diagnosis:** Penetrating gastric ulcer.

6. 胃癌

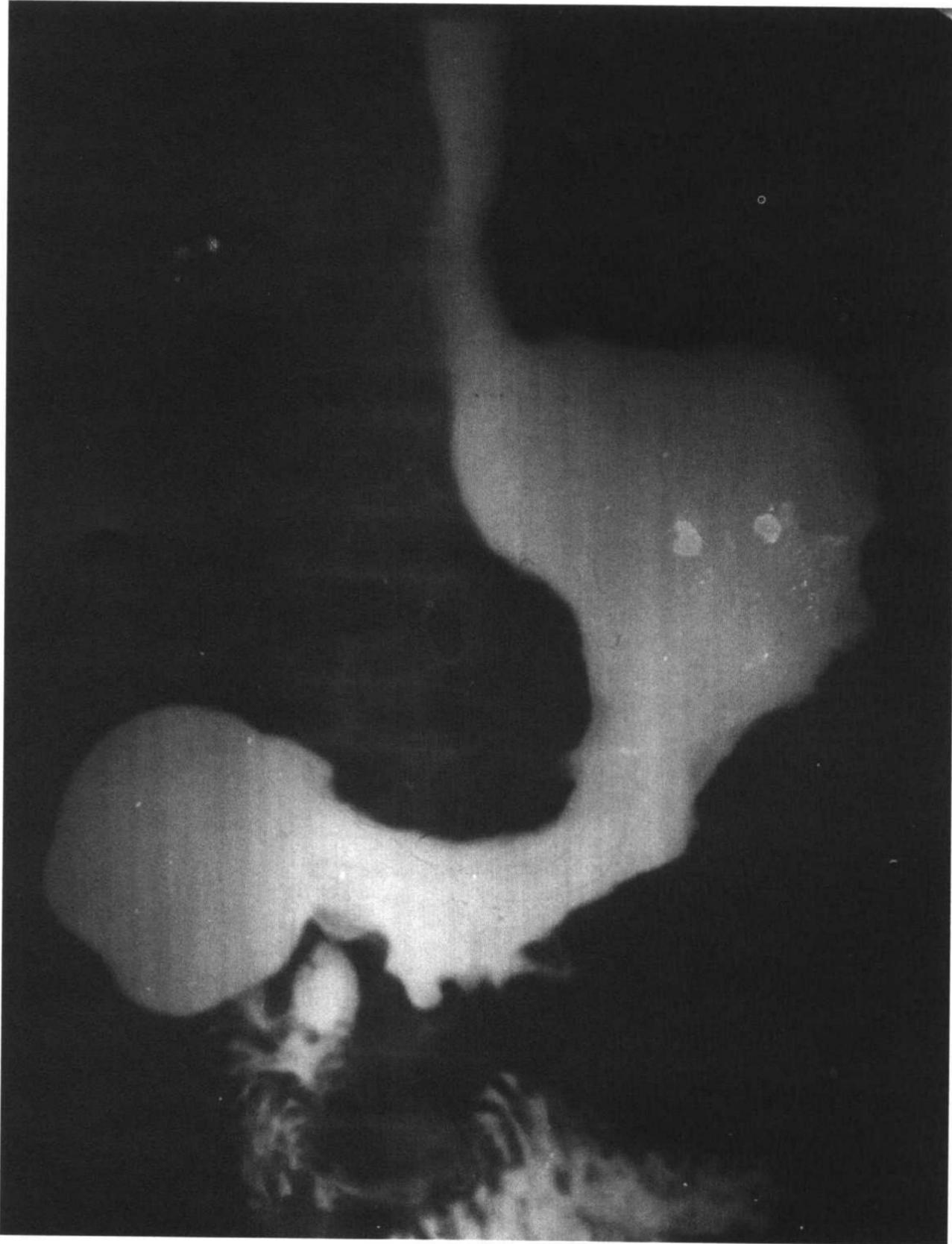


图 1 - 23 上消化道钡餐造影摄片  
Fig 1 · 23 Upper gastrointestinal barium  
meal examination and photograph

**检查名称:**上消化道钡餐造影检查。

**检查方法:**常规方法。

**检查所见:**食管黏膜连续,管壁柔软,蠕动及排空正常;胃体部及胃窦部胃腔明显狭窄,胃壁僵硬,局部胃扩张受限,胃蠕动消失,胃体小弯侧可见直径约1 cm 之小龛影。十二指肠球及肠圈无异常表现。

**诊断意见:**胃癌(胃体及胃窦)。

**Name of examination:** Upper gastrointestinal barium meal examination.

**Technique:** Routine.

**Findings:** The folds of esophagus are continuous, the wall soft, the peristalsis and evacuation normal; the lumen of gastric body and antrum is obviously narrow. Local stomach wall is stiff and can't expand, peristalsis disappears, and a small crater is seen in the lesser curvature. No abnormality is found in duodenal cap and loop.

**Diagnosis:** Gastric carcinoma (in the stomach body and antrum).

## 7. 胃底贲门癌



图 1-24 上消化道钡餐造影摄片

Fig 1 · 24 Upper gastrointestinal barium meal examination and photograph

**检查名称:**上消化道钡餐造影检查。

**检查方法:**常规方法。

**检查所见:**贲门胃底黏膜破坏,局部管壁僵硬,蠕动消失,管腔狭窄,周围可见软组织肿块;病变以上之食管扩张;胃体部及胃窦部未见明显异常,十二指肠球及肠圈无异常表现。

**诊断意见:**胃底贲门癌。

**Name of examination:** Upper gastrointestinal barium meal examination.

**Technique:** Routine.

**Findings:** The folds of cardia and fundus of stomach are disrupted, the local wall is stiff and the local lumen is obviously narrow, peristalsis disappears, a mass can be seen around it. The lumen of esophagus above the lesion expands. No abnormality is found in stomach body, pyloric antrum, duodenal cap and loop.

**Diagnosis:** Carcinoma in cardia and fundus of stomach.

### 三、结肠钡灌肠造影检查

#### 1. 正常结肠钡灌肠检查



图 1 - 25 结肠钡灌肠造影摄片

Fig 1 · 25 Colon barium examination and photograph

**检查名称:**结肠钡灌肠造影检查。

**检查方法:**常规方法。

**检查所见:**结肠各段钡剂充盈良好,肠壁光整柔软,未见龛影,肠腔未见狭窄或充盈缺损,未见肠外压迫征象;部分排空钡剂后显示黏膜连续规整,未见增粗或中断。

**诊断意见:**结肠钡灌肠造影检查未见异常。

**Name of examination:** Colon barium examination.

**Technique:** Routine.

**Findings:** All parts of colon are filled well with barium, the wall smooth and soft, no niche is seen, and no stenosis and filling defect is found, no oppressing sign outside the colon displays. After part of barium is excreted, the folds of colon are continuous and regular, no thickening or interruption appears.

**Diagnosis:** No abnormality is found in the colon barium examination.

## 2. 溃疡性结肠炎

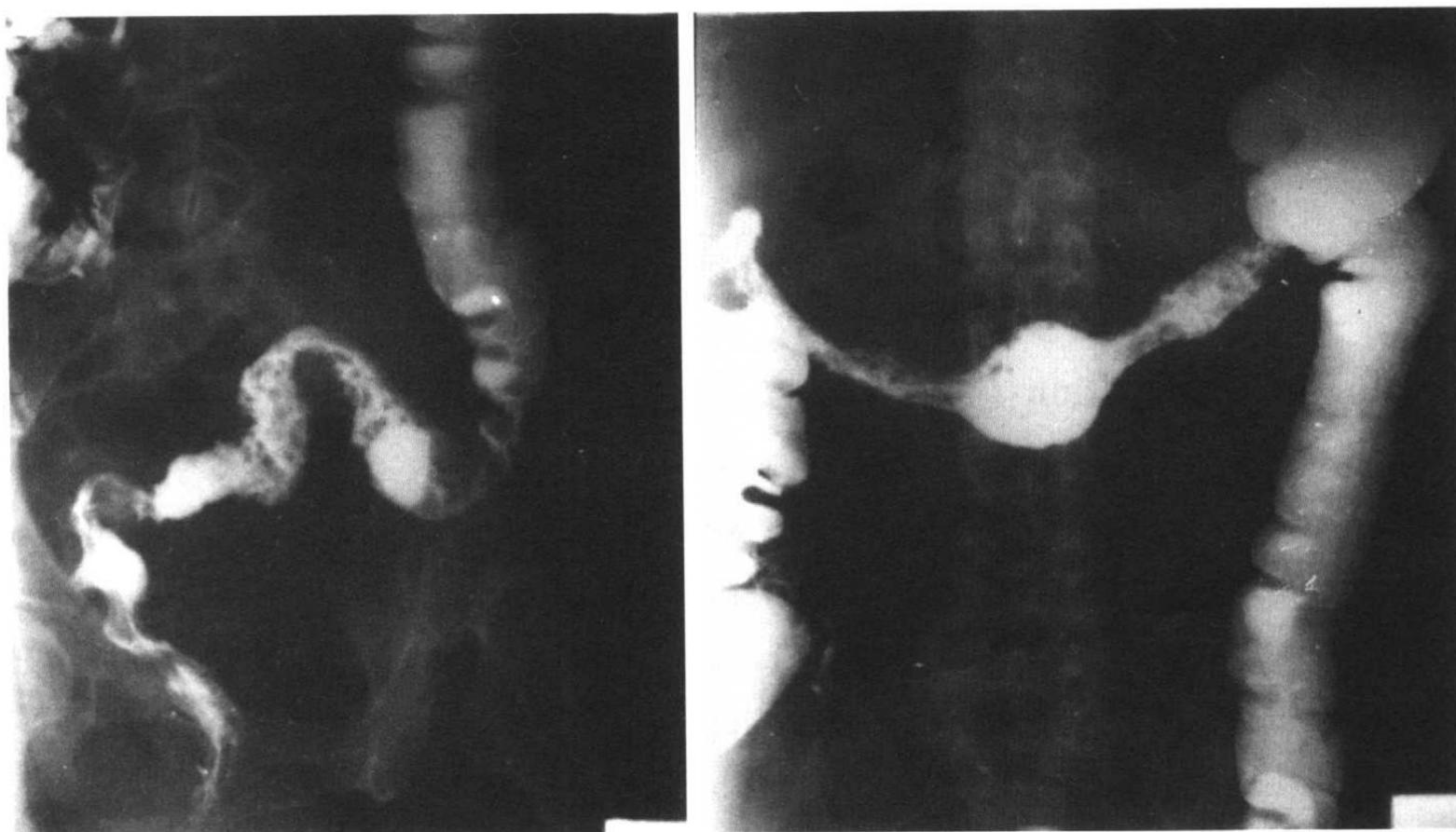


图 1-26 结肠钡灌肠造影摄片

Fig 1 · 26 Colon barium examination and photograph

**检查名称:**结肠钡灌肠造影检查。

**检查方法:**常规方法。

**检查所见:**乙状结肠及横结肠呈痉挛收缩状态,但肠壁柔软仍可扩张,钡剂通过迅速。肠壁边缘不规则,可见多发小刺状龛影,肠腔内未见充盈缺损,未见肠外压迫征象;部分排空钡剂后显示黏膜紊乱但连续未见中断。

**诊断意见:**溃疡性结肠炎。

**Name of examination:** Colon barium examination.

**Technique:** Routine.

**Findings:** The sigmoid and transverse colon is in a state of spasm, but the wall is soft and can expand. Barium goes through there quickly. There are many small thorn-like niches along the irregular ridge of lesion colon; no filling defect is found, and no oppressing sign outside the colon displays. After part of barium is excreted, the folds of colon seem to be irregular but continuous and no interruption of mucous folds appears.

**Diagnosis:** Ulcerative colitis.

3. 结肠癌

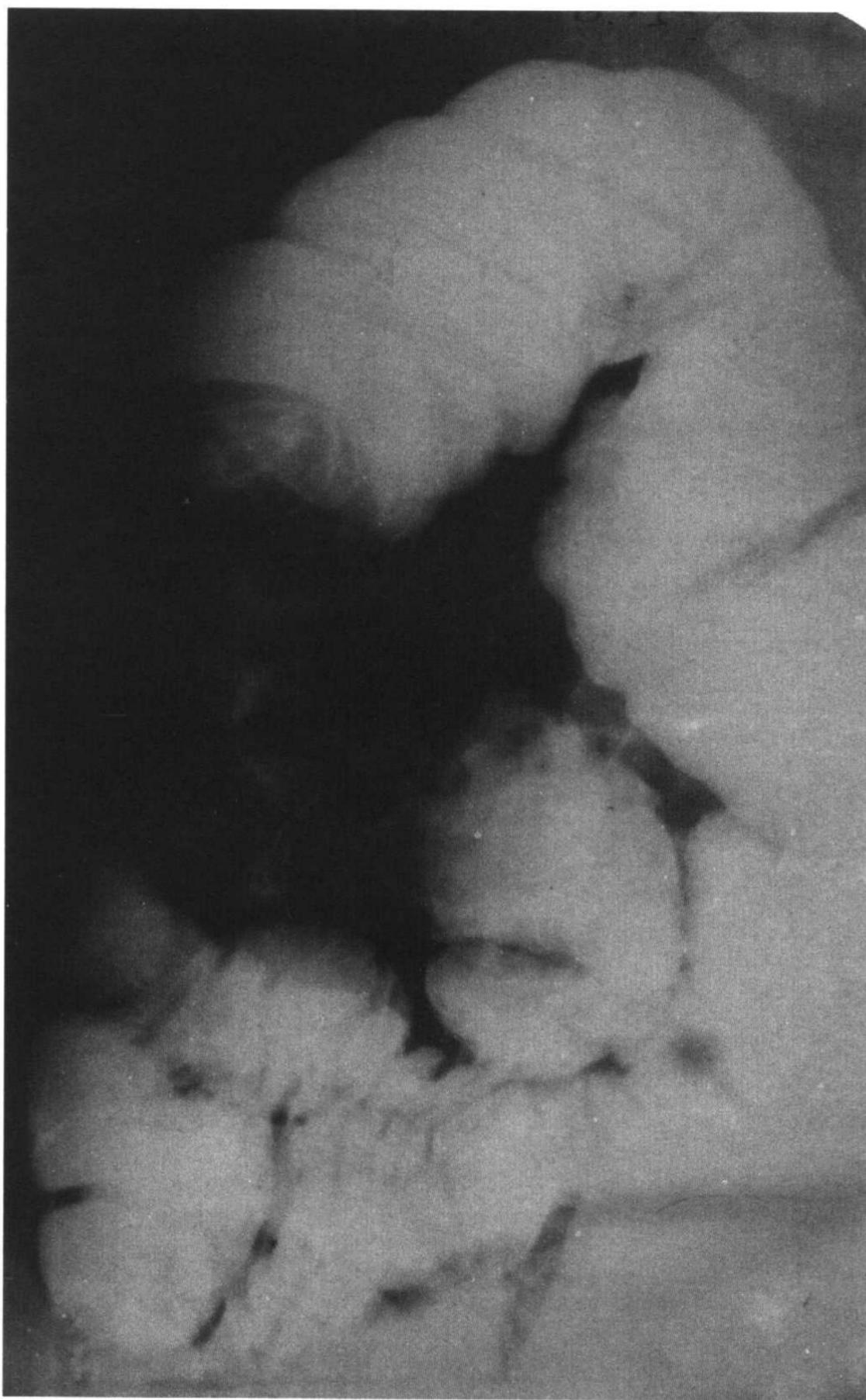


图 1 - 27 结肠钡灌肠造影摄片

Fig 1 · 27 Colon barium examination and photograph

**检查名称:**结肠钡灌肠造影检查。

**检查方法:**常规方法。

**检查所见:**右侧升结肠可见长约8 cm的肠腔明显狭窄段,边缘不规则,肠腔内可见明显类圆形充盈缺损,边界清楚,局部黏膜中断,肠管僵硬,扩张受限,但未见明显肠梗阻征象。

**诊断意见:**右侧升结肠癌。

**Name of examination:** Colon barium examination.

**Technique:** Routine.

**Findings:** There is a stenosis in the right ascent colon that is 8 cm long, with an irregular edge. Round-like filling defect can be seen in the lumen with a clear margin obviously. The local mucous folds are interrupted, and the wall is stiffened, and can't expand. No obvious bowel obstruction is found.

**Diagnosis:** Carcinoma of right ascend colon.

## 第二章 CT

### 一、头及头颈部

#### 1. 正常颅脑 CT



图 2-1 轴位像  
Fig 2·1 Transverse image

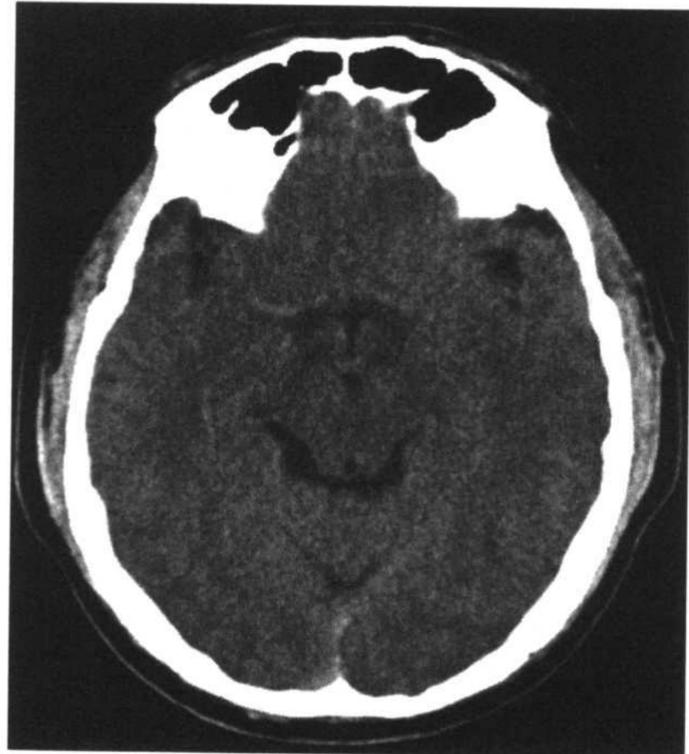


图 2-2 轴位像  
Fig 2·2 Transverse image

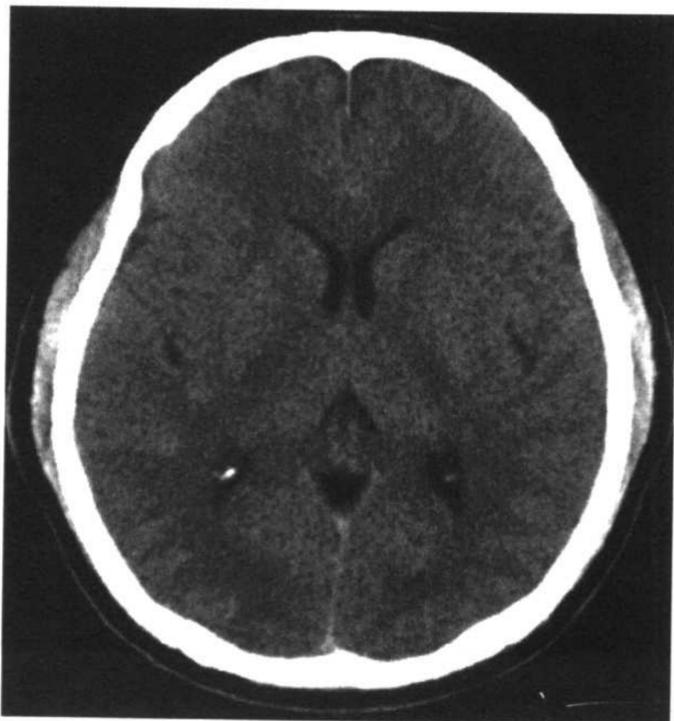


图 2-3 轴位像  
Fig 2·3 Transverse image



图 2-4 轴位像  
Fig 2·4 Transverse image

**检查名称:**头颅 CT 平扫。

**检查方法:**头颅 CT 横断扫描,层厚 8 mm,间隔 8 mm。

**检查所见:**脑实质内未见明显异常密度灶,脑室及蛛网膜下腔未见明显异常,中线结构居中。

**诊断意见:**头颅 CT 平扫未见异常。

**Name of examination:** Plain CT scan of the head.

**Technique:** Axial plain CT scan of the head, 8 mm slice apart 8 mm.

**Findings:** No area of abnormal attenuation can be found in brain parenchyma. Ventricles and subarachnoid cavity are normal. The midline structures are in the middle of the head.

**Diagnosis:** No evidence of the head abnormality.

2. 脑出血

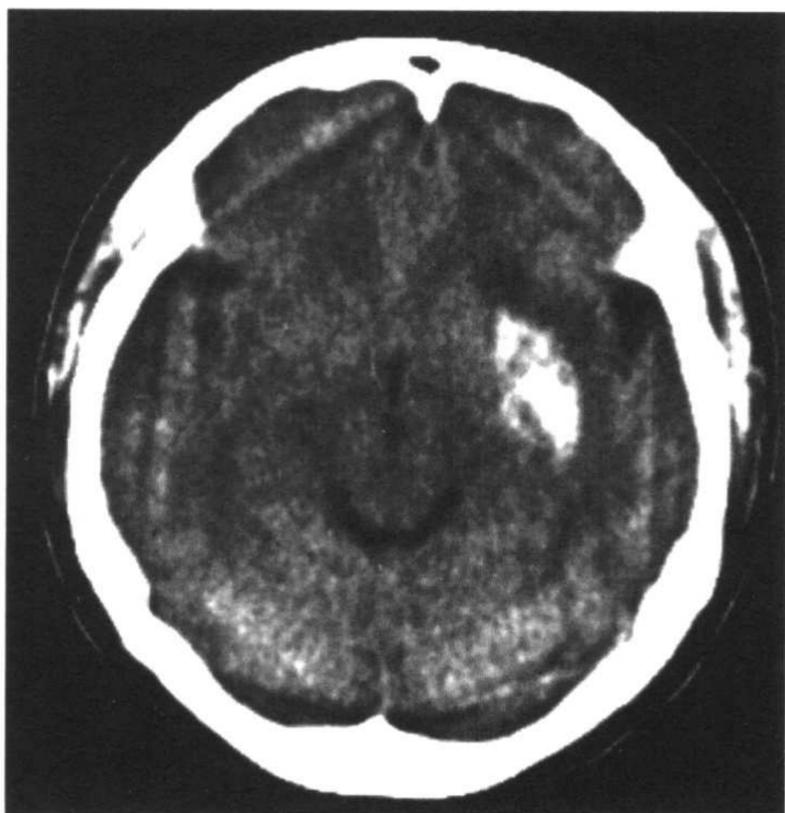


图 2-5 轴位像  
Fig 2·5 Transverse image

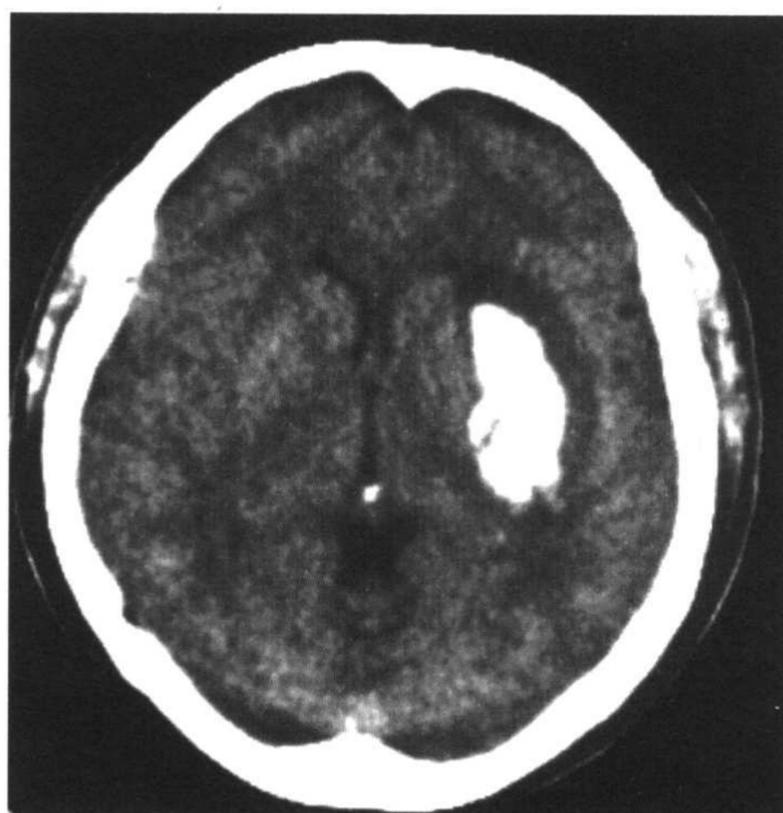


图 2-6 轴位像  
Fig 2·6 Transverse image

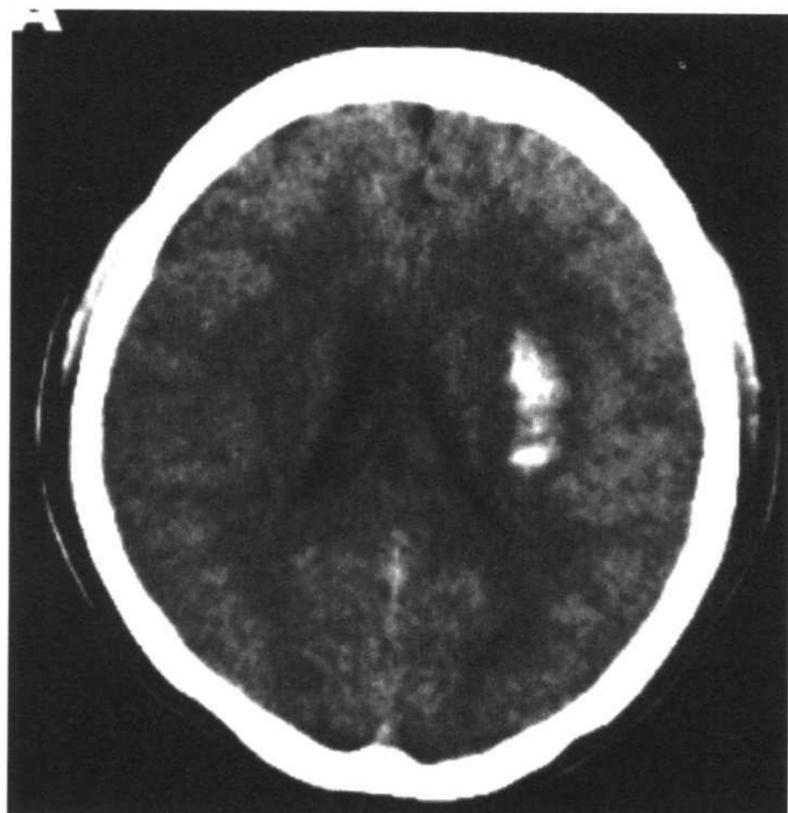


图 2-7 轴位像  
Fig 2·7 Transverse image

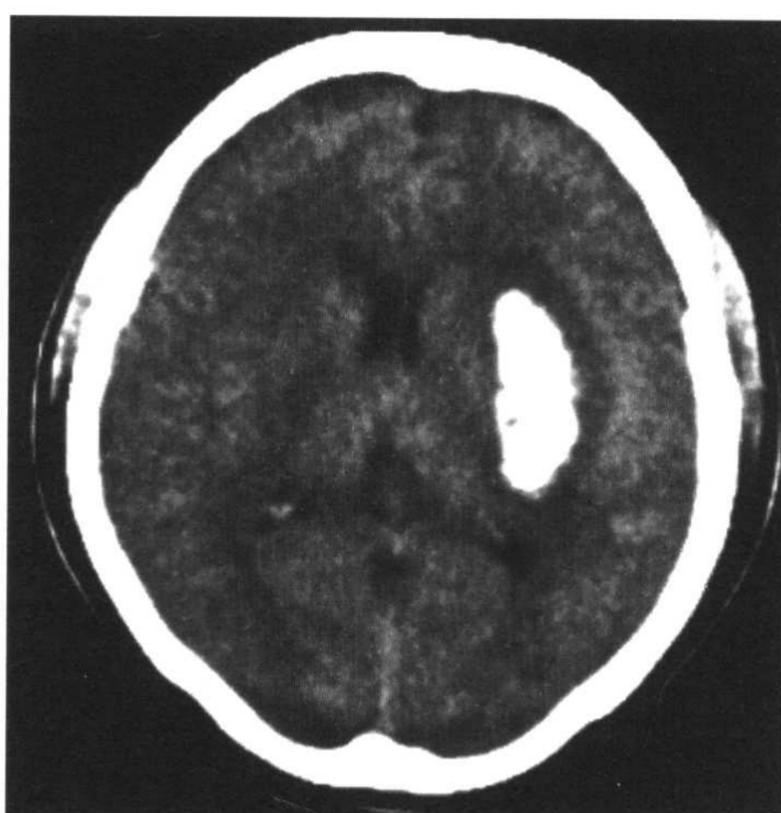


图 2-8 轴位像  
Fig 2·8 Transverse image

**检查名称:**头颅 CT 平扫。

**检查方法:**头颅 CT 横断扫描,层厚 8 mm,间隔 8 mm。

**检查所见:**CT 平扫示:左侧外囊区见一边界清楚的肾形高密度灶,周边为一低密度水肿带环绕,病灶最大横截面积为 2.5 cm × 5.5 cm。左侧脑室受压变形,邻近中线结构向右侧轻度移位。

**诊断意见:**左侧外囊区脑血肿。

**Name of examination:** Plain CT scan of the head.

**Technique:** Axial plain CT scan of the head, 8 mm slice apart 8 mm.

**Findings:** The plain CT scan shows a well-defined kidney-shaped lesion of hyperattenuation surrounded by a circumferential edema zone of hypo-attenuation at the region of left external capsule, the maximal axial area of the lesion is 2.5 cm × 5.5 cm. The left lateral ventricle is compressed and deformed. The adjacent midline structures are slightly deviated to right side.

**Diagnosis:** Hematoma at the region of left external capsule.

3. 脑膜瘤

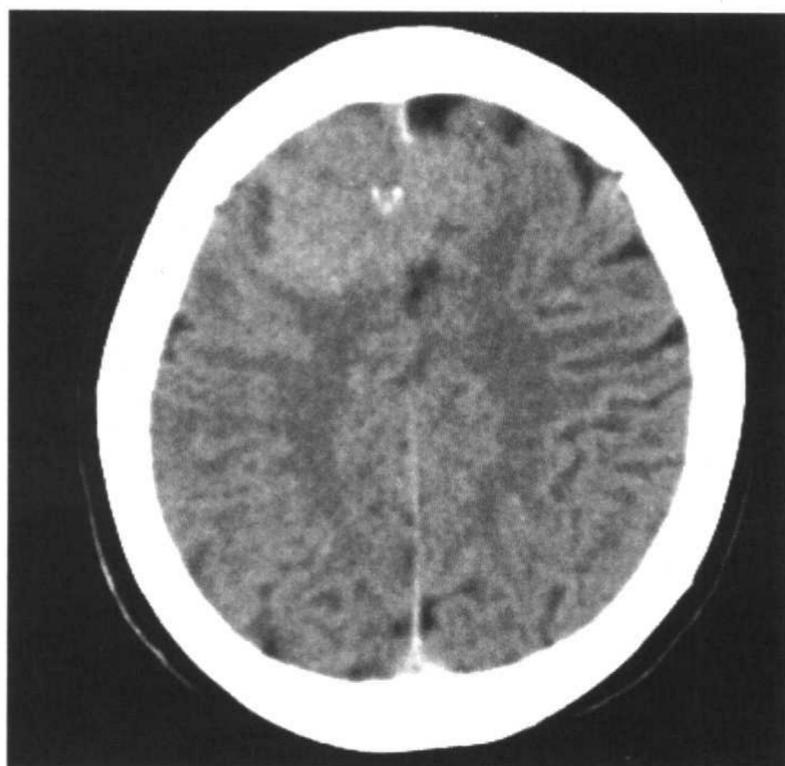


图 2-9 平扫轴位像

Fig 2 · 9 Pre-contrast transverse

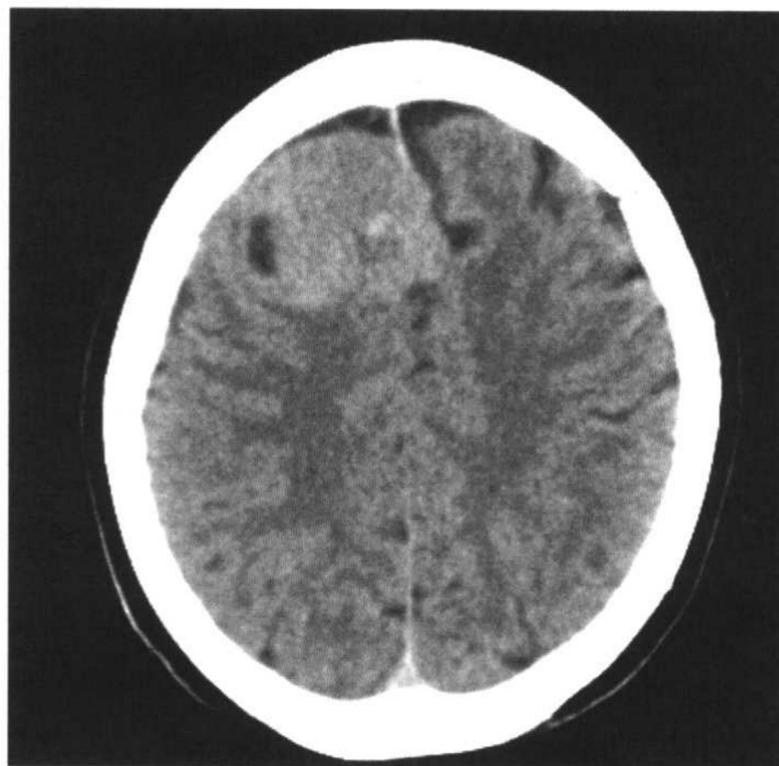


图 2-10 平扫轴位像

Fig 2 · 10 Pre-contrast transverse image image

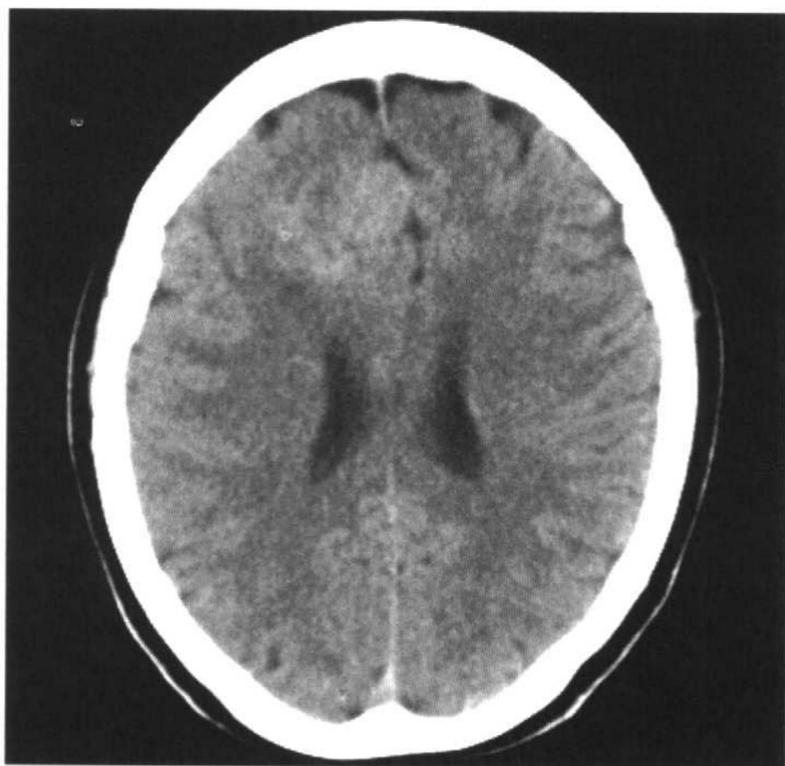


图 2-11 平扫轴位像

Fig 2 · 11 Pre-contrast transverse image

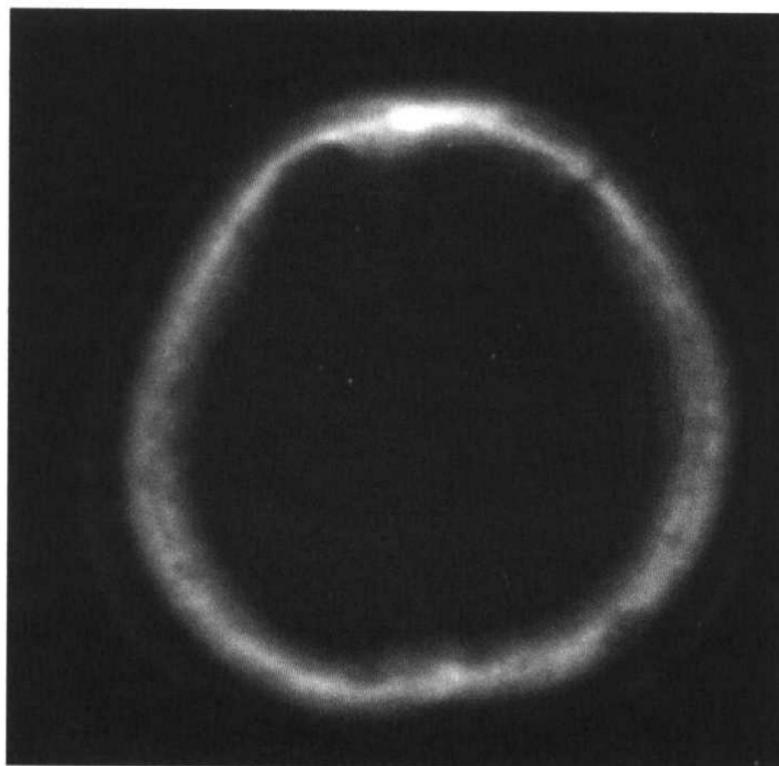


图 2-12 轴位像 骨窗

Fig 2 · 12 Transverse image (kernel = 60)

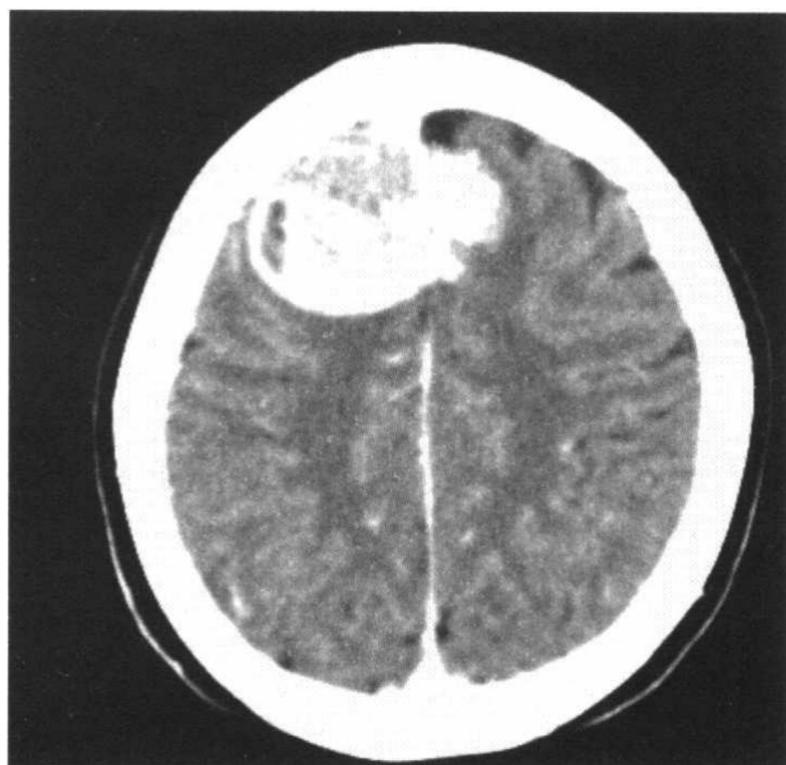


图 2 - 13 增强扫描轴位像

Fig 2 · 13 Post-contrast transverse image

**检查名称:**头颅 CT 平扫 + 增强扫描。

**检查方法:**头颅 CT 横断扫描, 层厚 5 mm, 间隔 5 mm。

**检查所见:**CT 平扫示, 双侧额部见一稍高密度肿块, 大部位于中线右侧, 周边脑实质未见水肿, 病灶最大横截面积为 4.1 cm × 6.2 cm。肿块宽基底附着于右额骨和大脑镰前部两侧, 内可见更低密度区和钙化。增强后病灶明显强化, 边界清晰, 上述低密度区未见强化, 相邻脑实质受压推移, 蛛网膜下腔增宽, 右额骨内板凹陷, 边界锐利。右侧脑室轻度受压移位, 邻近中线结构向左侧轻度移位。

**诊断意见:**大脑镰旁脑膜瘤。

**Name of examination:** CT scan of the head, pre-contrast and post-contrast.

**Technique:** Axial CT scan of the head, 5 mm slice apart 5 mm.

**Findings:** Axial pre-contrast images show a slightly hyper-dense mass without brain parenchyma circumferential edema at bilateral frontal part predominantly to the right of the midline, the maximal axial area of the lesion is 4.1 cm × 6.2 cm. The mass wide-basely adheres to the right frontal bone and both sides of the anterior cerebral flax. There are some areas with lower density and calcification can be seen. On the post-contrast images, the lesion is enhanced markedly with a well-defined border, and the noted hypo-intensive region is not enhanced. The adjacent brain parenchyma are compressed and displaced, subarachnoid cavity is enlarged, and the inner table of right frontal bone is depressed with well-defined border. The right lateral ventricle is slightly compressed and displaced. The adjacent midline structures are slightly deviated to left side.

**Diagnosis:** Meningioma beside cerebral flax.

4. 眼眶海绵状血管瘤

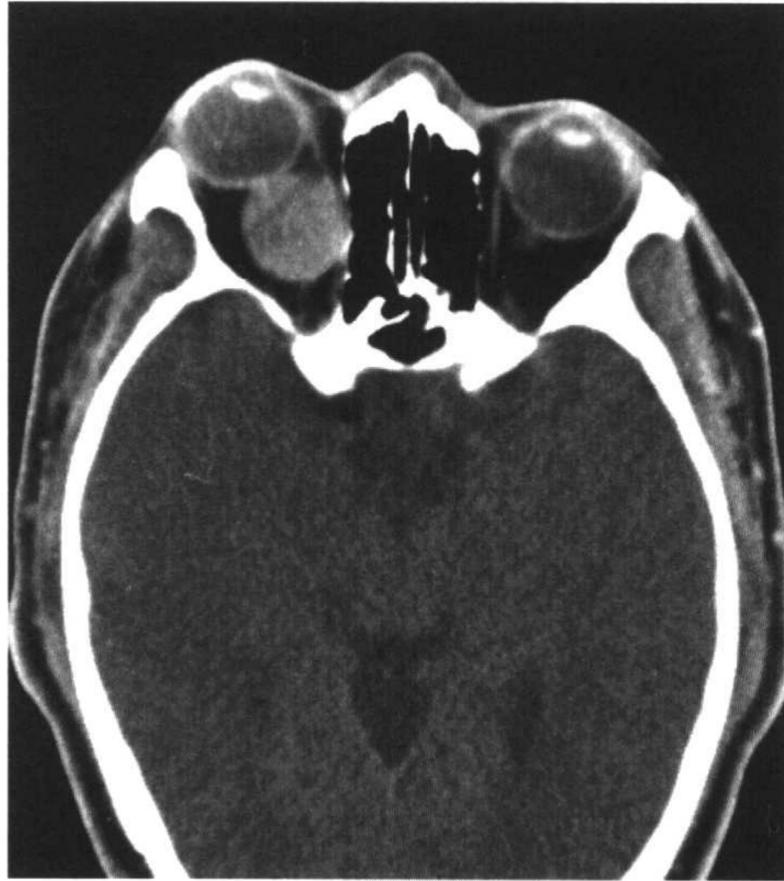


图 2-14 平扫轴位像

Fig 2 · 14 Pre-contrast transverse image



图 2-15 平扫冠状位像

Fig 2 · 15 Pre-contrast coronal image  
(MPR)



图 2-16 平扫冠状位(骨窗)

Fig 2 · 16 Pre-contrast coronal image  
(MPR)

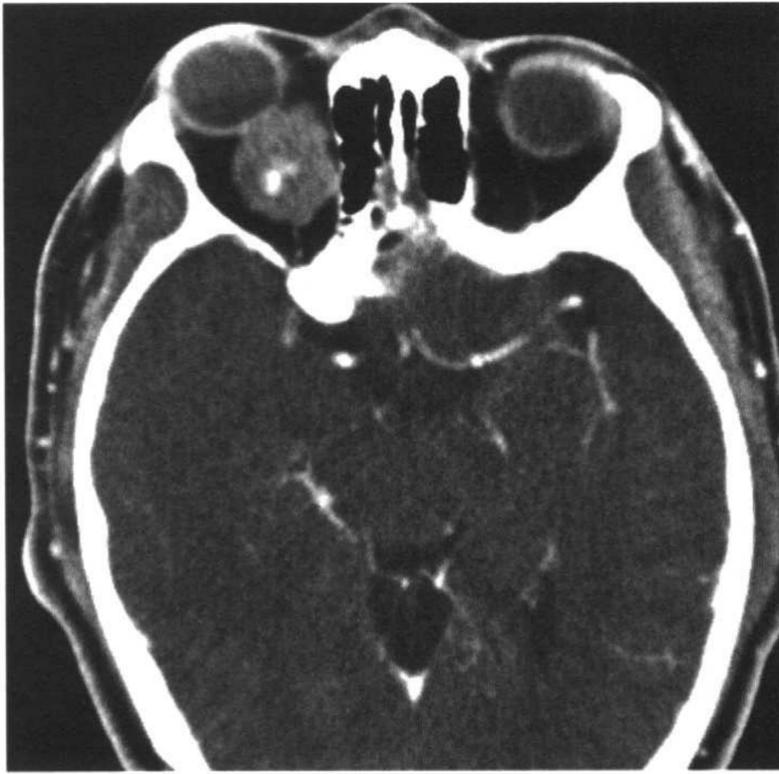


图 2-17 增强扫描轴位像

Fig 2 · 17 Post-contrast transverse image

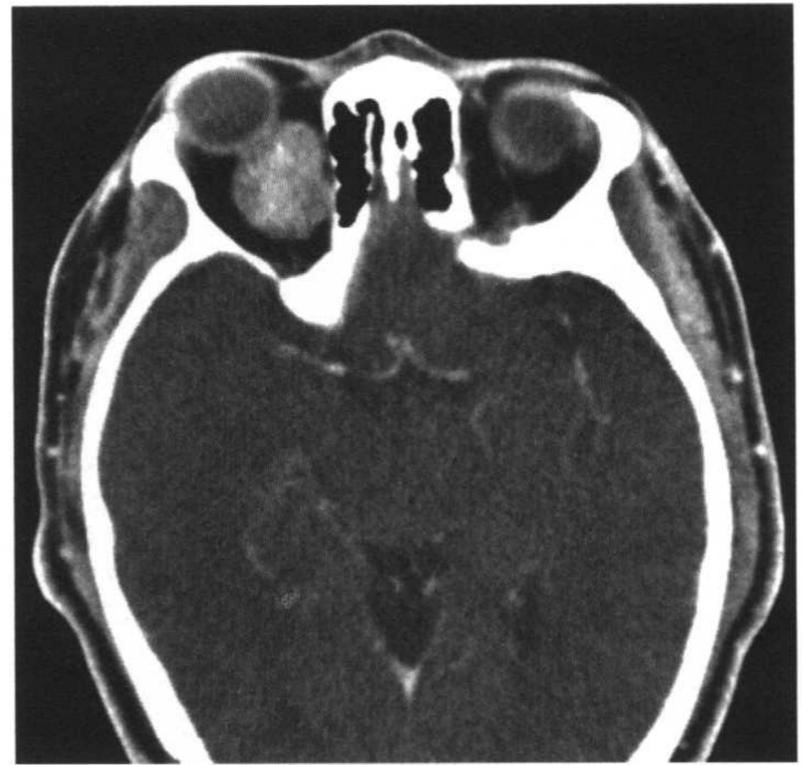


图 2-18 增强扫描轴位像

Fig 2 · 18 Post-contrast transverse image

**检查名称:**眼眶 CT 平扫 + 增强扫描。

**检查方法:**眼眶 CT 横断扫描,层厚 3 mm,间隔 3 mm。MPR 重建。

**检查所见:**CT 平扫示,右眼眶内眼球后方见一约 2.7 cm × 2.8 cm 大小的软组织肿块影,密度均匀,右眼球向前突出约 0.8 cm。视神经向外下方移位,右眼眶内侧壁受压变薄。增强后动脉期病灶明显点状强化,静脉期病灶呈渐进样强化,强化范围较动脉期扩大。左眼眶未见明显异常。

**诊断意见:**右眼眶海绵状血管瘤。

**Name of examination:** CT scan of the orbit, pre-contrast and post-contrast.

**Technique:** Axial CT scan of the orbit, 3 mm slice apart 3 mm. MPR reconstruction.

**Findings :** On the pre-contrast images, an isoattenuating lesion with a size of 2.7 cm × 2.8 cm is found behind the eyeball of right orbit. The right eyeball is about 0.8 cm prominent. The optic nerve is deviated to outer and downward of eyeball, the inner wall of right orbit is compressed and thin. On arterial phase images, the lesion shows spotted enhancement obviously. On vein phase images, the lesion shows progressive enhancement and the area of enhancement is larger than that of arterial phase. The left orbit is unremarkable.

**Diagnosis:** Cavernous hemangioma in the right orbit.

5. 面神经肿瘤

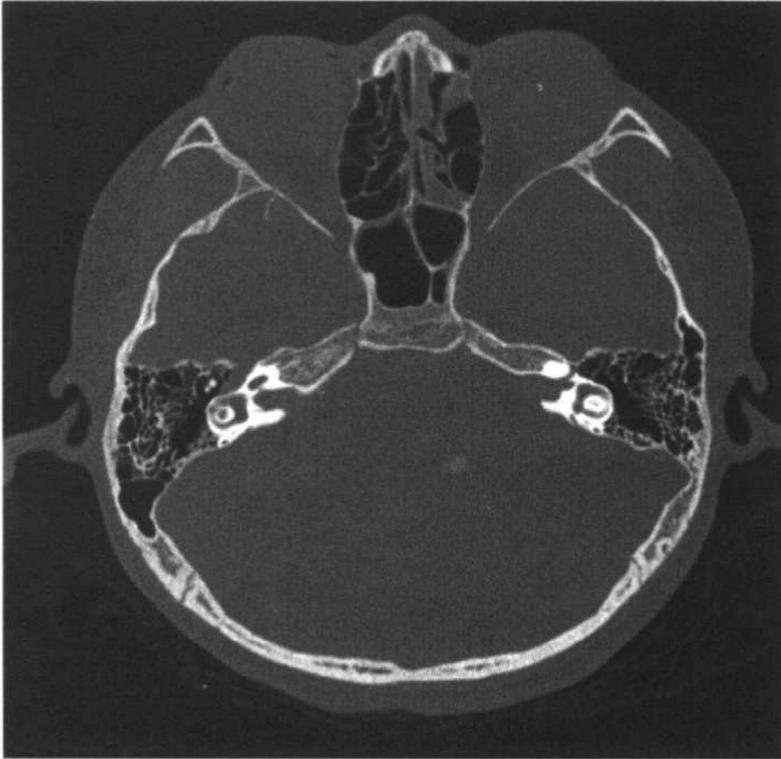


图 2-19 轴位像  
Fig 2 · 19 Transverse image

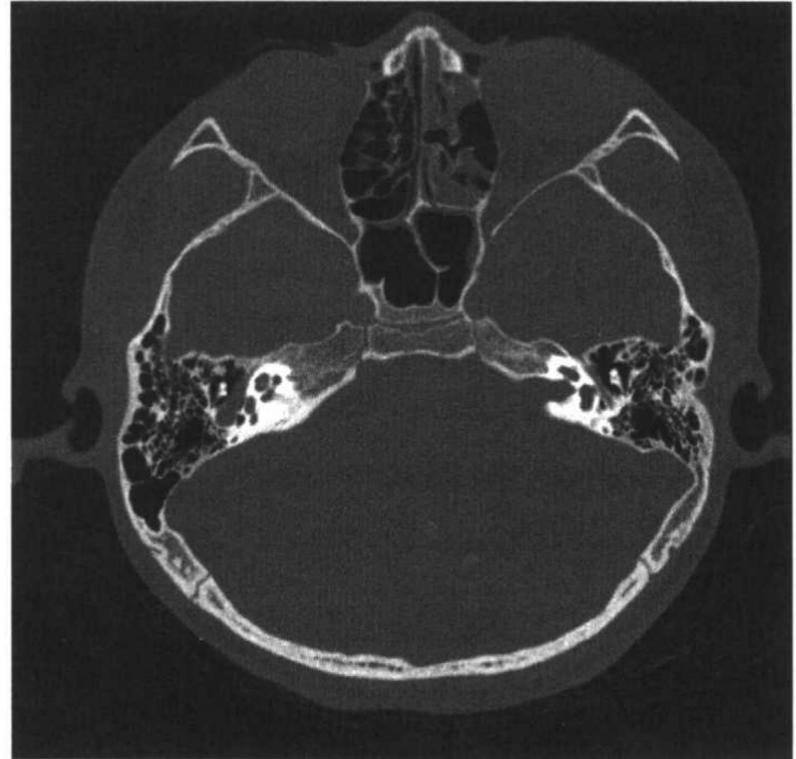


图 2-20 轴位像  
Fig 2 · 20 Transverse image

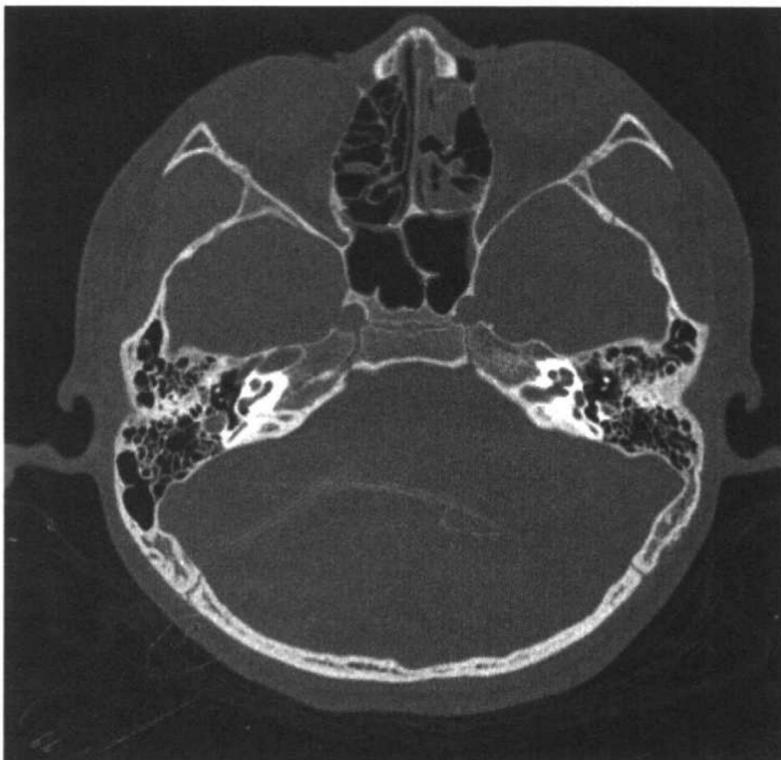


图 2-21 轴位像  
Fig 2 · 21 Transverse image

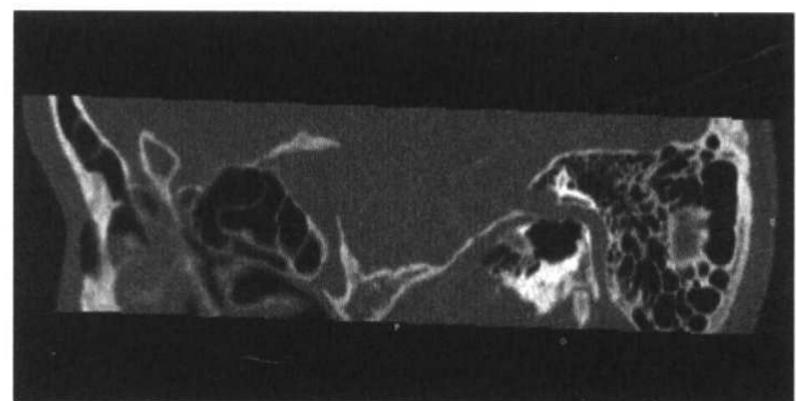


图 2-22 MPR 像  
Fig 2 · 22 MPR image

**检查名称:**颞骨 CT 平扫。

**检查方法:**颞骨 CT 横断扫描,层厚 0.6 mm,间隔 0.6 mm。MPR 重建。

**检查所见:**右侧面神经管全程明显扩大,未见明显骨质破坏。左侧面神经、双侧内听道及中耳结构未见明显异常。

**诊断意见:**右侧面神经肿瘤,考虑良性病变。

**Name of examination:** CT scan of the temporal bone.

**Technique:** Axial CT scan of the temporal bone, 0.6 mm slice apart 0.6 mm. MPR reconstruction.

**Findings:** The right facial canal is enlarged, and no bony destruction is noted. The left facial canal, internal auditory meatus and the structure of middle ear are unremarkable.

**Diagnosis:** Tumor of right facial nerve, benign is suggested.

6. 鼻咽癌



图 2-23 平扫轴位像

Fig 2 · 23 Pre-contrast transverse image

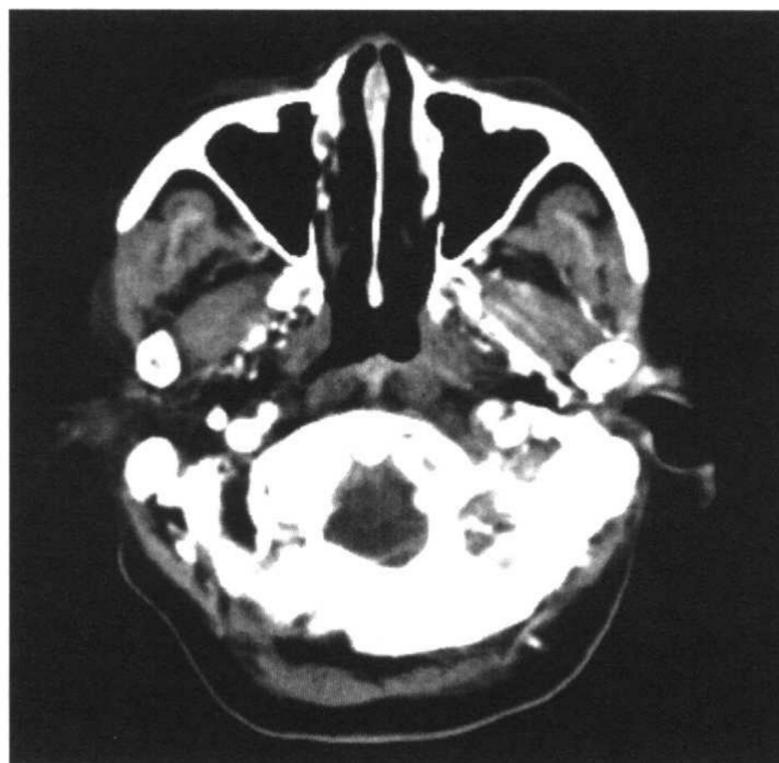


图 2-24 平扫轴位像

Fig 2 · 24 pre-contrast transverse image

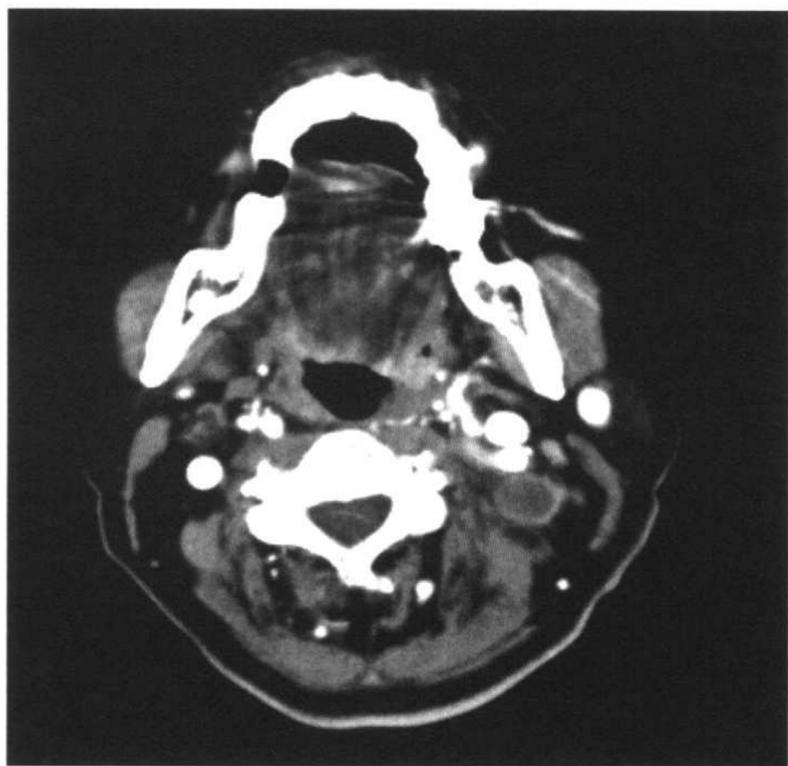


图 2-25 增强扫描轴位像

Fig 2 · 25 Post-contrast transverse image

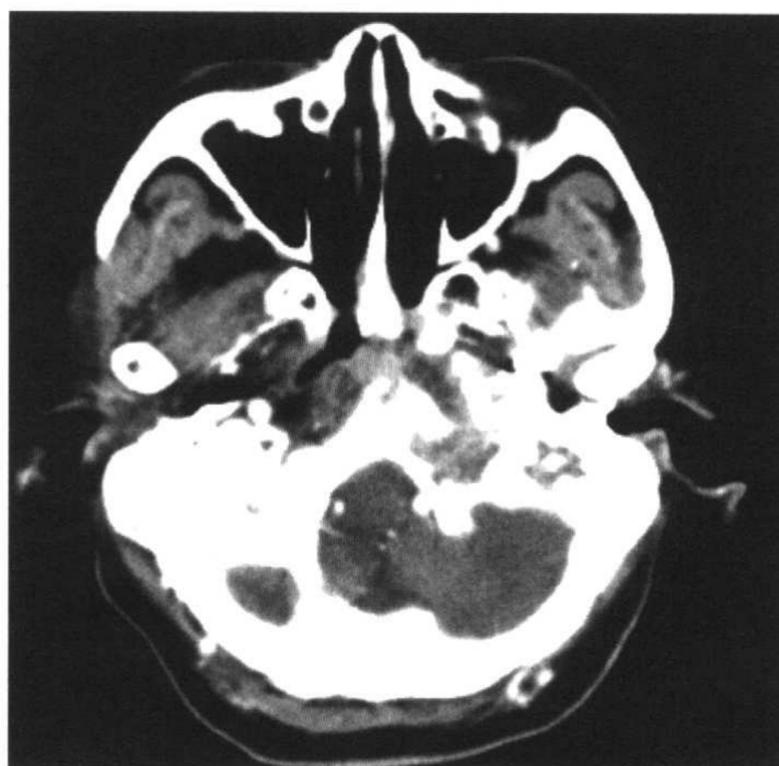


图 2-26 增强扫描轴位像

Fig 2 · 26 post-contrast transverse image

**检查名称:**鼻咽 CT 平扫 + 增强。

**检查方法:**鼻咽 CT 横断扫描,层厚 5 mm,间隔 5 mm。

**检查所见:**CT 平扫示,左侧咽后壁增厚,咽隐窝消失,左咽外侧间隙变小。增强后病灶中等程度强化,双侧颈部见环样强化淋巴结。左侧颅底骨质破坏。

**诊断意见:**鼻咽癌累及颅底并颈部淋巴结转移。

**Name of examination:** CT scan of the nasopharynx, pre-contrast and post-contrast.

**Technique:** Axial CT scan of the nasopharynx, 5 mm slice apart 5 mm.

**Findings:** On the pre-contrast images, the left posterior wall of nasopharynx is thickened, the left pharyngeal recess is obliterated, and the left parapharyngeal space is narrowed. On the post-contrast images, the lesion shows enhancement mildly and multiple lymph nodes are present ringed enhancement in the bilateral neck. The bony destruction is presented in left base of skull.

**Diagnosis:** Nasopharyngeal carcinoma with skull base invasion and cervical lymphatic metastasis.

## 二、脊柱和骨骼

### 1. 正常颈椎



图 2-27 矢状位像  
Fig 2·27 Sagittal image (MPR)



图 2-28 矢状位像 骨窗  
Fig 2·28 Sagittal image (MPR)  
(kernel = 60)

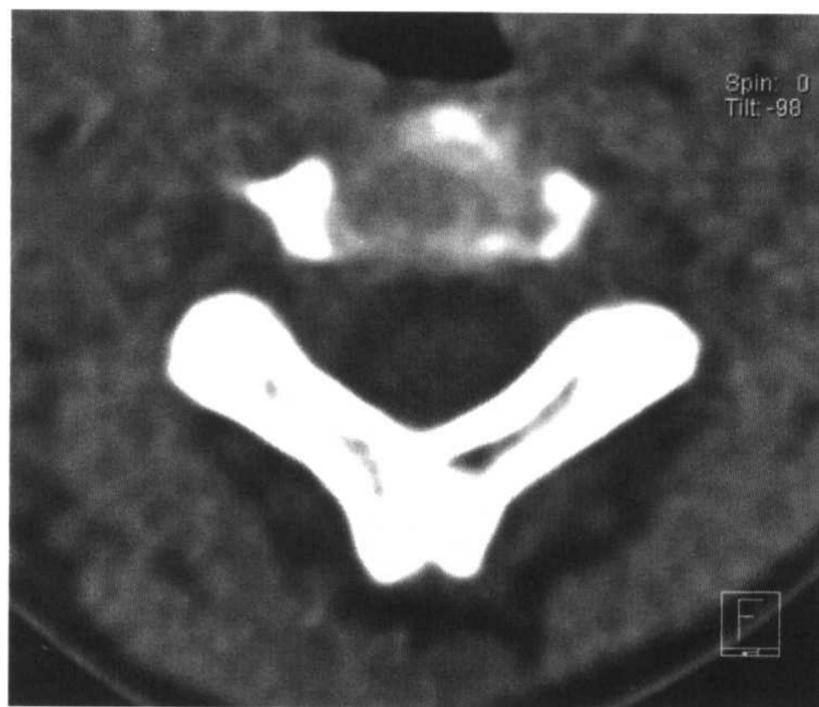


图 2-29 轴位像  
Fig 2·29 Transverse image

**检查名称:**颈椎 CT 平扫。

**检查方法:**颈椎 CT 轴位扫描及矢状位重建,层厚 1 mm,间隔 1 mm。

**检查所见:**颈椎各椎体排列及曲度正常,未见明显骨质增生及破坏,椎间盘未见突出,未见椎管狭窄及神经根受压。

**诊断意见:**颈椎 CT 扫描未见异常。

**Name of examination:** Plain CT scan of the cervical spine.

**Technique:** Axial plain CT scan of the cervical spine and sagittal reconstruction, 1 mm slice apart 1 mm.

**Findings:** The alignment and curvature of cervical vertebra are normal. No bony destruction and hyperosteo-geny is noted in vertebrae. Discs are normal. There is no evidence of vertebral canal stenosis and nerve root sleeves compression.

**Diagnosis:** No abnormality is found in CT scan of the cervical spine.

2. 腰椎间盘突出



图 2-30 矢状位像  
Fig 2 · 30 Sagittal image(MPR)



图 2-31 矢状位像 骨窗  
Fig 2 · 31 Sagittal image(MPR)  
( kernel = 60)



图 2-32 轴位像  
Fig 2 · 32 Transverse image

**检查名称:**腰椎 CT 平扫。

**检查方法:**腰椎 CT 轴位扫描及矢状位重建,层厚 2 mm,间隔 2 mm。

**检查所见:**腰椎各椎体排列及曲度正常,腰椎骨质疏松,L 2-5 椎体前缘骨质增生,L 3/4 水平前纵韧带见点状钙化,L 4/5 椎间盘突出,超出椎体左后缘 4 mm,邻近硬膜囊脂肪消失。余未见异常。

**诊断意见:**腰椎退行性变,L4/5 椎间盘突出。

**Name of examination:** Plain CT scan of the lumbar spine.

**Technique:** Axial plain CT scan of the lumbar spine and sagittal reconstruction, 2 mm slice apart 2 mm.

**Findings:** The alignment and curvature of lumbar vertebrae are normal. Osteoporosis is found in the lumbar spine. Anterior osteophytes are revealed at L2-5. A punctual calcification is seen in the anterior longitudinal ligament of L3/4 level. Herniated disc of L4/5 with 4 mm exceeding the left posterior margin of the vertebrae, obliterating the adjacent epidural fat. No other abnormalities are noted.

**Diagnosis:** Degenerative changes of lumbar spine; disc herniation of the L4/5.

3. 椎弓崩裂

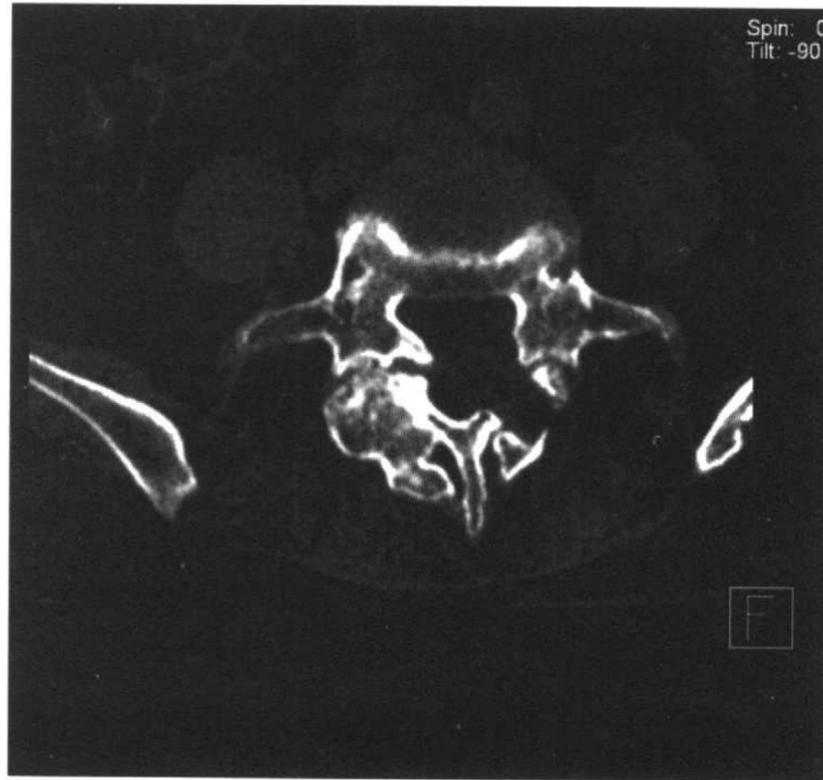


图 2-33 腰 5 横轴位图像  
Fig 2·33 L5 axial CT image



图 2-34 腰椎矢状位 MPR  
Fig 2·34 Sagittal MPR image



图 2-35 VRT 图像  
Fig 2·35 VRT image

**检查名称:**腰椎 64 层 CT 螺旋扫描。

**检查方法:**腰椎轴位螺旋扫描及 MPR 及三维重建。

**检查所见:**第五腰椎双侧椎弓峡部可见裂隙,腰 5 椎体轻度向前方滑脱。其他椎体、椎弓及椎间隙未见异常,椎旁软组织未见病变。

**诊断意见:**腰 5 双侧椎弓崩裂。

**Name of examination:** Spiral CT scan of lumbar vertebrae by 64-slice CT.

**Technique:** Axial spiral scanning, MPR and three-dimensional reconstruction.

**Findings:** There can be seen fissures in the bilateral isthmus of the fifth lumbar vertebra which surges forward mildly; no abnormality is found in the other lumbar vertebrae and archs, the inter-vertebrae spaces and soft tissue are normal.

**Diagnosis:** Isthmic spondylolisthesis of the fifth lumbar vertebra.

## 4. 骨纤维异常增殖症

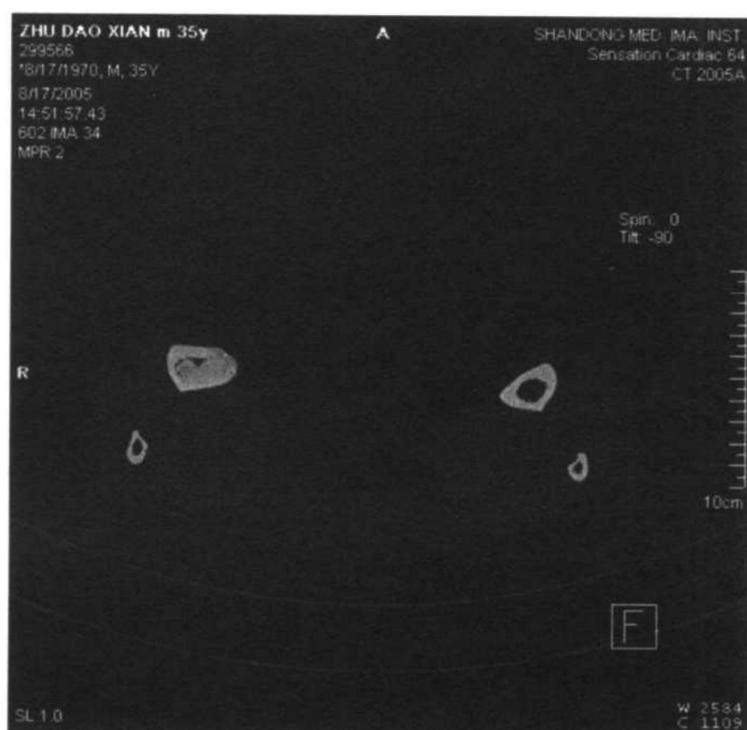


图 2-36 胫骨 CT 轴位扫描图像

Fig 2 · 36 Tibia axial CT scan



图 2-37 胫骨 CT 长轴位 MPR 重建

Fig 2 · 37 Tibia long-axial MPR

**检查名称:** 双侧胫骨 64 层 CT 螺旋扫描。

**检查方法:** 胫骨 CT 轴位扫描及冠状 MPR 重建。

**检查所见:** 右胫骨中下段可见骨皮质明显增生硬化,并向髓腔内突入,病变范围约 14 cm × 3 cm × 4 cm,形态不规则,密度较均匀,边界清楚,未见骨质破坏,周围软组织未见病变。

**诊断意见:** 右胫骨骨纤维异常增殖症。

**Name of examination:** Spiral CT scans of bilateral tibia by 64-slice CT.

**Technique:** Axial scanning and coronal MPR.

**Findings:** Remarkable osteosclerosis of cortex can be seen in the middle and low part of right tibia, part of which stretches into the marrow lumen. The above lesion is about 14 cm × 3 cm × 4 cm with an irregular shape, heterogeneous attenuation and well-defined border. No bone destruction and soft lesion can be seen. The left tibia is normal.

**Diagnosis:** Fibrous dysplasia of right tibia.

5. 胸骨囊肿

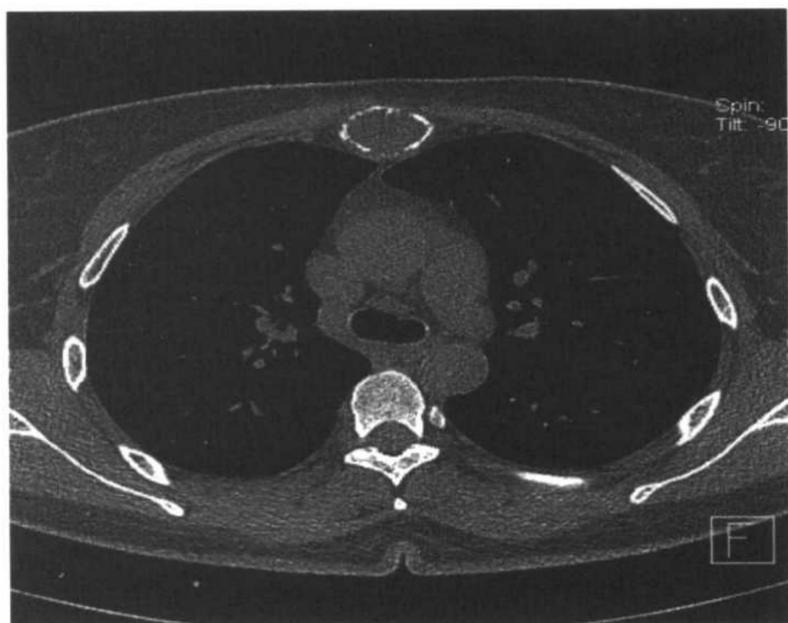


图 2-38 轴位图像  
Fig 2·38 Axial image



图 2-39 矢状位 MPR  
Fig 2·39 Sagittal MPR



图 2-40 冠状 MPR  
Fig 2·40 Coronal MPR



图 2-41 VRT 图像  
Fig 2·41 VRT image

**检查名称:**胸骨 64 层 CT 螺旋扫描。

**检查方法:**胸骨轴位螺旋扫描及 MPR 及三维重建。

**检查所见:**胸骨体可见长圆形大小约 6 cm × 3 cm × 3 cm 的骨质破坏,边界清楚,密度均匀,内部 CT 值 35 HU,局部骨皮质膨胀,并可见皮质不连续,有小的缺损中断区域,周围软组织内未见明显肿块;胸骨余部未见异常。

**诊断意见:**胸骨良性病变,考虑囊肿可能性大。

**Name of examination:** Spiral CT scan of sternum by 64-slice CT.

**Technique:** Axial spiral scanning, MPR and three-dimensional reconstruction.

**Findings:** There can be seen bone destruction in the body of sternum with a range of 6 cm × 3 cm × 3 cm, a long round shape, well-defined margin, and a homogeneous attenuation. The CT value in the lesion is 35 HU. Local bone cortex is expanded with several small interrupted zones along the cortex. There is no abnormal sign in the other parts of sternum and in the soft tissue around the bone.

**Diagnosis:** The benign lesion of sternum, most possible be cyst.

### 三、胸部

#### 1. 正常胸部

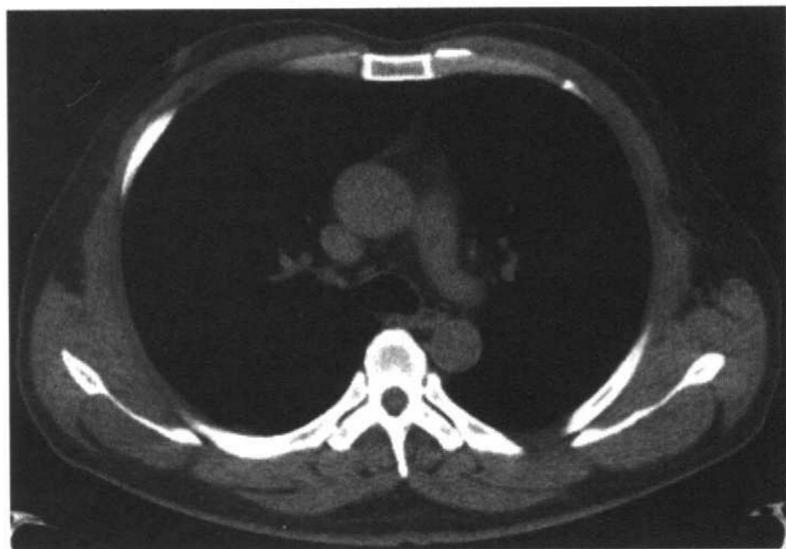


图 2-42 轴位像(纵隔窗)

Fig 2 · 42 Transverse image (kernel = 30)



图 2-43 轴位像(纵隔窗)

Fig 2 · 43 Transverse image (kernel = 30)

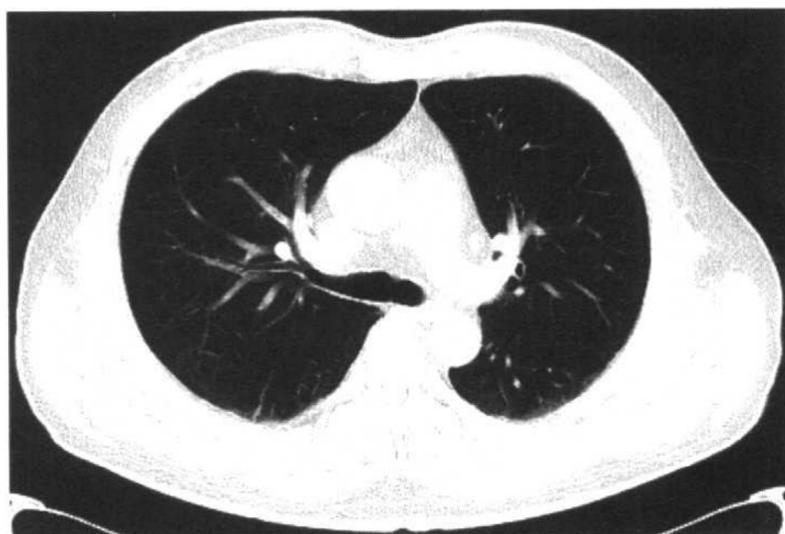


图 2-44 轴位像(肺窗)

Fig 2 · 44 Transverse image (kernel = 60)

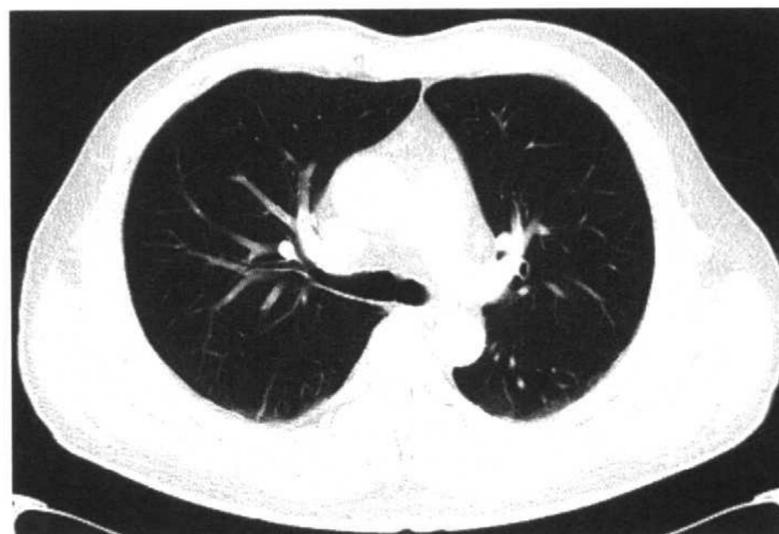


图 2-45 轴位像(肺窗)

Fig 2 · 45 Transverse image (kernel = 60)

**检查名称:**胸部 CT 平扫。

**检查方法:**胸部横断 CT 扫描,层厚 5 mm,间隔 5 mm。

**检查所见:**胸廓对称,纵隔、气管居中。两肺野清晰,肺纹理走行自然。气管及支气管通畅,纵隔内未见肿大淋巴结。

**诊断意见:**胸部 CT 平扫未见异常。

**Name of examination:** Plain CT scan of the chest.

**Technique:** Axial CT scan of the chest, 5 mm slice apart 5 mm.

**Findings:** The bilateral compages of thorax are symmetrical. The mediastinum and trachea are in the middle of the chest. Both sides of the lung field are clear. Lung-markings present naturally. The trachea and bronchi are all through. No mediastinal lymphadenectasis is noted.

**Diagnosis:** No evidence of the chest abnormality.

## 2. 肺炎

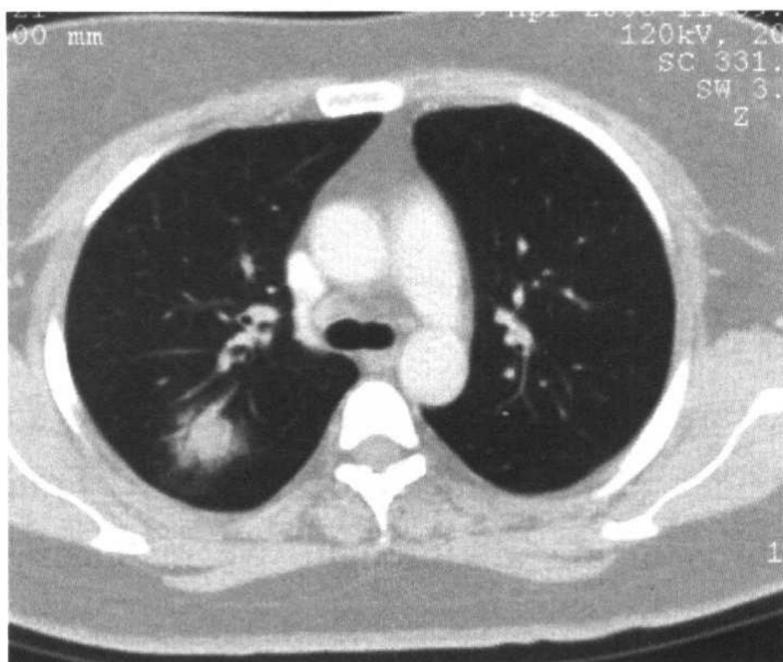


图 2-46 轴位像(肺窗)

Fig 2 · 46 Transverse image (kernel = 60)

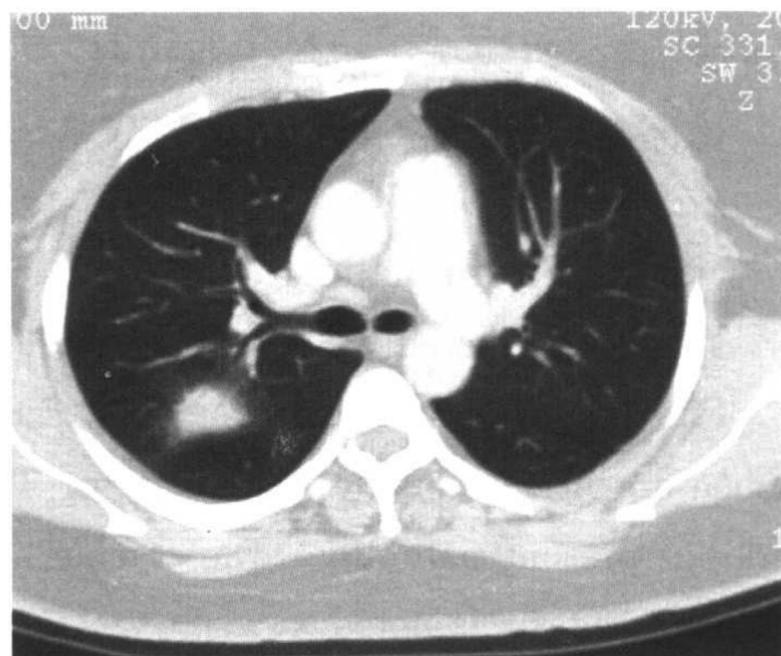


图 2-47 轴位像(肺窗)

Fig 2 · 47 Transverse image (kernel = 60)

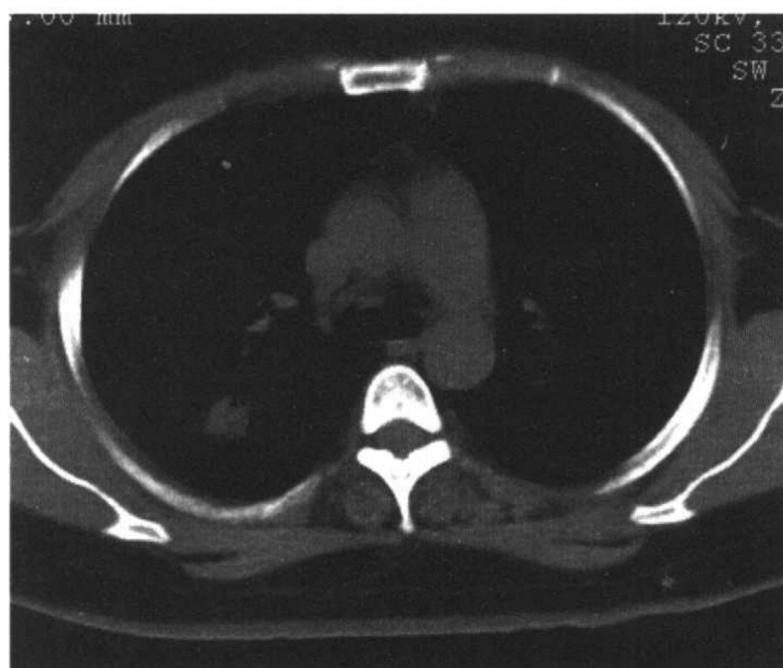


图 2-48 平扫轴位像(纵隔窗)

Fig 2 · 48 Pre-contrast transverse image  
(kernel = 30)



图 2-49 增强扫描轴位像(纵隔窗)

Fig 2 · 49 Post-contrast transverse image  
(kernel = 30)

**检查名称:**胸部 CT 平扫 + 增强扫描。

**检查方法:**胸部横断 CT 扫描,层厚 5 mm,间隔 5 mm。

**检查所见:**胸廓对称,纵隔、气管居中。右肺上叶后段见片状密度增高影,边界模糊,其内见空气支气管征。增强扫描病灶强化明显。气管隆突右前方见一 0.8 cm × 1.3 cm 大小的淋巴结。左肺野清晰。气管及支气管通畅。

**诊断意见:**右肺上叶后段炎症。

**Name of examination:** CT scan of the chest, pre-contrast and post-contrast.

**Technique:** Axial CT scan of the chest, 5 mm slice apart 5 mm.

**Findings:** The bilateral compages of thorax are symmetrical. The mediastinum and trachea are in the middle of the chest. A patchy lesion with ill-defined margin is present in the posterior segment of right superior lobe. Air bronchogram sign is present in the lesion. On the post contrast images the lesion is enhanced obviously. A 0.8 cm × 1.3 cm lymph node is present at the right anterior to carina of trachea. The left lung field is clear. The trachea and bronchi are all through.

**Diagnosis:** Pneumonia in the posterior segment of right superior lobe.

3. 肺部小结节

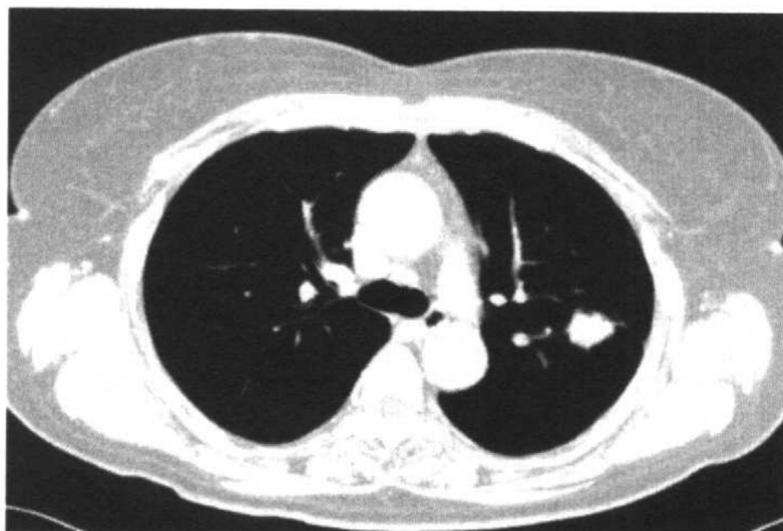


图 2-50 轴位像(肺窗)

Fig 2 · 50 Transverse image (kernel = 60)

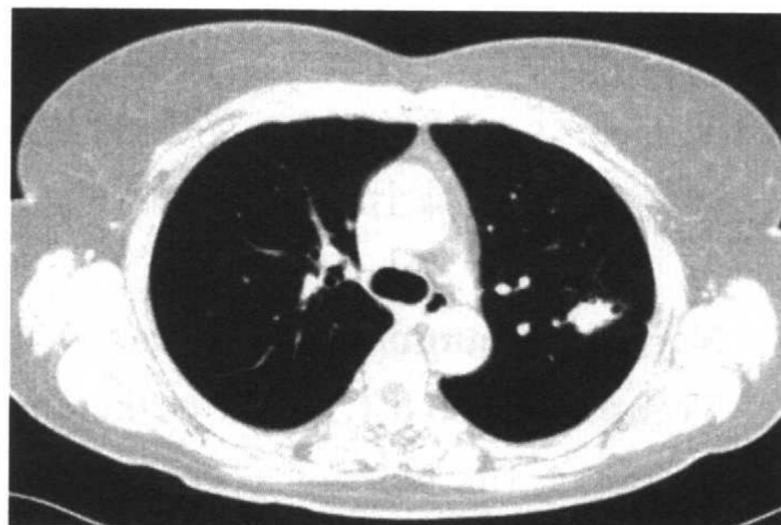


图 2-51 轴位像(肺窗)

Fig 2 · 51 Transverse image (kernel = 60)

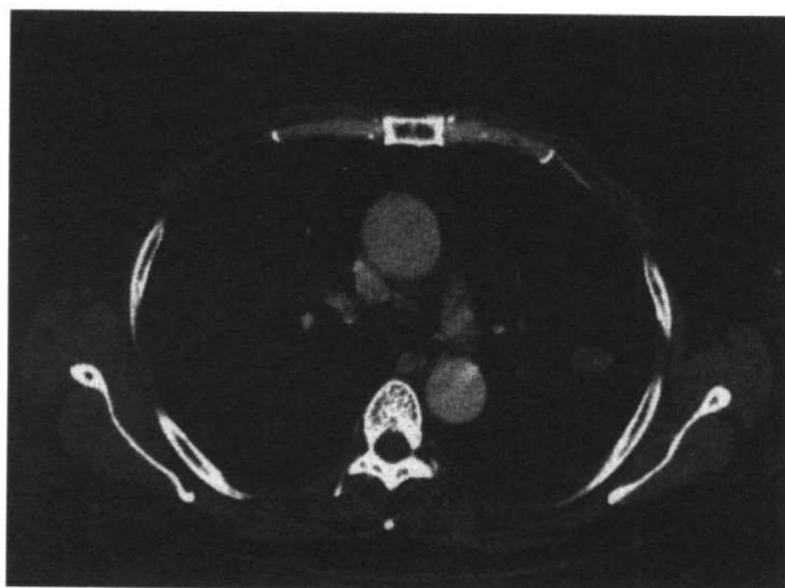


图 2-52 平扫轴位像(纵隔窗)

Fig 2 · 52 Pre-contrast transverse image  
(kernel = 30)

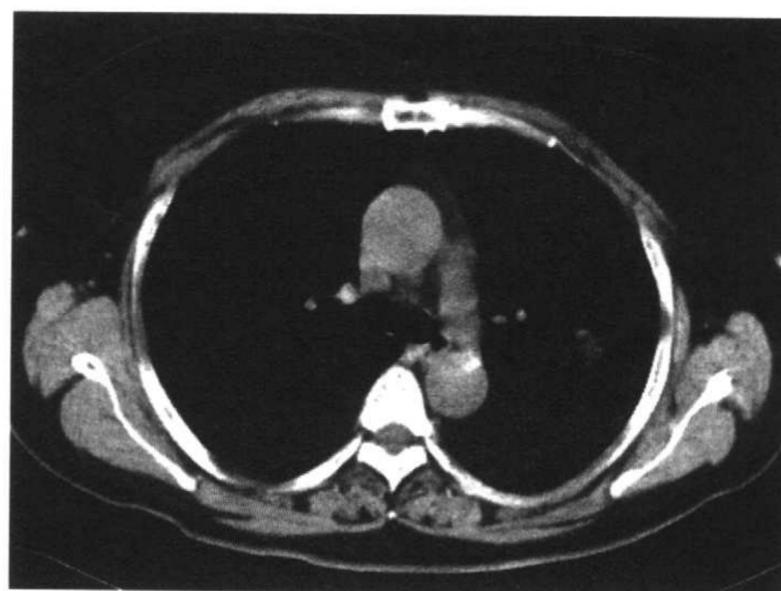


图 2-53 增强扫描轴位像(纵隔窗)

Fig 2 · 53 Post-contrast transverse image  
(kernel = 30)

**检查名称:**胸部 CT 平扫 + 增强扫描。

**检查方法:**胸部横断 CT 扫描,层厚 5 mm,间隔 5 mm。

**检查所见:**胸廓对称,纵隔、气管居中。左肺上叶后段见一边界稍模糊的结节状病灶,最大截面积为 1.7 cm × 2.4 cm。病灶边缘呈轻度分叶状,并有长毛刺。气管隆突右前方见一 0.7 cm × 1.2 cm 大小的淋巴结。增强扫描病灶轻度强化。右肺野清晰。气管及支气管通畅。

**诊断意见:**左肺上叶结节灶,建议活检。

**Name of examination:** CT scan of the chest, pre-contrast and post-contrast.

**Technique:** Axial CT scan of the chest, 5 mm slice apart 5 mm.

**Findings:** The bilateral compages of thorax are symmetrical. The mediastinum and trachea are in the middle of the chest. A nodular lesion with slightly hazy margin is present in the apicoposterior segment of left lung, the maximal axial area of the lesion is 1.7 cm × 2.4 cm. The border of lesion is slightly lobular with long spicule. On the post contrast images the lesion is slightly enhanced. The right lung field is clear. The trachea and bronchi are all through. A 0.7 cm × 1.2 cm lymph node is present at the right anterior to carina of trachea.

**Diagnosis:** Nodular lesion in the left superior lobe, biopsy is suggested.

4. 肺癌

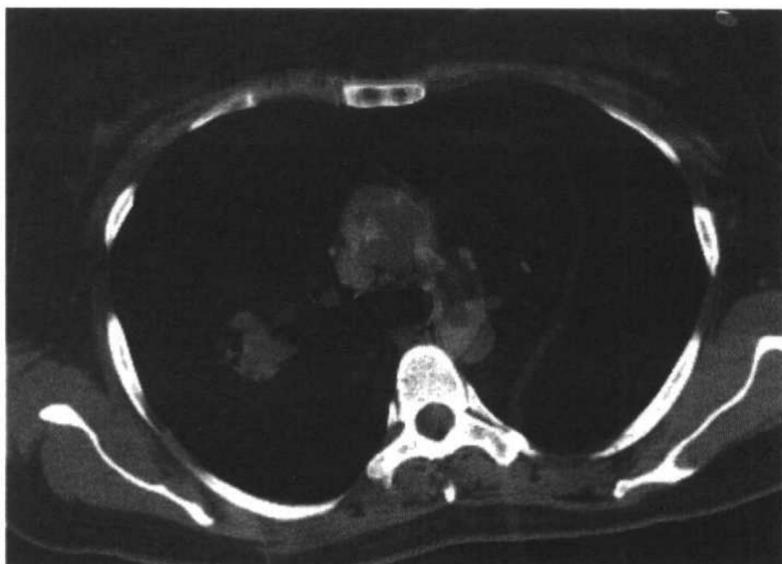


图 2-54 平扫轴位像(纵隔窗)  
Fig 2·54 Pre-contrast transverse image  
(kernel = 30)

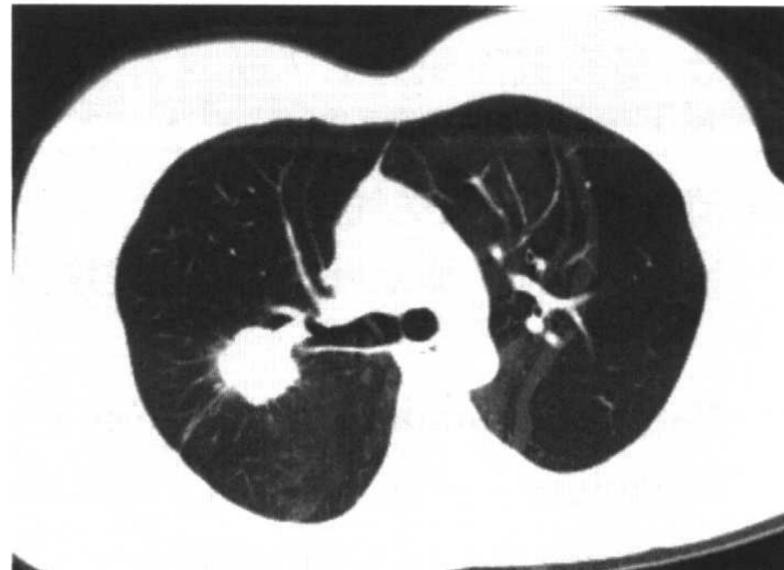


图 2-55 轴位像(肺窗)  
Fig 2·55 Transverse image  
(kernel = 60)

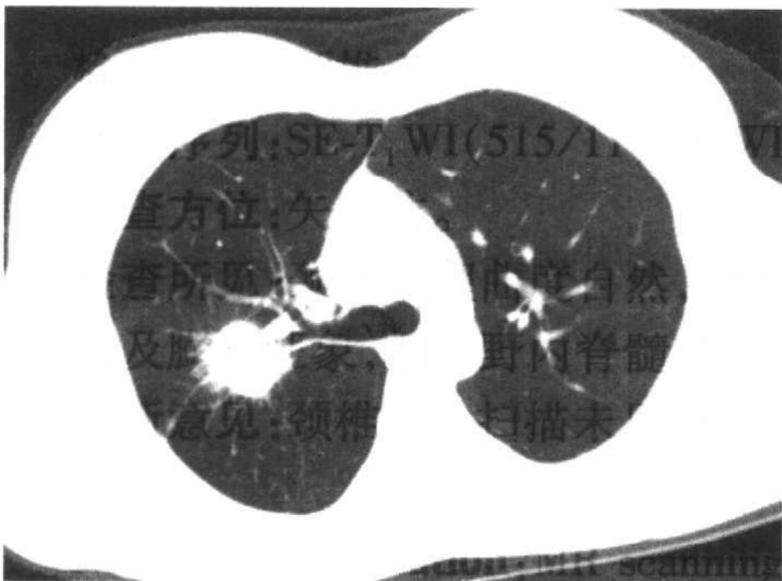


图 2-56 轴位像(肺窗)  
Fig 2·56 Transverse image  
(kernel = 60)

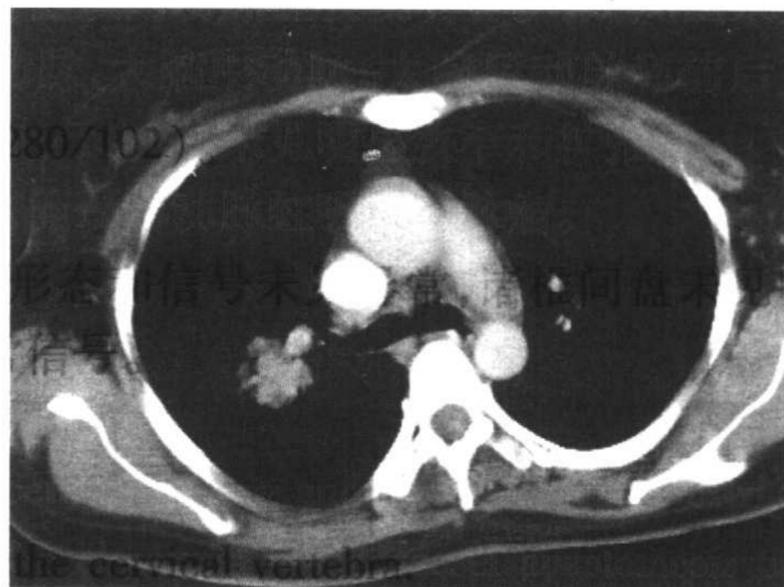


图 2-57 增强扫描轴位像(纵隔窗)  
Fig 2·57 Post-contrast transverse image  
(kernel = 30)

**检查名称:**胸部 CT 平扫 + 增强扫描。

**检查方法:**胸部横断 CT 扫描,层厚 5 mm,间隔 5 mm。

**检查所见:**右肺上叶后段支气管开口处可见一 3.8 cm × 4.6 cm 大小的软组织肿块影,其内见不规则空洞,边缘呈分叶状,并可见毛刺。右肺上叶后段支气管狭窄、中断。增强扫描肿块明显强化。纵隔见多发肿大淋巴结。左肺野清晰。

**诊断意见:**右肺上叶中央型肺癌并纵隔淋巴结转移。

**Name of examination:** CT scan of the chest, pre-contrast and post-contrast.

**Technique:** Axial CT scan of the chest, 5 mm slice apart 5 mm.

**Findings:** A soft tissue mass with a size of 3.8 cm × 4.6 cm is present at the bronchial orifice of posterior segment of right superior lobe, an irregular cavity is found in the lesion, and the border of lesion is lobular with spicule. The bronchus of posterior segment of right superior lobe demonstrates stenosis and occlusion. On the post contrast images the mass is obviously enhanced. Multiple enlarged lymph nodes are present in the mediastinum. The left lung field is clear.

**Diagnosis:** Central bronchogenic carcinoma of right superior lobe with mediastinal lymphatic metastasis.

## 5. 胸腺瘤

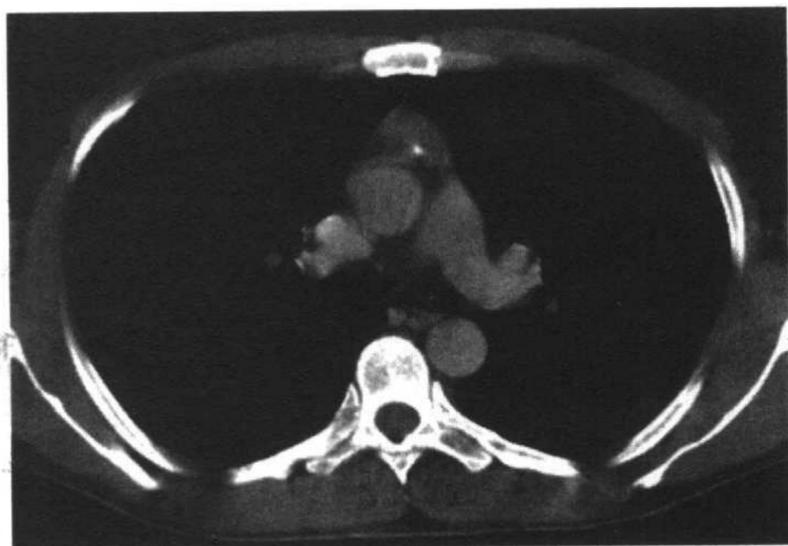


图 2 - 58 平扫轴位像

Fig 2 · 58 Pre-contrast transverse image



图 2 - 59 增强扫描轴位像

Fig 2 · 59 Post-contrast transverse image

**检查名称:**胸部 CT 平扫 + 增强扫描。

**检查方法:**胸部横断 CT 扫描,层厚 5 mm,间隔 5 mm。

**检查所见:**胸廓对称,气管居中。前上纵隔内可见一 2.5 cm × 2.0 cm 大小的软组织肿块影,边缘较光滑,其内见点状钙化,增强扫描病灶中等程度强化。两肺野清晰,肺纹理走行自然。气管及支气管通畅,纵隔及肺门未见明显肿大淋巴结。

**诊断意见:**前上纵隔肿瘤,考虑胸腺瘤。

**Name of examination:** CT scan of the chest, pre-contrast and post-contrast.

**Technique:** Axial CT scan of the chest, 5 mm slice apart 5 mm.

**Findings:** The bilateral compages of thorax are symmetrical. The trachea is in the middle of the chest. A soft tissue mass with a size of 2.5 cm × 2.0 cm is present in the anterior-superior mediastinum. The border of mass is smooth, and a punctual calcification is found in the lesion. On the post contrast images the mass is mildly enhanced. Both sides of the lung field are clear. Lung-markings present naturally. The trachea and bronchi are all through. No lymphadenectasis of mediastinum and pulmonary hilus is noted.

**Diagnosis:** Anterior-superior mediastinal mass, thymoma is suggested.

四、腹部

1. 正常上腹部

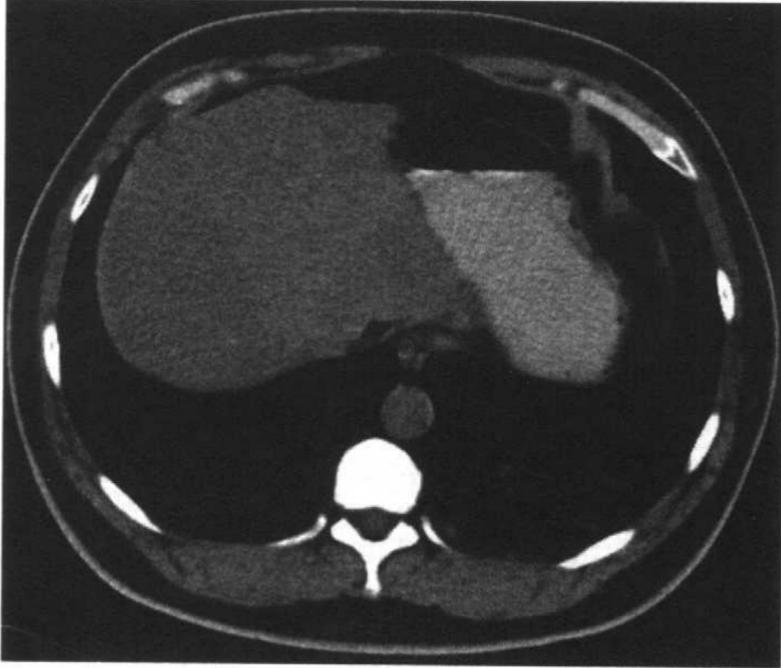


图 2-60 平扫轴位像

Fig 2 · 60 Pre-contrast transverse image



图 2-61 增强扫描轴位像

Fig 2 · 61 Post-contrast transverse image

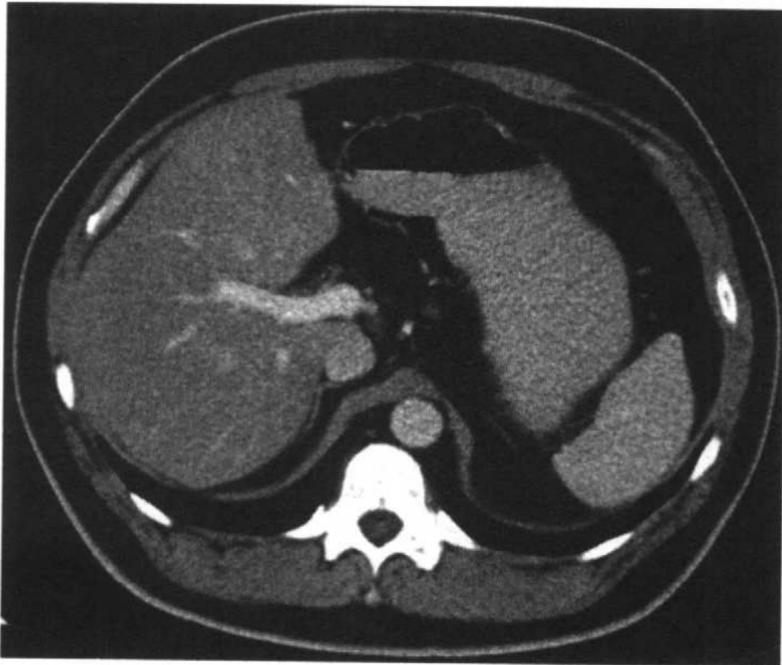


图 2-62 增强扫描轴位像

Fig 2 · 62 Post-contrast transverse image

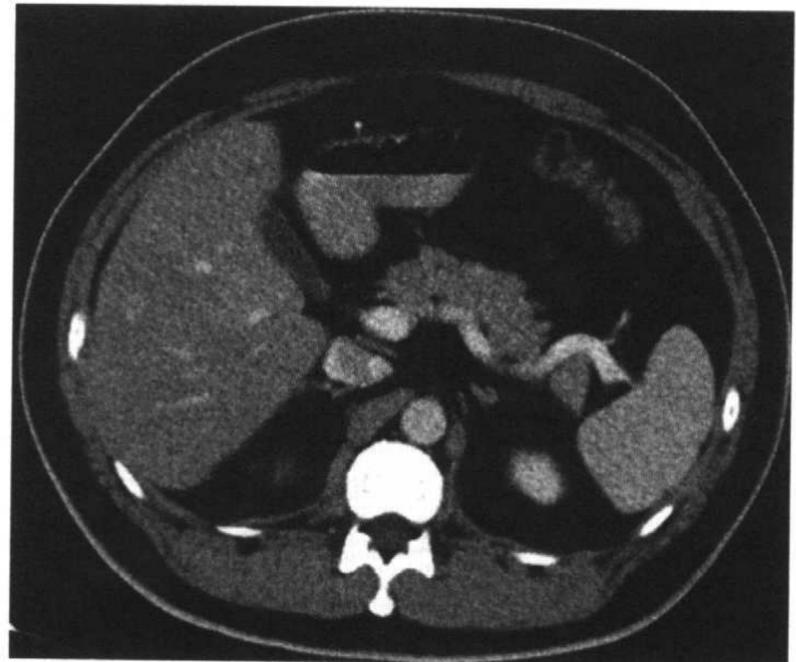


图 2-63 增强扫描轴位像

Fig 2 · 63 Post-contrast transverse image

**检查名称:**上腹部 CT 平扫 + 增强扫描。

**检查方法:**腹部横断 CT 扫描,层厚 5 mm,间隔 5 mm。

**检查所见:**肝脏形态及左右叶比例正常,表面光整。肝实质密度正常,肝内、外胆管无扩张。胆囊壁光整。胰腺形态、密度未见明显异常。脾脏体积不大,密度均质。腹腔及腹膜后无明显肿大淋巴结。

**诊断意见:**上腹部 CT 扫描未见异常。

**Name of examination:** CT scan of the upper abdomen, pre-contrast and post-contrast.

**Technique:** Axial CT scan of the upper abdomen, 5 mm slice apart 5mm.

**Findings:** The configuration of liver and the proportion of left and right hepatic lobe are normal. The hepatic contour is smooth. The density of hepatic parenchyma is normal, intra- and extra-hepatic duct is not dilated. Gallbladder wall is smooth. The shape and density of the pancreas are unremarkable. The volume of spleen is not enlarged, and its density is homogeneous. No lymphadenectasis of abdominal cavity and retroperitoneal is revealed.

**Diagnosis:** No abnormality is revealed in the upper abdominal CT scan.

2. 肝血管瘤

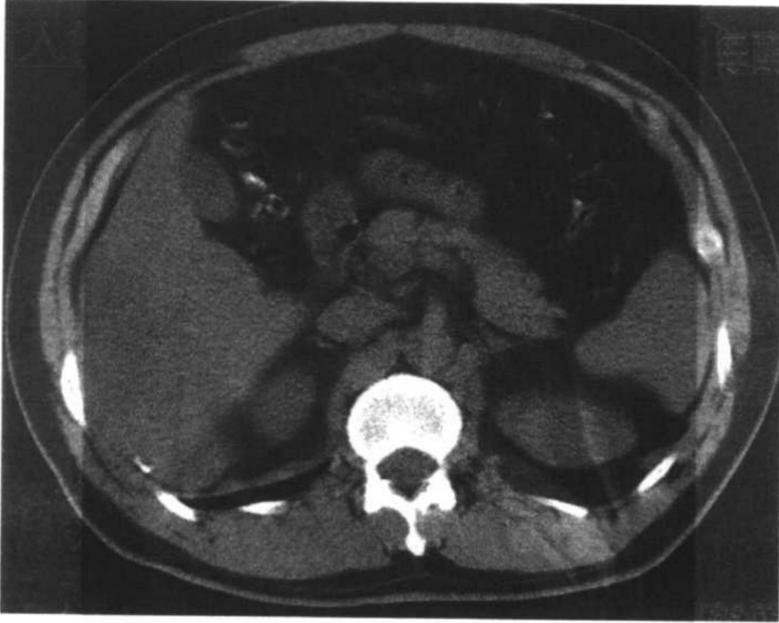


图 2-64 平扫轴位像  
Fig 2·64 Pre-contrast transverse image



图 2-65 增强扫描轴位像(动脉期)  
Fig 2·65 Post-contrast transverse image  
(artery phase)



图 2-66 增强扫描轴位像(静脉期)  
Fig 2·66 Post-contrast transverse image  
(vein phase)

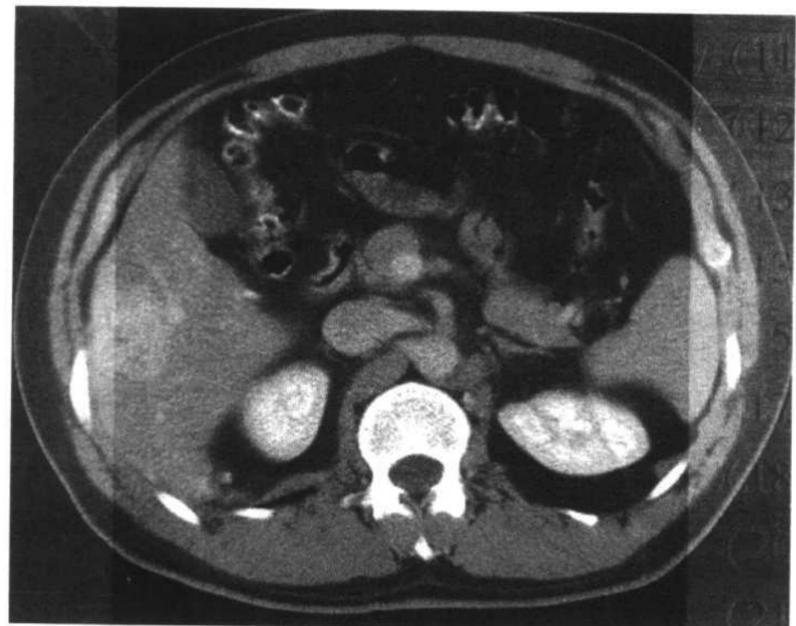


图 2-67 增强扫描轴位像(延迟期)  
Fig 2·67 Post-contrast transverse image  
(delay phase)

**检查名称:**上腹部 CT 平扫 + 增强扫描。

**检查方法:**腹部横断 CT 扫描,层厚 5 mm,间隔 5 mm。

**检查所见:**平扫肝右后叶下段见一大小约 2.2 cm × 3.0 cm 等密度病灶。动脉期病灶呈与主动脉等密度的周边强化;门脉期病灶渐进样强化,与下腔静脉密度相等;延迟期继续向心性强化,密度仍高于正常肝实质。胆囊、胰腺、脾脏、双肾及肾上腺未见异常。腹腔及腹膜后无明显肿大淋巴结。

**诊断意见:**肝右叶海绵状血管瘤。

**Name of examination:** CT scan of the upper abdomen, pre-contrast and post-contrast.

**Technique:** Axial CT scan of the upper abdomen, 5 mm slice apart 5 mm.

**Findings:** On the pre-contrast images, an isoattenuating lesion with a size of 2.2 cm × 3.0 cm is found in inferior aspect of the right lobe. On arterial phase images, the lesion shows early peripheral enhancement that is isoattenuating to the aorta. On portal vein phase images, the lesion shows progressive enhancement that is isoattenuating to the inferior vena cave. Delay phase, the lesion continues to enhance centripetally and is still hyperattenuating to the normal hepatic parenchyma. Gallbladder, pancreas, spleen, bilateral kidneys and adrenal glands are unremarkable. No lymphadenectasis of abdominal cavity and retroperitoneal is revealed.

**Diagnosis:** Cavernous hemangioma in the right lobe of liver.

3. 肝癌



图 2-68 平扫轴位像

Fig 2 · 68 Pre-contrast transverse Image



图 2-69 平扫轴位像

Fig 2 · 69 Pre-contrast transverse Image

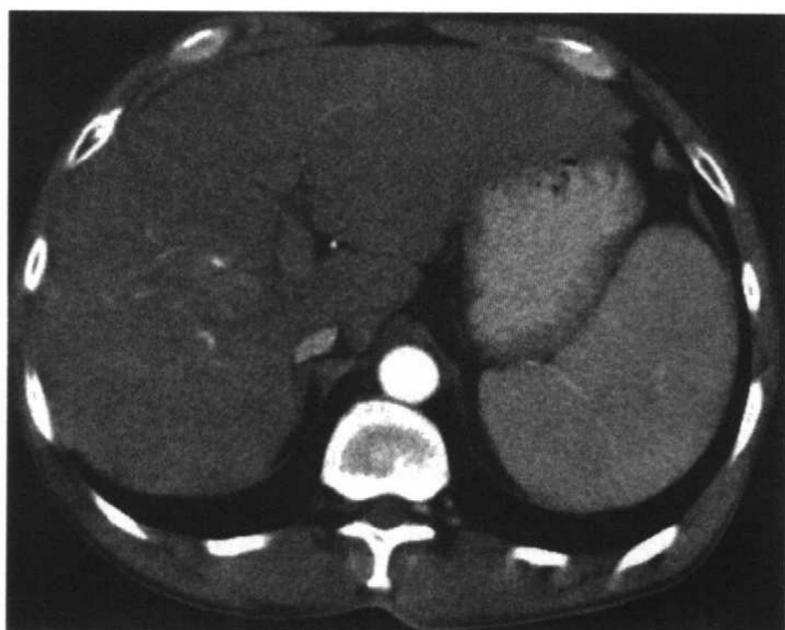


图 2-70 增强扫描轴位像(动脉期)

Fig 2 · 70 Post-contrast transverse image (artery phase)

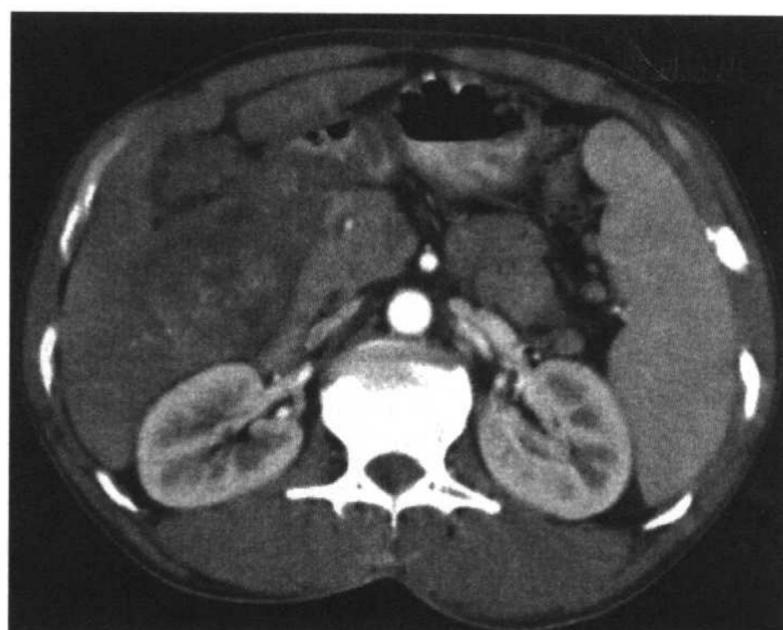


图 2-71 增强扫描轴位像(动脉期)

Fig 2 · 71 Post-contrast transverse image (artery phase)

检查名称:上腹部 CT 平扫 + 增强扫描。

检查方法:腹部横断 CT 扫描,层厚 5 mm,间隔 5 mm。

检查所见:平扫肝右叶见一大小约 5 cm × 7 cm 边界模糊的低密度病灶,其内见更低密度区。动脉期病灶呈早期不均质强化;门脉期病灶密度下降,低于邻近肝实质,上述更低密度区未见强化。门静脉右支未显影,内有低密度影充填。脾脏增大。胆囊壁增厚。胰腺、双肾及肾上腺未见异常。腹腔及腹膜后无明显肿大淋巴结。

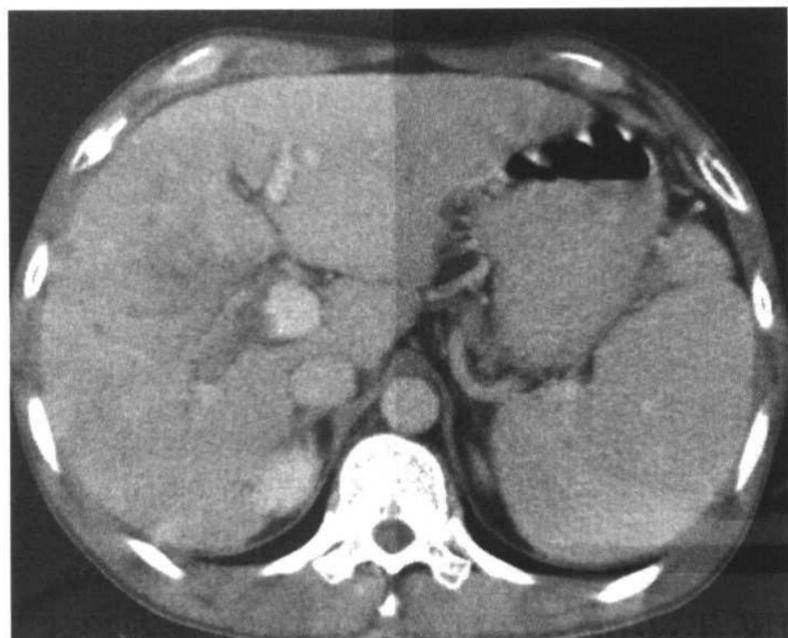


图 2 - 72 增强扫描轴位像(静脉期)  
Fig 2 · 72 Post-contrast transverse image  
( vein phase)



图 2 - 73 增强扫描轴位像(静脉期)  
Fig 2 · 73 post-contrast transverse image  
( vein phase)

诊断意见:①肝癌并门静脉癌栓。②肝硬化、脾大。

**Name of examination:** CT scan of the upper abdomen, pre-contrast and post-contrast.

**Technique:** Axial CT scan of the upper abdomen, 5 mm slice apart 5 mm.

**Findings:** On the pre-contrast images, an ill-defined, hypodense mass with a size of 5 cm × 7 cm is found in the right lobe, some more lower density areas can be seen in the lesion. On arterial phase images, the lesion shows early heterogeneous enhancement. On portal vein phase images, the density of lesion decreases and is hypodense to adjacent hepatic parenchyma. The noted hypo-intensive region is not enhanced. The right branch of portal vein is not enhanced and a hypodense mass is filling within its lumen. Splenomegaly is revealed. The wall of gallbladder is thickening. Pancreas, bilateral kidneys and adrenal glands are unremarkable. No lymphadenectasis of abdominal cavity and retroperitoneal is revealed.

**Diagnosis:** ①Hepatocarcinoma with neoplastic thrombosis of portal vein. ②Cirrhosis of liver with splenomegaly.

4. 胆囊切除术后



图 2-74 平扫轴位像  
Fig 2·74 Pre-contrast transverse  
image



图 2-75 平扫轴位像  
Fig 2·75 Pre-contrast transverse  
image

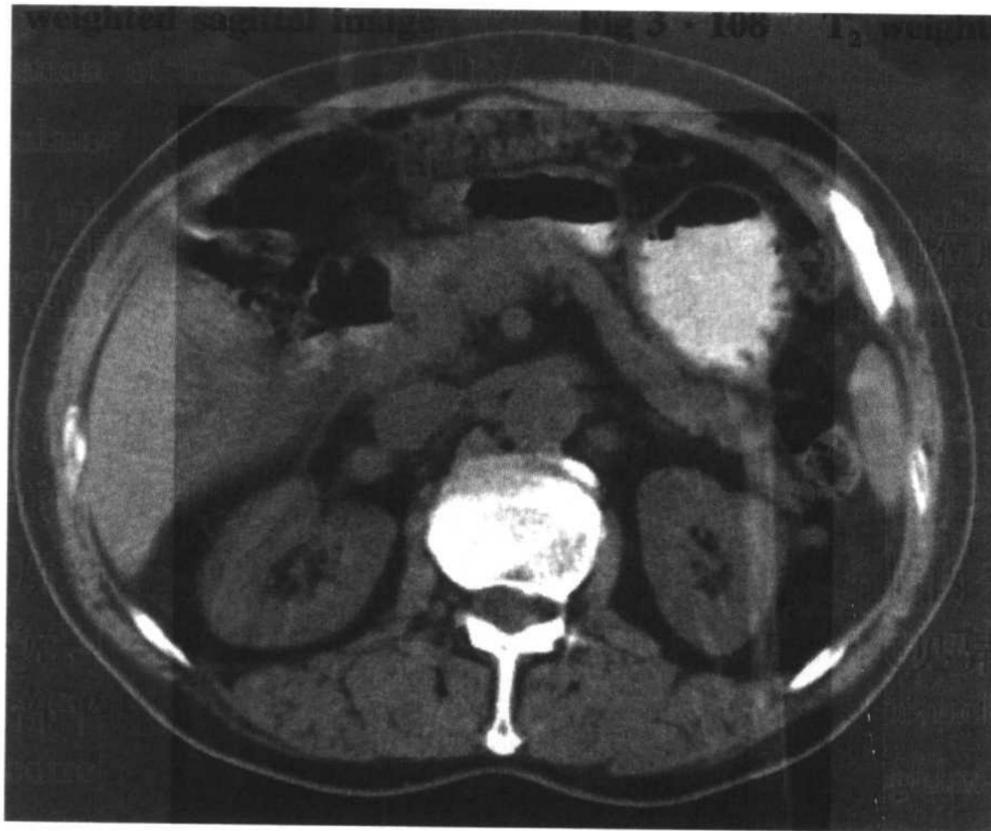


图 2-76 平扫轴位像  
Fig 2·76 Pre-contrast transverse image

**检查名称:**上腹部 CT 平扫。

**检查方法:**腹部横断 CT 扫描,层厚 5 mm,间隔 5 mm。

**检查所见:**胆囊切除术后,肝内胆管积气,胰管扩张,直径约 5 mm,胰头部及胆总管末端未见局限性肿块及结石。肝脏形态及密度正常。脾脏未见异常。腹腔及腹膜后无明显肿大淋巴结。

**诊断意见:**胆囊切除术后,肝内胆管积气,胰管扩张。

**Name of examination:** CT scan of the upper abdomen.

**Technique:** Axial CT scan of the upper abdomen, 5 mm slice apart 5 mm.

**Findings:** Status of post cholecystectomy, the intra-hepatic duct is pneumotosis and the pancreatic duct is enlarged with a diameter of 5 mm. The head of pancreas and the distal end of common bile duct are demonstrated without focal mass or stone. The configuration and the density of liver are normal. The spleen is unremarkable. No lymphadenectasis of abdominal cavity and retroperitoneal is revealed.

**Diagnosis:** Status of cholecystectomy with intra-hepatic duct pneumotosis and pancreatic duct dilation.

5. 肾囊肿

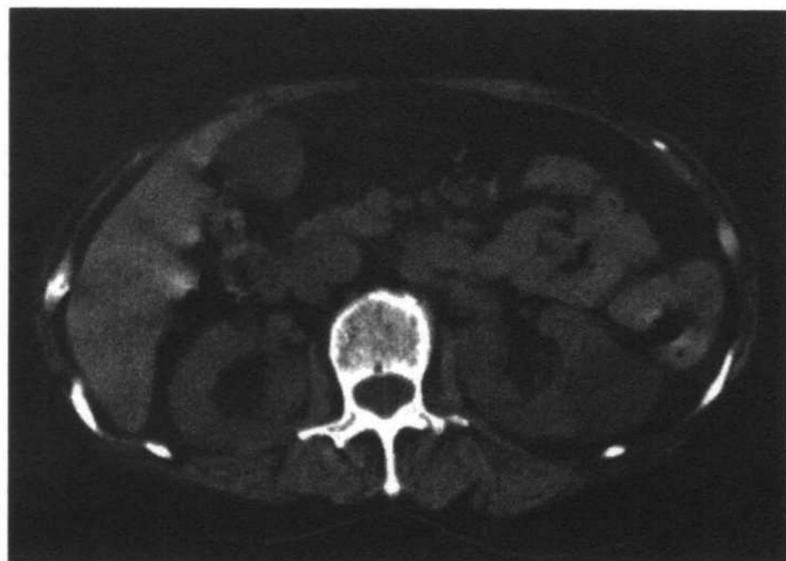


图 2-77 平扫轴位像  
Fig 2·77 Pre-contrast transverse image



图 2-78 增强扫描轴位像(动脉期)  
Fig 2·78 Post-contrast transverse image(artery phase)



图 2-79 增强扫描轴位像(静脉期)  
Fig 2·79 Post-contrast transverse image (vein phase)

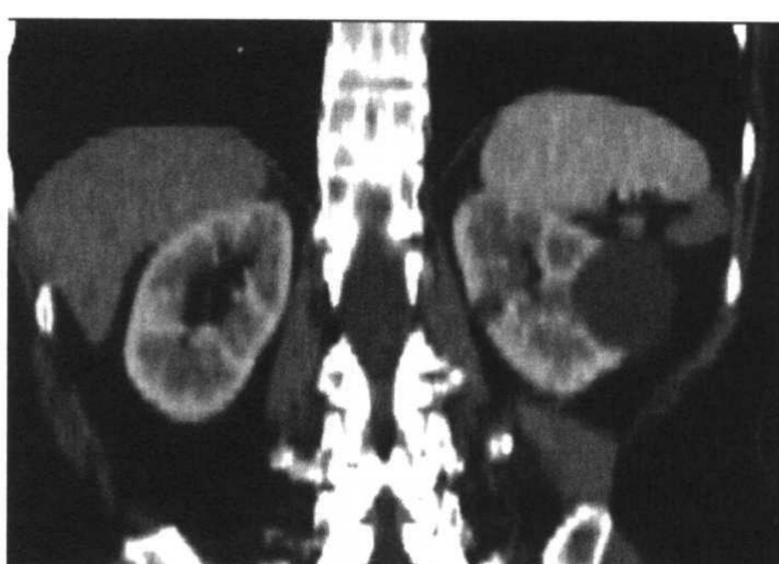


图 2-80 增强扫描冠状位像(动脉期)  
Fig 2·80 Post-contrast coronal image(artery phase)

**检查名称:**肾脏 CT 平扫 + 增强扫描。

**检查方法:**肾脏横断 CT 扫描并冠状位重建,层厚 3 mm,间隔 3 mm。

**检查所见:**左肾中部后外侧见一 CT 值为 10 Hu 的圆形均质的低密度病灶突出于肾轮廓外。注入造影剂后该病灶未见强化,边缘光滑锐利。病灶大小约 2.8 cm × 3.1 cm。右肾及双侧肾上腺未见明显异常。双侧肾盂肾盏未见明显扩张。腹腔及腹膜后无明显肿大淋巴结。

**诊断意见:**左肾囊肿。

**Name of examination:** CT scan of the kidney, pre- and post- contrast.

**Technique:** Axial CT scan of the kidney with coronary reconstruction, 3 mm slice apart 3 mm.

**Findings:** A round and homogeneous hypoattenuation lesion with a CT value of 10 Hu is seen in the posterolateral of mid-pole of left kidney and beyond the contour of kidney. After administration of contrast material, the lesion is not increased in attenuation and has a smoothly sharp border. The size of lesion is about 2.8 cm × 3.1 cm. Right kidney and bilateral adrenal glands are unremarkable. Bilateral renal pelvis and calices are not obviously dilated. No lymphadenectasis of abdominal cavity and retroperitoneal is revealed.

**Diagnosis:** Renal cyst in the left kidney.

6. 肾癌



图 2-81 平扫轴位像  
Fig 2·81 Pre-contrast transverse image

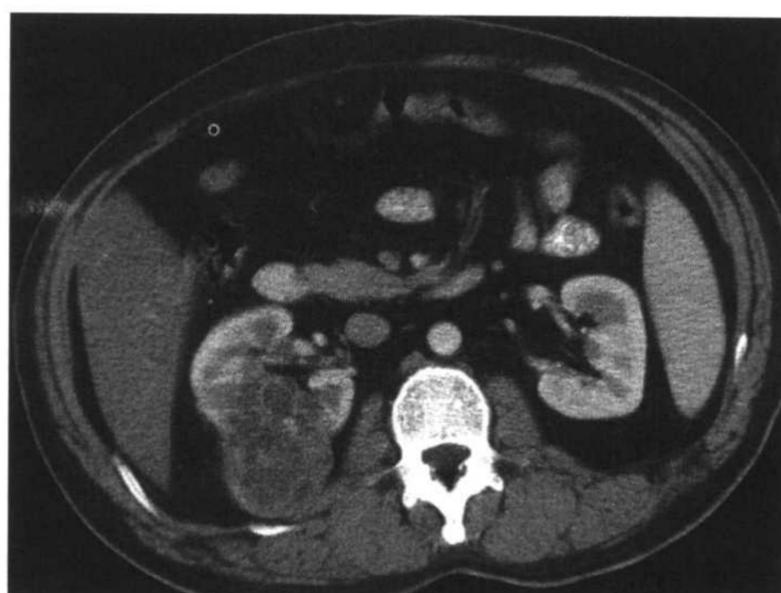


图 2-82 增强扫描轴位像(动脉期)  
Fig 2·82 Post-contrast transverse image  
(artery phase)

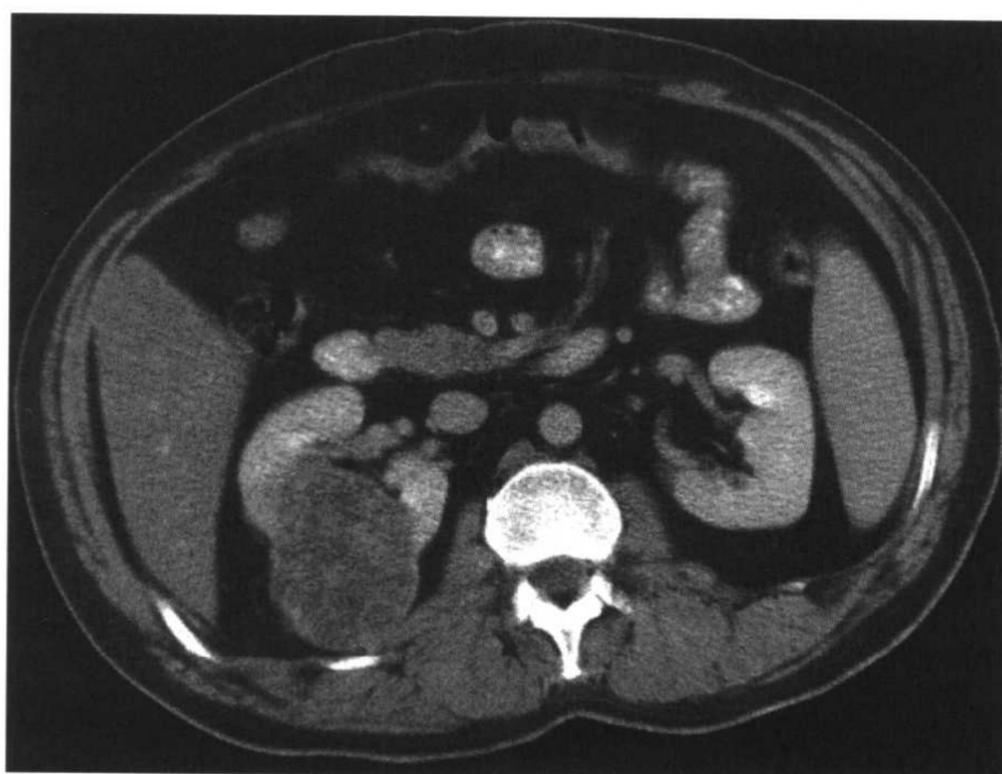


图 2-83 增强扫描轴位像(静脉期)  
Fig 2·83 Post-contrast transverse image  
(vein phase)

**检查名称:**肾脏 CT 平扫 + 增强扫描。

**检查方法:**肾脏横断 CT 扫描,层厚 5 mm,间隔 5 mm。

**检查所见:**轴位平扫示右肾中部后方见一 3.5 cm × 4.2 cm 大小的均质、稍低密度灶突出于肾轮廓外。增强后病灶不均质强化,密度低于相邻肾实质。肿块与残余肾实质无明显分界。左肾及双侧肾上腺未见明显异常。双侧肾盂肾盏未见明显扩张。肾静脉及下腔静脉内未见充盈缺损。腹腔及腹膜后无明显肿大淋巴结。

**诊断意见:**右肾癌。

**Name of examination:** CT scan of the kidney, pre-contrast and post-contrast.

**Technique:** Axial CT scan of the kidney, 5 mm slice apart 5 mm.

**Findings:** Axial pre-contrast images show a homogeneous, slightly hypo-intensive lesion with a size of 3.5 cm × 4.2 cm in the posterior aspect of the mid-pole of right kidney and beyond the contour of kidney. On post-contrast images, the lesion is nonhomogeneous enhanced and hypoattenuation to adjacent parenchyma of kidney. A definite interface between the mass and the remaining renal parenchyma can't be identified. Left kidney and bilateral adrenal glands are unremarkable. Bilateral renal pelvis and calices are not obviously dilated. No filling defect is remarkable in the renal vein and the inferior vena cava. No lymphadenectasis of abdominal cavity and retroperitoneal is revealed.

**Diagnosis:** Renal carcinoma in the right kidney.

7. 急性胰腺炎

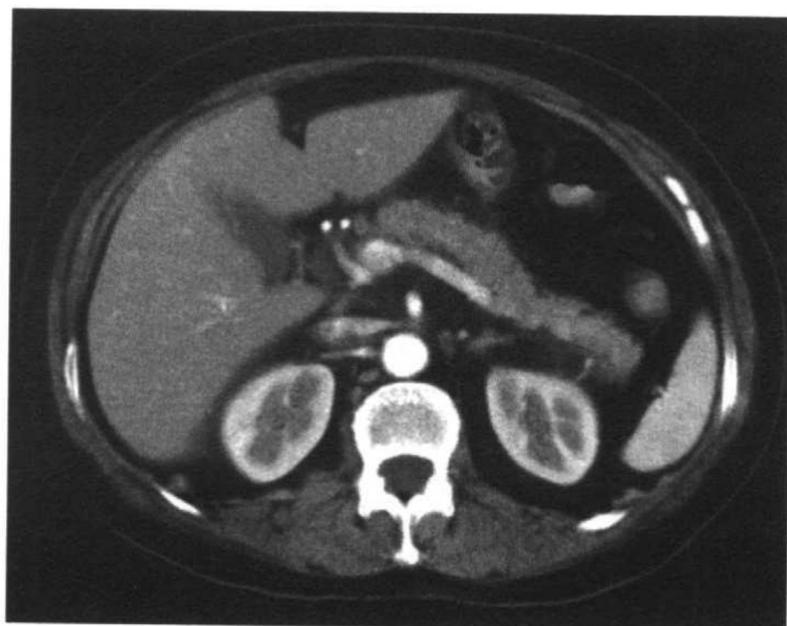


图 2-84 增强扫描轴位像  
Fig 2·84 Post-contrast transverse image



图 2-85 增强扫描轴位像  
Fig 2·85 Post-contrast transverse image

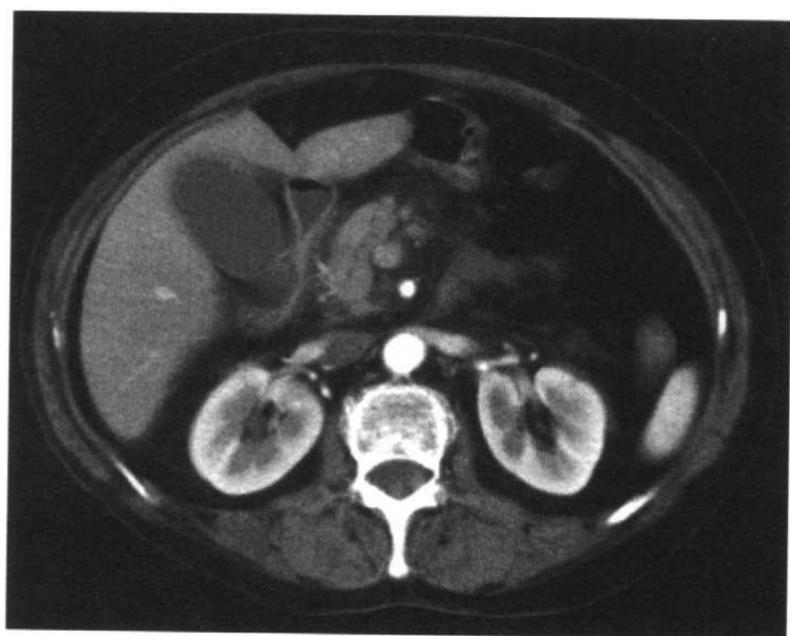


图 2-86 增强扫描轴位像  
Fig 2·86 Post-contrast transverse image

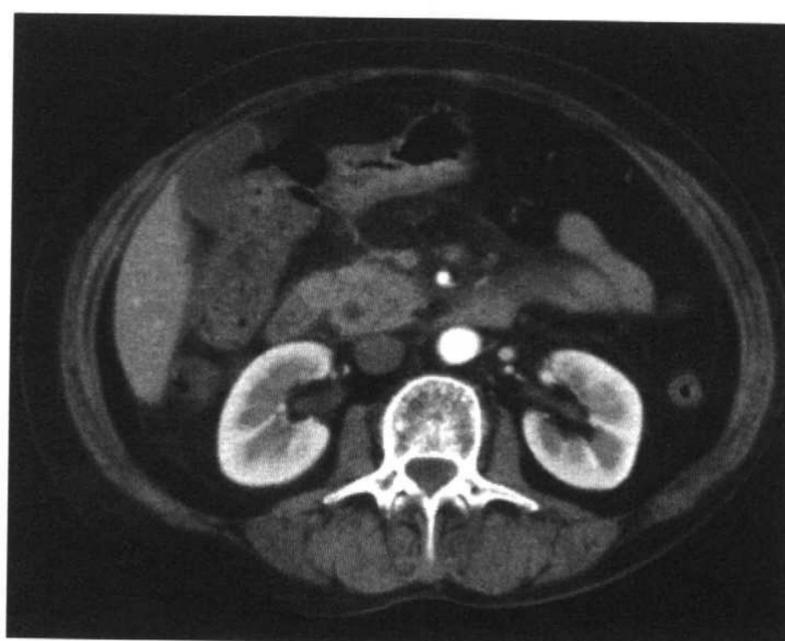


图 2-87 增强扫描轴位像  
Fig 2·87 Post-contrast transverse image

**检查名称:**上腹部 CT 增强扫描。

**检查方法:**腹部横断 CT 扫描,层厚 5 mm,间隔 5 mm。

**检查所见:**强化扫描示胰腺体积略增大,密度不均,边缘尚清晰。胰周脂肪密度增高,胰周、肝肾隐窝及肾周间隙可见液性密度影。肾周筋膜增厚。余未见异常。

**诊断意见:**急性胰腺炎。

**Name of examination:** CT post-contrast scan of the upper abdomen.

**Technique:** Axial CT scan of the upper abdomen, 5 mm slice apart 5 mm.

**Findings:** On the post-contrast images, the volume of pancreas is slightly enlarged. The density of pancreas is non-homogeneous and the margin of gland is still clearly defined. The density of peripancreas fat is increased. The fluid density can be found in peripancreas, hepatorenal recess and perinephric space. Gerota's fascia is thickening. No other abnormality can be found.

**Diagnosis:** Acute pancreatitis.

8. 胰腺癌



图 2-88 增强扫描轴位像  
Fig 2·88 Post-contrast transverse image



图 2-89 增强扫描轴位像  
Fig 2·89 Post-contrast transverse image

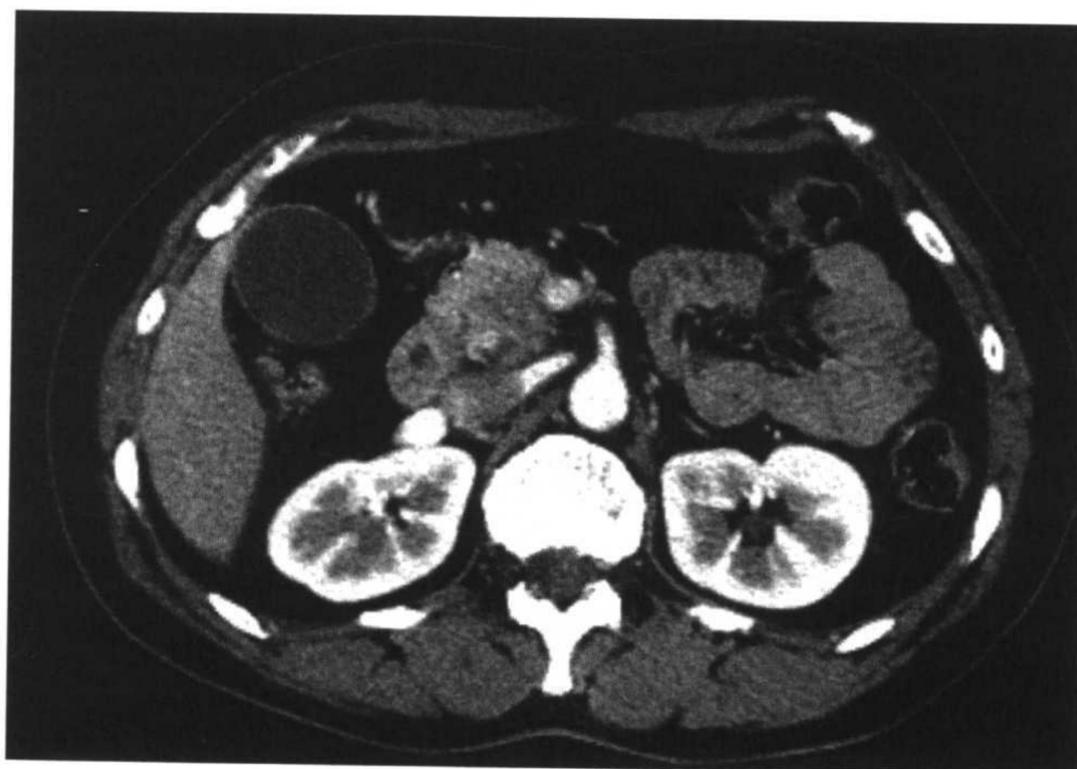


图 2-90 增强扫描轴位像  
Fig 2·90 Post-contrast transverse image

**检查名称:**上腹部 CT 增强扫描

**检查方法:**腹部横断 CT 扫描,层厚 5 mm,间隔 5 mm。

**检查所见:**强化扫描示胰头部见一 2.5 cm × 2.5 cm 大小的低密度病灶,与周围正常胰腺实质对比明显。病灶与肠系膜上静脉关系密切,并致胆总管、肝内胆管、胆囊及主胰管扩张。腹腔及腹膜后无明显肿大淋巴结。

**诊断意见:**胰头癌并胆系扩张。

**Name of examination:** CT post-contrast scan of the upper abdomen.

**Technique:** Axial CT scan of the upper abdomen, 5 mm slice apart 5 mm.

**Findings:** On the post-contrast images, a hypoattenuating lesion with a size of 2.5 cm × 2.5 cm is found in the head of pancreas, which has significantly contrast with peripancreatic parenchymal. The lesion has involved superior mesenteric vein and caused dilatation of duct system including the common bile duct, the intra-hepatic duct, gall-bladder and the main pancreatic duct. No lymphadenectasis of abdominal cavity and retroperitoneal is revealed.

**Diagnosis:** Pancreatic carcinoma with duct system dilation.

## 五、消化道 CT 检查

### 1. 正常胃部 CT

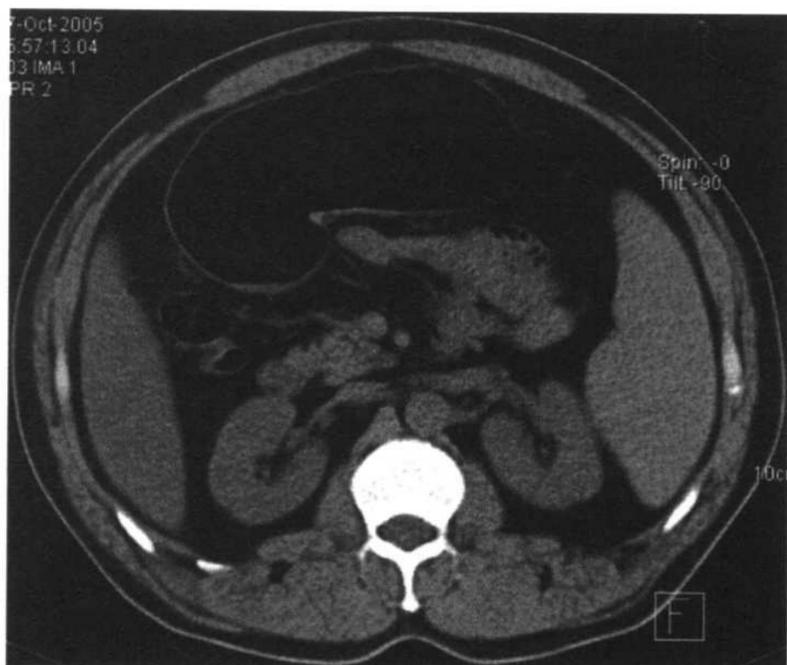


图 2-91 平扫轴位像

Fig 2 · 91 Post-contrast transverse image

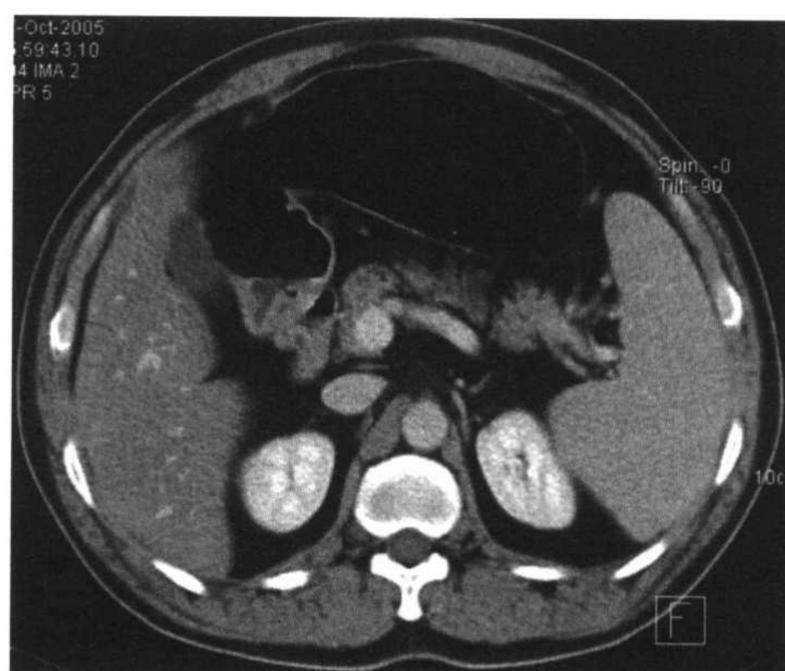


图 2-92 增强扫描轴位像

Fig 2 · 92 Post-contrast transverse image

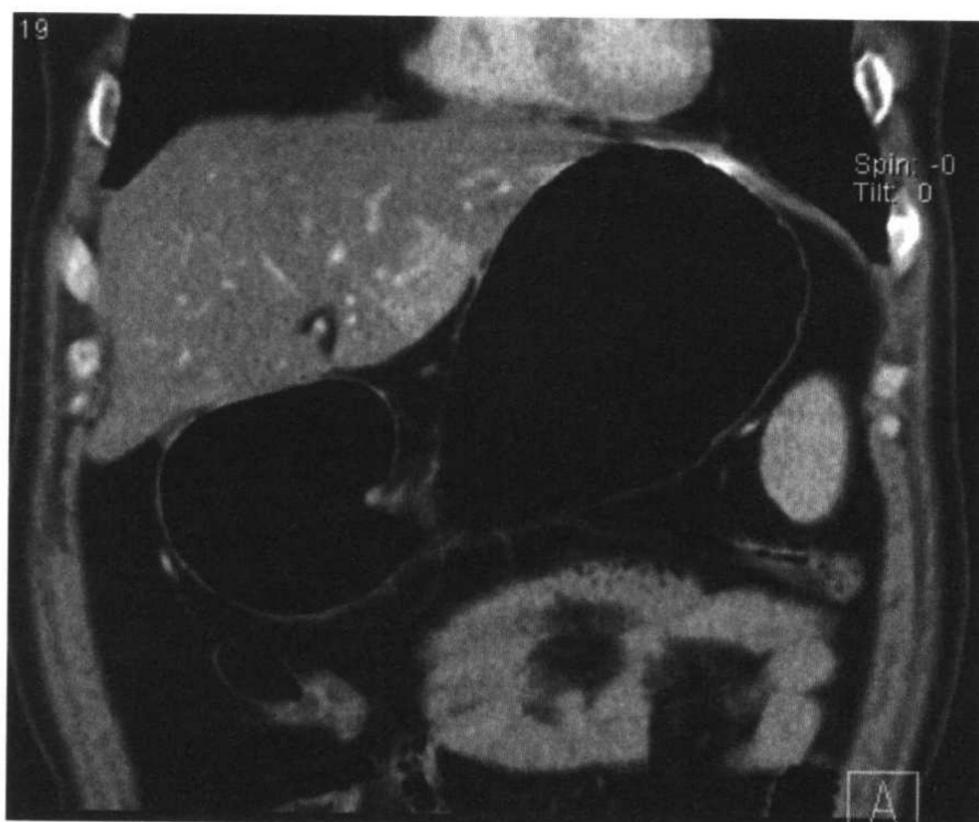


图 2-93 MPR 冠状位图像

Fig 2 · 93 MPR coronal image

**检查名称:**胃部 CT 平扫 + 增强扫描。

**检查方法:**胃部横断 CT 扫描及 MPR 重建,层厚 2 mm,间隔 2 mm。

**检查所见:**胃壁光整,未见明显增厚,胃腔未见明显狭窄。肝脏表面光整,肝实质密度正常,肝内、外胆管无扩张。胆囊壁光整。胰腺形态、密度未见明显异常。脾脏体积不大,密度均质。腹腔及腹膜后无明显肿大淋巴结。

**诊断意见:**胃部 CT 扫描未见明显异常。

**Name of examination:** CT plain scan of the stomach.

**Technique:** Axial CT scan of the stomach with MPR, VR, CTVE reconstruction; 2 mmslice apart 2 mm.

**Findings:** The gastric wall is smooth, and no thickness is seen. No stenosis of the gastric lumen is found. The hepatic contour is smooth. The density of hepatic parenchyma is normal, intra- and extra-hepatic duct is not dilated. Gallbladder wall is smooth. The shape and density of the pancreas are unremarkable. The volume of spleen is not enlarged, and its density is homogeneous. No lymphadenectasis of abdominal cavity and retroperitoneal is revealed.

**Diagnosis:** No abnormality is revealed in the stomach CT scan.

2. 胃癌

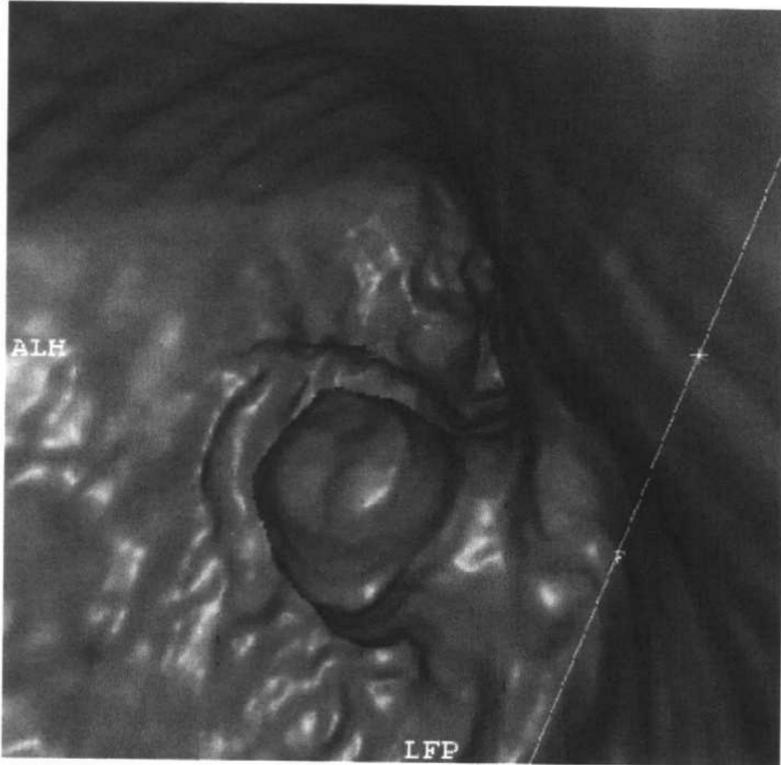


图 2-94 CT 内窥镜  
Fig 2·94 CT endoscopy

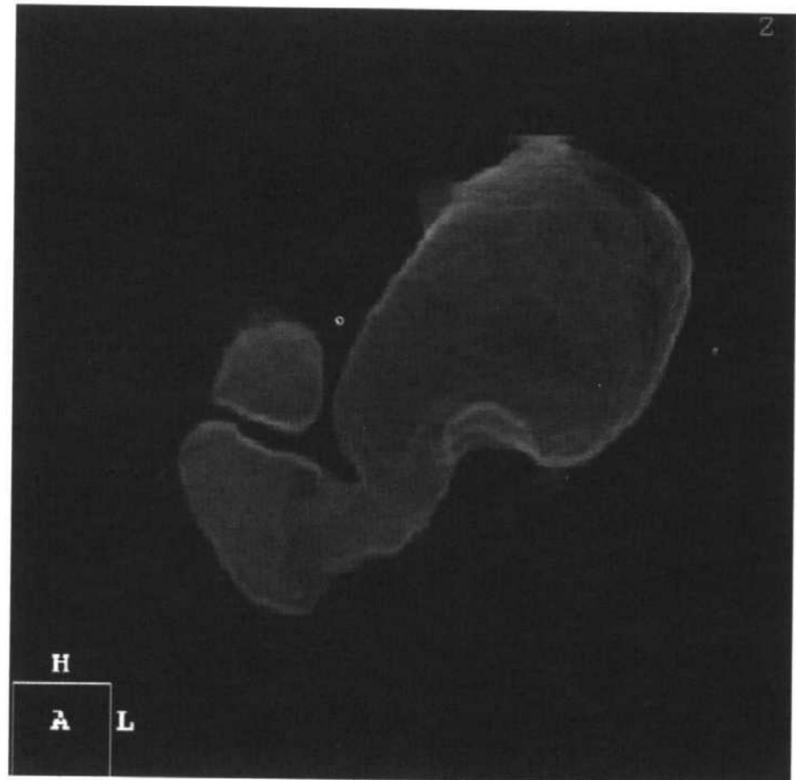


图 2-95 CT 容积重建图像  
Fig 2·95 CT VR image



图 2-96 平扫轴位像  
Fig 2·96 Pre-contrast transverse image

**检查名称:**胃部 CT 平扫。

**检查方法:**胃部横断 CT 扫描及 MPR、VR、CTVE 重建,层厚 2 mm,间隔 2 mm。

**检查所见:**胃体部大弯侧胃壁增厚,可见一 2.3 cm × 2.1 cm 大小的软组织肿块影突向腔内,边缘呈分叶状。肝脏、胆囊、胰腺、脾脏未见明显异常。腹腔及腹膜后未见明显肿大淋巴结。

**诊断意见:**胃体部肿瘤,考虑胃癌,建议胃镜检查。

**Name of examination:** CT scan of the stomach.

**Technique:** Axial CT scan of the stomach with MPR, VR, CTVE reconstruction, 2 mm slice apart 2 mm.

**Findings:** The gastric wall of greater curvature is thickening, and a 2.3 cm × 2.1 cm sized soft tissue mass with a lobular contour projects into gastric lumen. The hepatic, gallbladder, pancreas and spleen are unremarkable. No lymphadenectasis of abdominal cavity and retroperitoneal is revealed.

**Diagnosis:** Gastric body tumor, carcinoma is presumed, gastroscopy is suggested.

3. 结肠癌

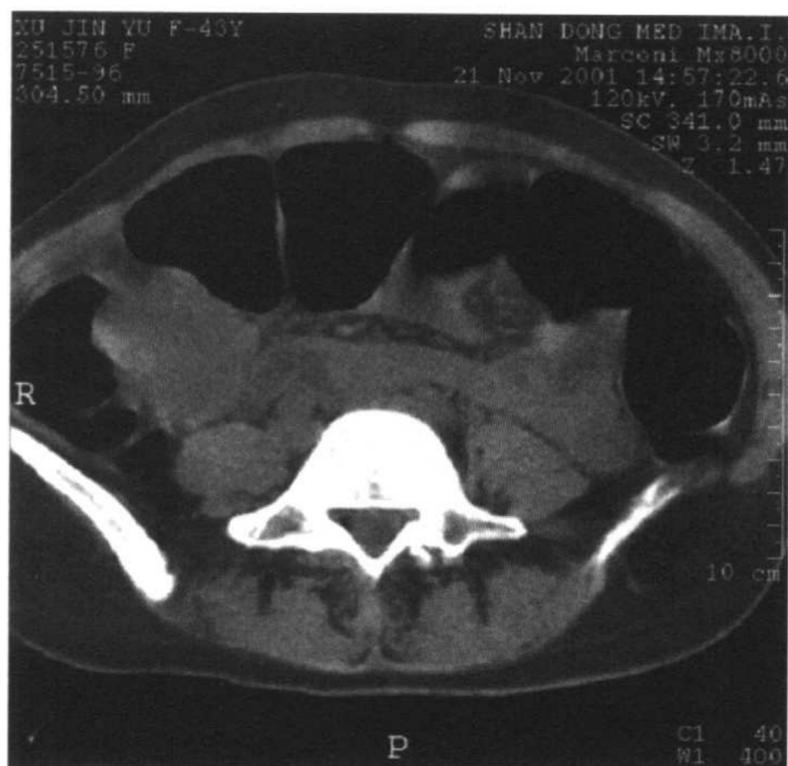


图 2-97 平扫轴位像

Fig 2 · 97 Pre-contrast transverse image



图 2-98 CT 容积重建图像

Fig 2 · 98 CT VR image

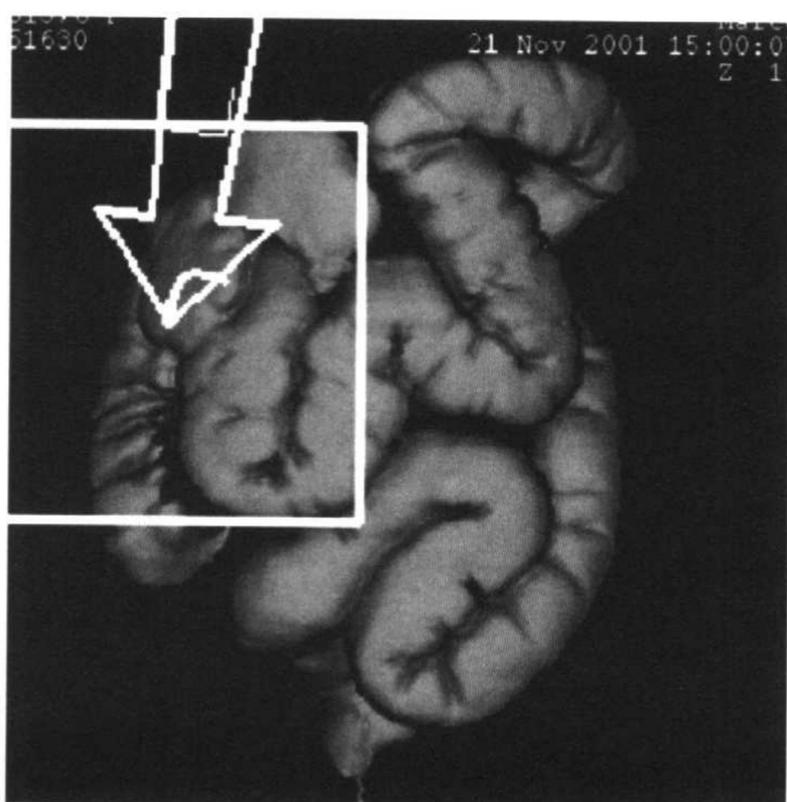


图 2-99 表面遮盖法图像

Fig 2 · 99 SSD image

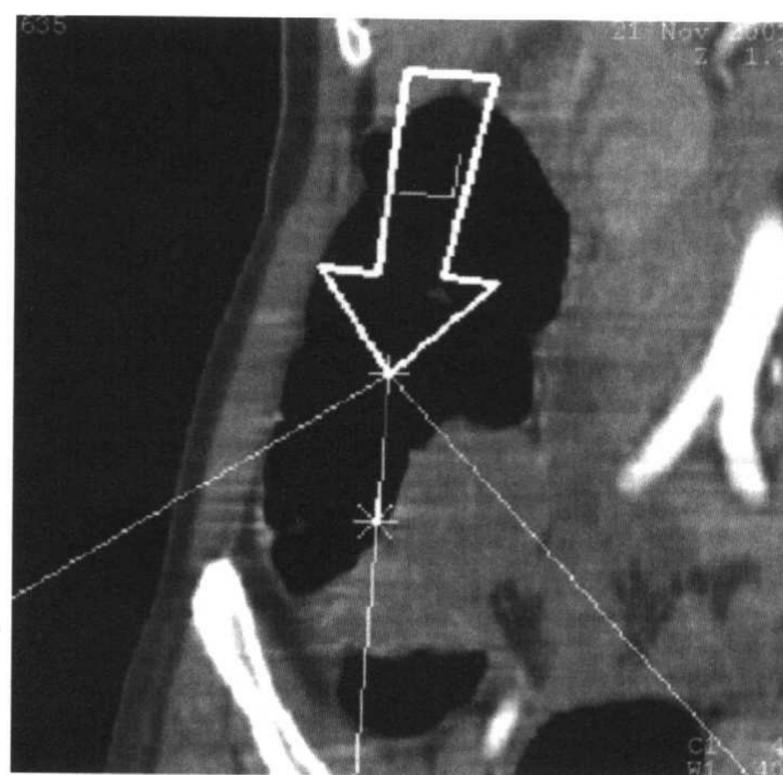


图 2-100 多平面重建图像

Fig 2 · 100 MPR image

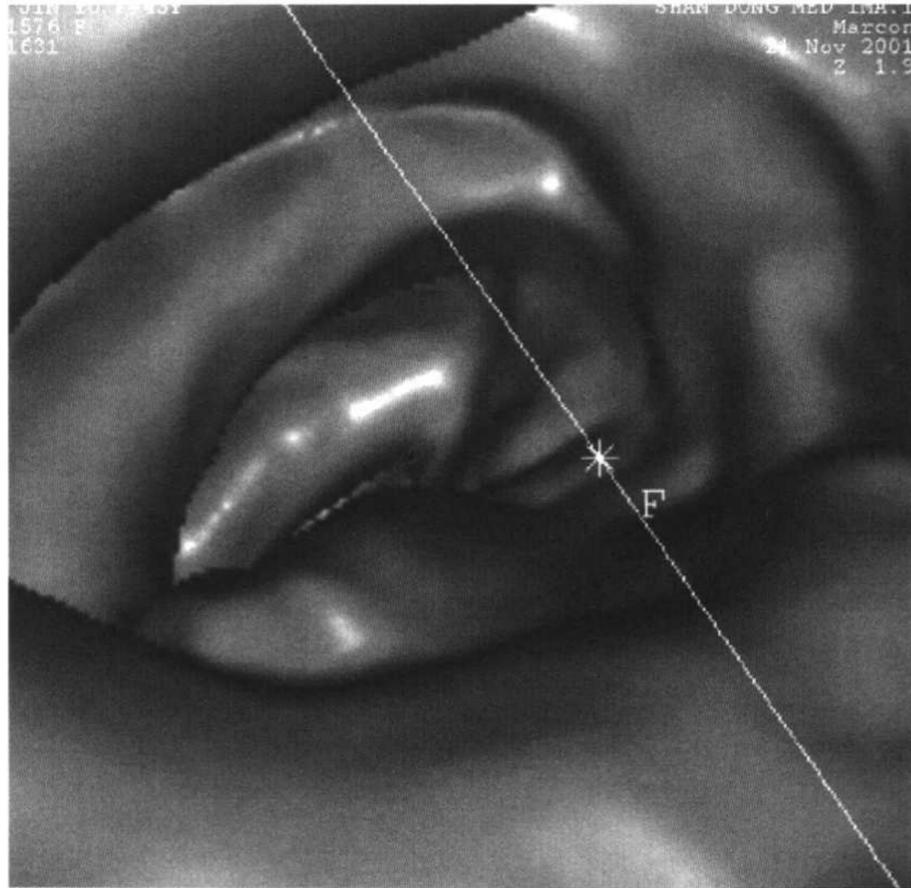


图 2 - 101 CT 内窥镜

Fig 2 · 101 CT endoscopy

**检查名称:**结肠 CT 平扫。

**检查方法:**结肠横断 CT 扫描, MPR、SSD、VR、CTVE 重建, 层厚 2 mm, 间隔 2 mm。

**检查所见:**盲肠部肠腔狭窄, 肠壁增厚, 可见一 5.8 cm × 4.6 cm 大小的软组织肿块影突向腔内。腹腔、盆腔及腹膜后内未见明显肿大淋巴结。

**诊断意见:**盲肠肿瘤, 考虑盲肠癌, 建议结肠镜检查。

**Name of examination:** CT scan of the colon.

**Technique:** Axial CT scan of the colon with MPR, SSD, VR and CTVE reconstruction, 2 mm slice apart 2 mm.

**Findings:** The lumen of cecum is stenosis. The cecal wall is thickening and a 5.8 cm × 4.6 cm sized soft tissue mass is protruded to the cavity. No lymphadenectasis of retroperitoneal, abdominal and pelvic cavity is revealed.

**Diagnosis:** Cecal tumor, carcinoma is presumed and colonoscopy is suggested.

## 六、盆 腔

### 1. 正常盆腔



图 2 - 102 平扫轴位像

Fig 2 · 102 Pre-contrast transverse image



图 2 - 103 增强扫描轴位像

Fig 2 · 103 Post-contrast transverse image

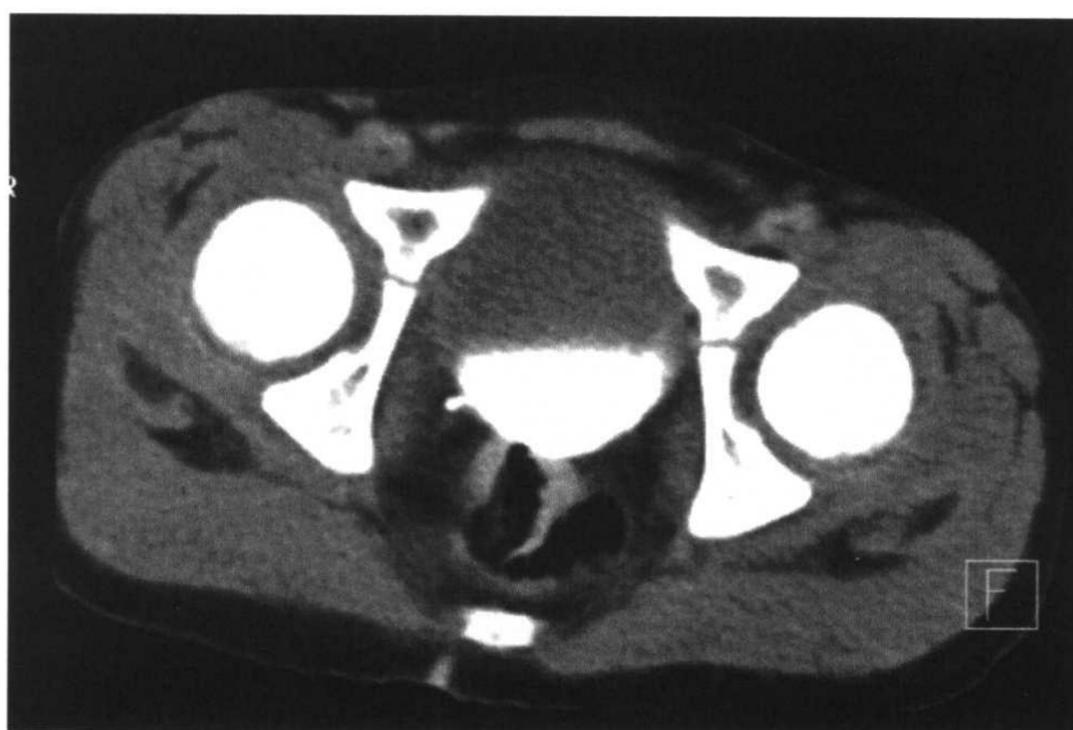


图 2 - 104 增强扫描轴位像

Fig 2 · 104 Post-contrast transverse image

**检查名称:**盆腔 CT 平扫 + 增强扫描。

**检查方法:**盆部横断 CT 扫描,层厚 5 mm,间隔 5 mm。

**检查所见:**盆腔内未见明显异常密度灶。膀胱壁光整,子宫及其附件未见明显异常。盆腔内未见明显肿大淋巴结。

**诊断意见:**盆部 CT 扫描未见异常。

**Name of examination:** CT scan of the pelvic cavity, pre-contrast and post-contrast.

**Technique:** Axial CT scan of the pelvic cavity, 5 mm slice apart 5 mm.

**Findings:** No lesion with abnormal density can be found in pelvic cavity. The wall of urinary bladder is smooth. The uterus and its appendage are unremarkable. No lymphadenectasis of pelvic cavity is revealed.

**Diagnosis:** No abnormality is revealed in the pelvic CT scan.

2. 膀胱肿瘤



图 2 - 105 平扫轴位像  
Fig 2 · 105 Pre-contrast transverse image



图 2 - 106 增强扫描冠状位像  
(延迟期)  
Fig 2 · 106 Post-contrast coronal  
image ( delay phase)



图 2 - 107 增强扫描轴位像  
(动脉期)  
Fig 2 · 107 Post-contrast transverse  
image ( artery phase)

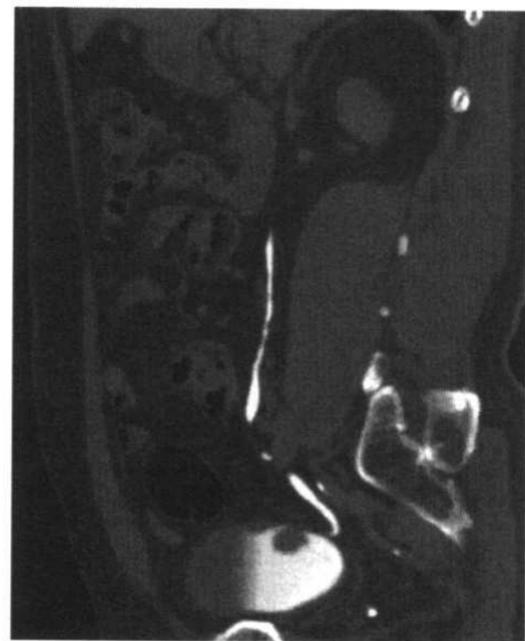


图 2 - 108 增强扫描矢状位像  
(延迟期)  
Fig 2 · 108 Post-contrast sagittal  
image ( delay phase)



图 2 - 109 增强扫描轴位像(延迟期)

Fig 2 · 109 Post-contrast transverse image  
(delay phase)

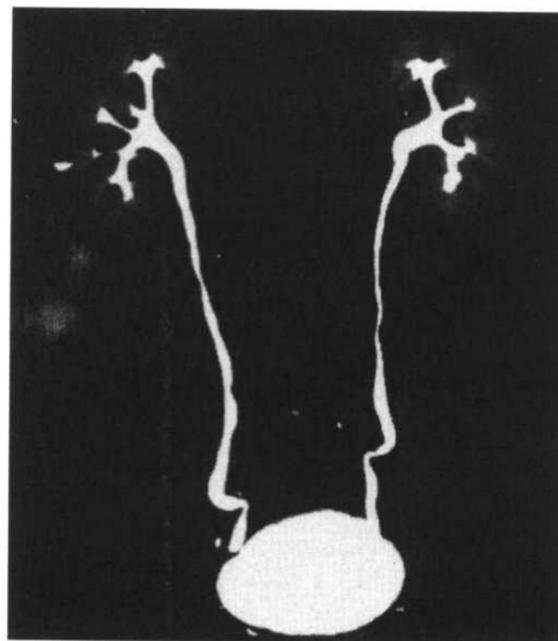


图 2 - 110 MIP 像

Fig 2 · 110 MIP image

**检查名称:**CTU。

**检查方法:**CTU,层厚 2 mm,间隔 2 mm。MPR、MIP 重建。

**检查所见:**膀胱右侧壁见一 1.5 cm × 1.6 cm 肿块影,内有点状钙化。注入造影剂后,肿块明显强化,延迟扫描,膀胱右侧见充盈缺损。双侧肾脏未见明显异常。CTU 示双侧肾盂、肾盏、输尿管未见明显扩张、狭窄及充盈缺损。腹、盆腔内未见明显肿大淋巴结。

**诊断意见:**膀胱肿瘤,建议膀胱镜检查。

**Name of examination:** CTU.

**Technique:** CT, 2 mm slice apart 2 mm. MPR, MIP reconstruction.

**Findings:** A 1.5 cm × 1.6 cm sized mass with punctual calcifications is found at the right lateral wall of bladder. After administration of contrast material, the mass is obviously enhanced. On delay phase images, a filling defect is seen in the right aspect of bladder. Bilateral kidneys are unremarkable. No dilatation, stenosis and filling defect are seen in bilateral renal pelvis and calices and ureters on CTU images. No lymphadenectasis of abdomen and pelvic cavity is revealed.

**Diagnosis:** Bladder tumor, cystoscopy is suggested.

## 七、CTA

### 1. 正常(肾动脉)

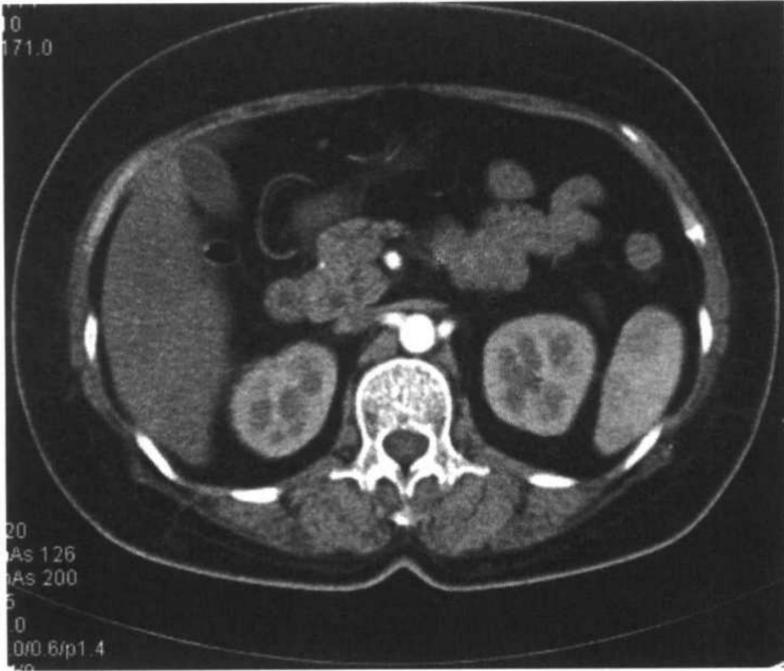


图 2-111 增强扫描轴位像

Fig 2 · 111 Post-contrast transverse image

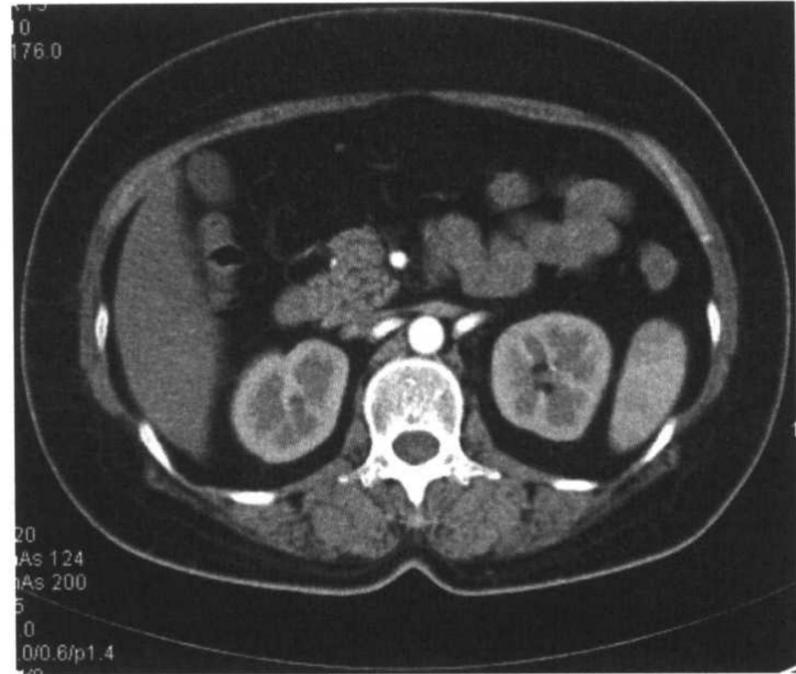


图 2-112 增强扫描轴位像

Fig 2 · 112 Post-contrast transverse image

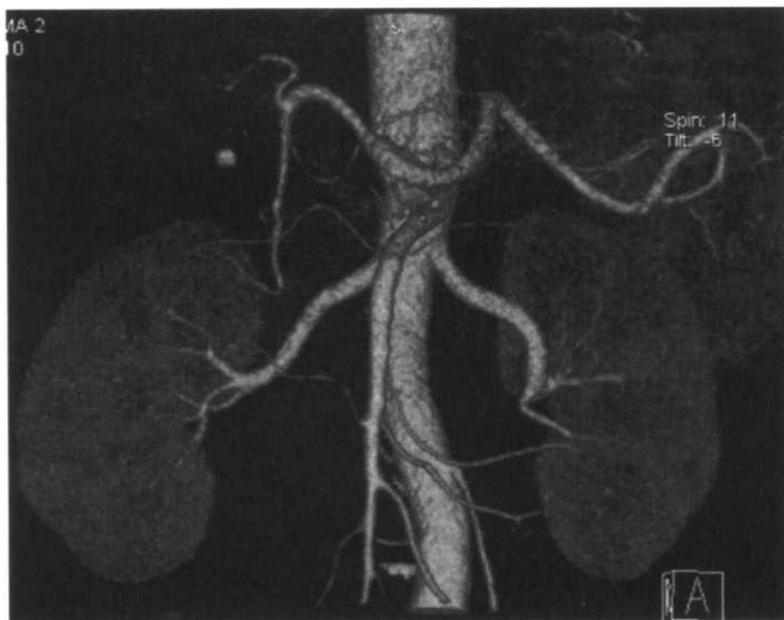


图 2-113 肾动脉 CTA VRT 图像

Fig 2 · 113 Renal artery CTA VRT image

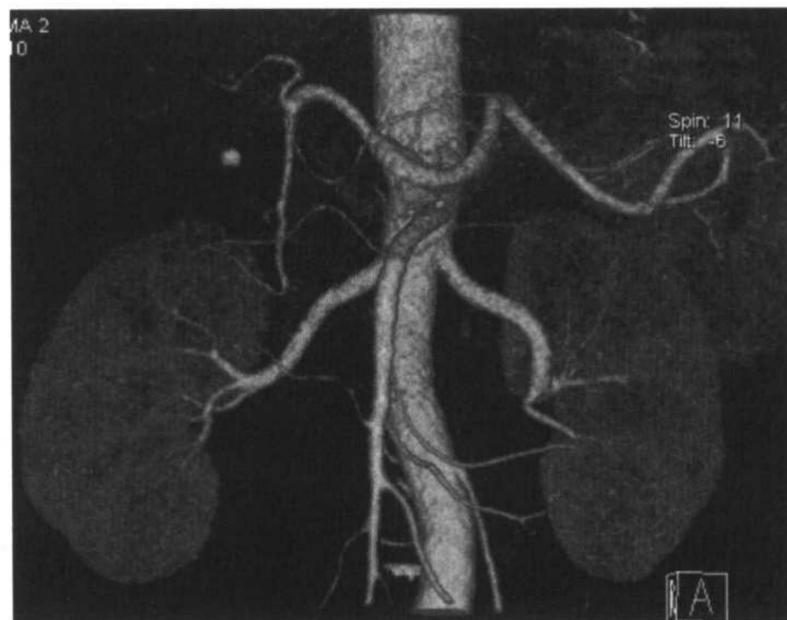


图 2-114 肾动脉 CTA MIP 像

Fig 2 · 114 Renal artery CTA MIP image

**检查名称:**肾动脉 CTA。

**检查方法:**肾动脉 CTA,层厚 1 mm,间隔 1 mm。MPR、MIP、VR 重建。

**检查所见:**双肾动脉开口未见狭窄。肾动脉分支走行自然,未见明显狭窄及扩张,管腔内未见明显充盈缺损。双侧肾实质、肾盂、肾盏及肾上腺未见明显异常。

**诊断意见:**肾动脉 CTA 未见异常。

**Name of examination:**CTA of the renal artery.

**Technique:** CTA of the renal artery, 1 mm slice apart 1 mm, MPR, MIP, VR reconstruction.

**Findings:**No stenosis is found at the orifices of renal arteries. All branches of renal artery present naturally, no stenosis and dilatation is seen, no filling defect can be found in the lumen. Bilateral renal parenchyma, pelvis, calices and adrenal glands are unremarkable.

**Diagnosis:**No abnormality is revealed in the CTA of renal artery.

2. 主动脉病变

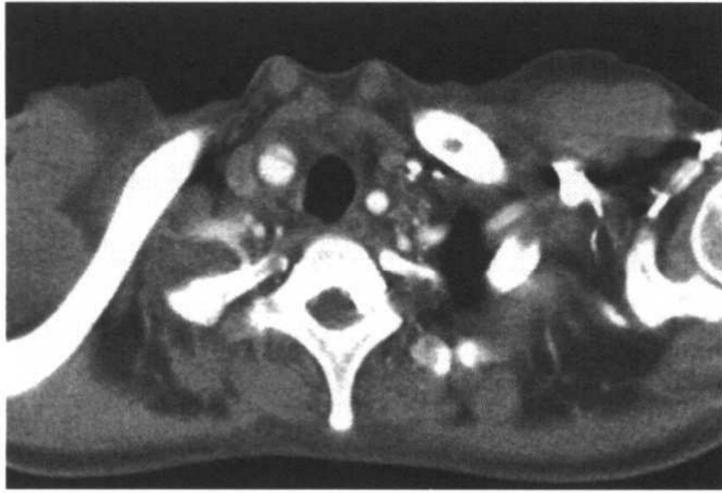


图 2 - 115 增强扫描轴位像

Fig 2 · 115 Post-contrast transverse image

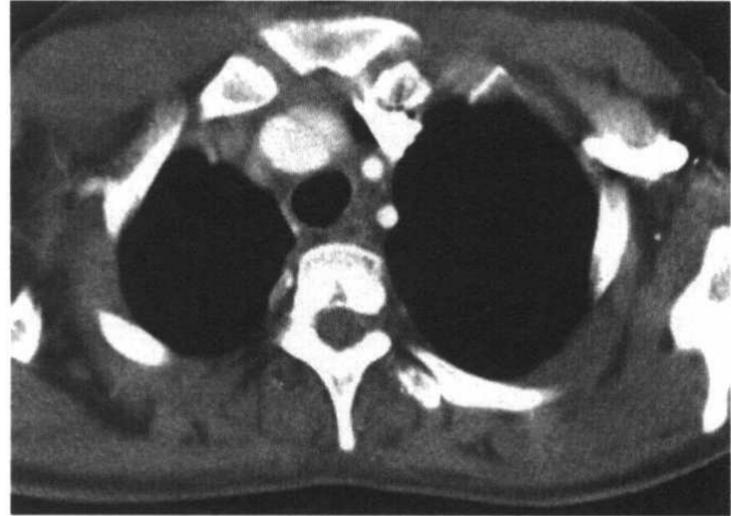


图 2 - 116 增强扫描轴位像

Fig 2 · 116 Post-contrast transverse image

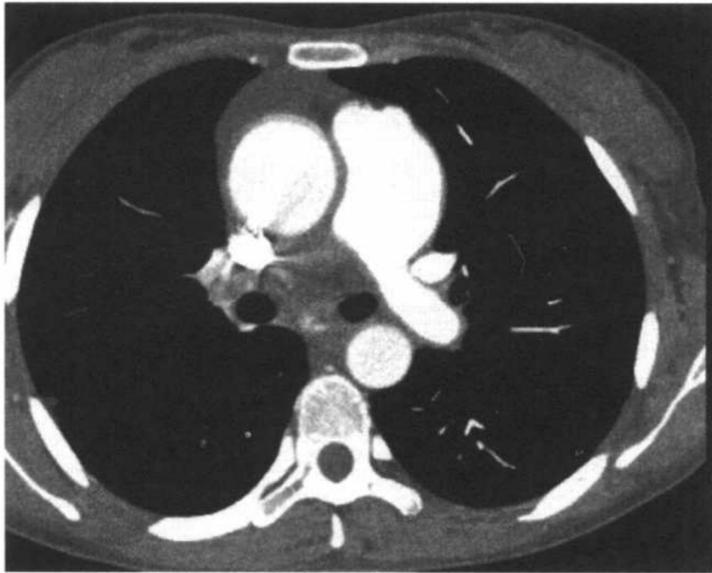


图 2 - 117 增强扫描轴位像

Fig 2 · 117 Post-contrast transverse image

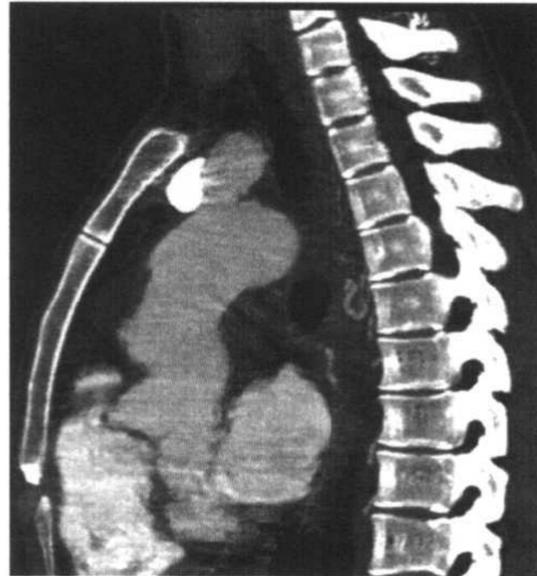


图 2 - 118 增强扫描矢状位像

Fig 2 · 118 Post-contrast sagittal image

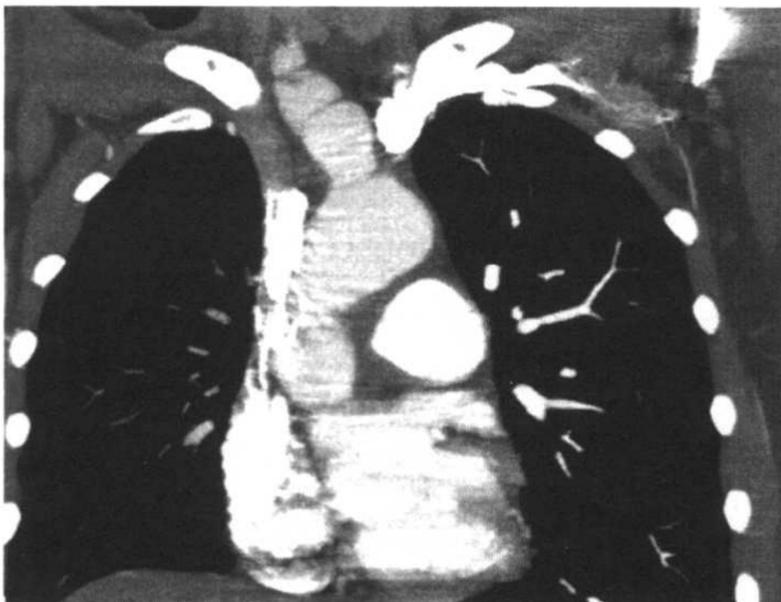


图 2 - 119 增强扫描冠状位像

Fig 2 · 119 Post-contrast coronal image

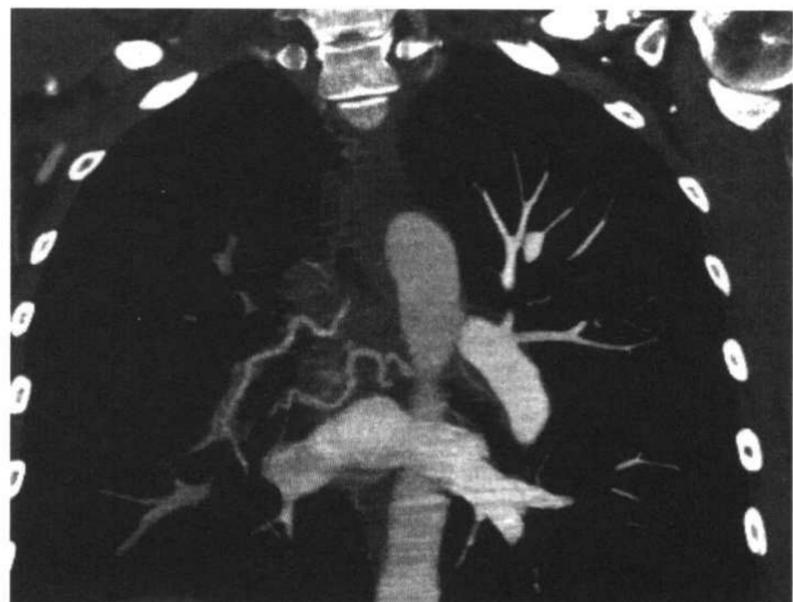


图 2 - 120 薄层 MIP 图像

Fig 2 · 120 Thin-slice MIP image



图 2 - 121 MIP 图像  
Fig 2 · 121 MIP image

**检查名称:**主动脉 CTA。

**检查方法:**主动脉横断 CT 扫描, 层厚 1.5 mm, 间隔 1.5 mm, MPR、MIP、VR 重建。

**检查所见:**升主动脉、头臂干及右侧颈总动脉近端明显扩张, 头臂干及右侧颈总动脉为一内膜瓣分隔为双腔, 升主动脉及肺动脉干前壁可见充盈缺损。右肺动脉未见显示, 纵隔内可见多发迂曲血管影由降主动脉发出。余未见明显异常。

**诊断意见:**

(1) 升主动脉、头臂干及右侧颈总动脉近端扩张, 伴头臂干及右侧颈总动脉夹层动脉瘤、升主动脉及肺动脉干血栓形成。

(2) 右肺动脉未显示。考虑为大动脉炎可能性大。

**Name of examination:** CTA of the aorta.

**Technique:** CT scan of the aorta, 1.5 mm slice apart 1.5 mm, MPR, MIP, VR reconstruction.

**Findings:** The ascending aorta, brachiocephalic trunk and proximal end of the right common carotid artery are obviously dilated. The brachiocephalic trunk and proximal end of the right common carotid artery are separated into two lumens by an endomembrane, and the filling defect is found in the front wall of ascending aorta and pulmonary artery. The right pulmonary artery is not detected. Multiple tortuous collateral vessels arise from the descending aorta in the mediastinum. No other abnormality can be found.

**Diagnosis:**

(1) Dilatation of the ascending aorta, brachiocephalic trunk and proximal end of the right common carotid artery; combining with the dissecting aneurysm of the brachiocephalic trunk and the right common carotid artery, thrombosis of the ascending aorta and pulmonary trunk.

(2) The right pulmonary artery is not detected. Takayasu arteritis is presumed.

### 3. 升主动脉瘤

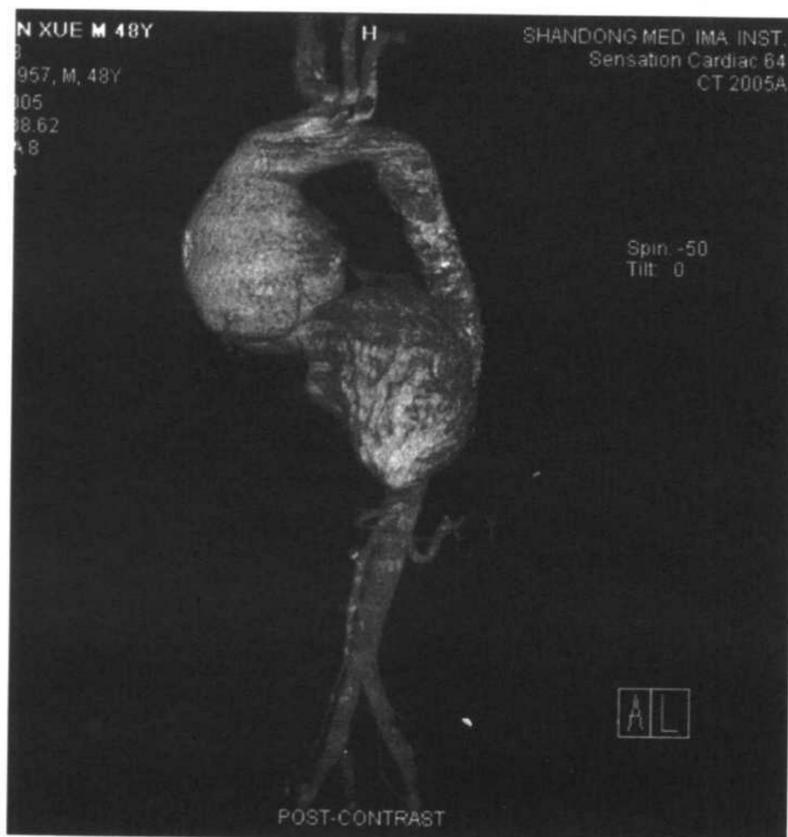


图 2-122 主动脉 CTA VRT 图像  
Fig 2 · 122 Aorta CTA VRT image

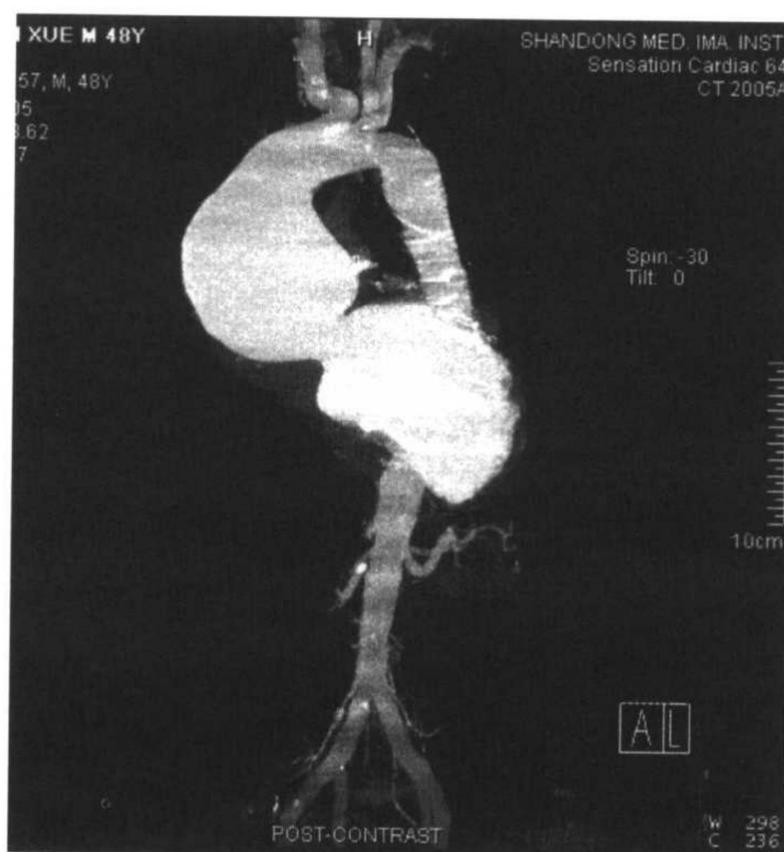


图 2-123 主动脉 CTA MIP 图像  
Fig 2 · 123 Aorta CTA MIP image

**检查名称:**主动脉 CT 成像(CTA)。

**检查方法:**CTA 及 VRT、MIP 重建。

**检查所见:**升主动脉近、中段可见明显扩张,直径约 9 cm,边界清楚;主动脉弓及三大分支、胸主动脉及腹主动脉未见明显异常。

**诊断意见:**升主动脉瘤。

**Name of examination:** CT angiography (CTA) of aorta.

**Technique:** CT angiography VRT and MIP reconstruction.

**Findings:** Proximal and middle part of the ascending aorta expands greatly with a diameter of 9 cm and well-defined margin. No abnormality is found in aorta arch and its three main branches, thoaracic and abdominal aorta.

**Diagnosis:** Aneurysm in ascending aorta.

4. 双侧肺动脉栓塞

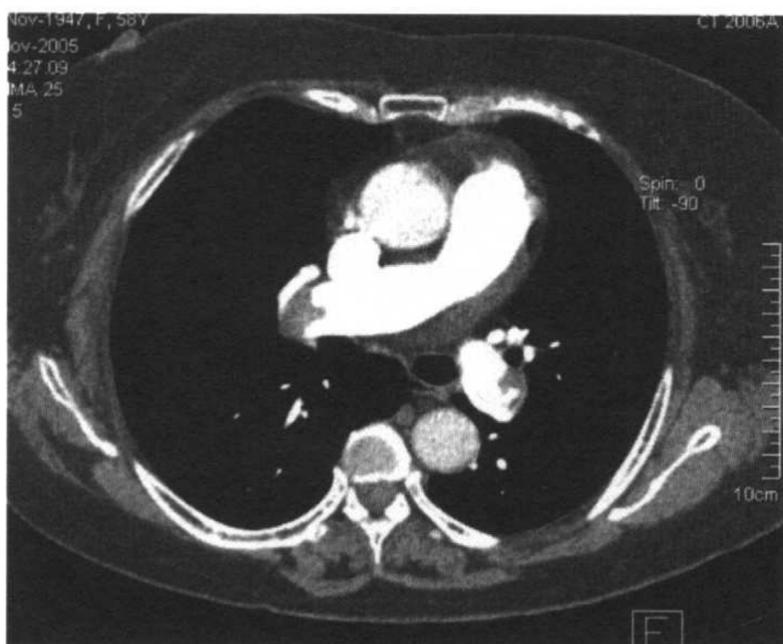


图 2 - 124 肺动脉 CTA 横断面图像  
Fig 2 · 124 Pulmonary artery CTA  
transaxial image



图 2 - 125 肺动脉 CTA 冠状面 MPR 图像  
Fig 2 · 125 Pulmonary artery CTA  
coronary MPR image

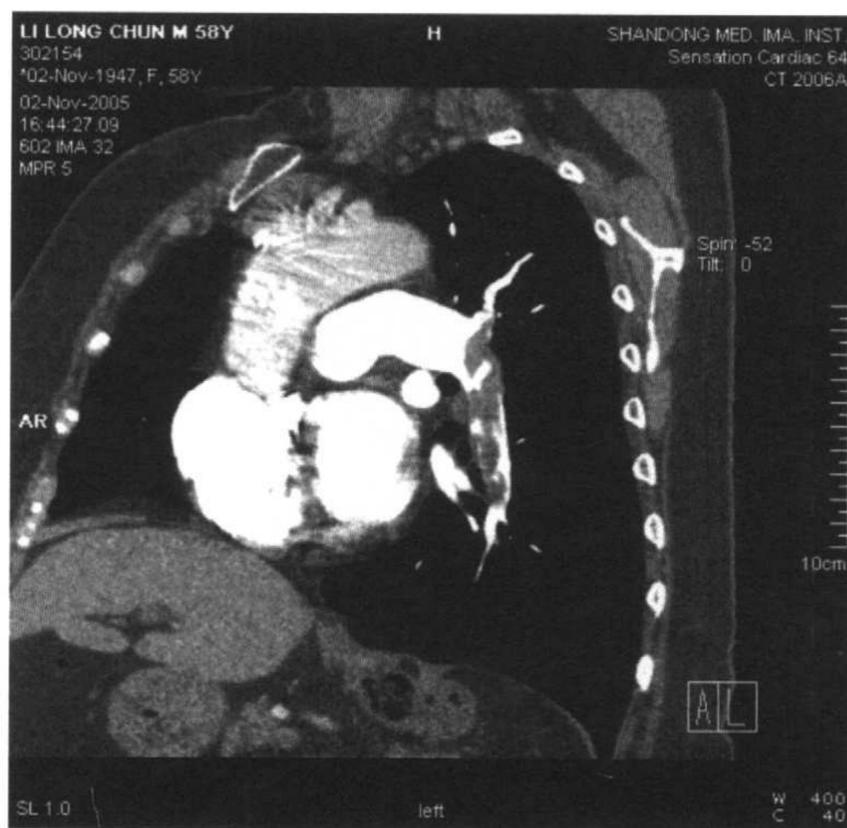


图 2 - 126 肺动脉 CTA 矢状面 MPR 图像  
Fig 2 · 126 Pulmonary artery CTA  
sagittal MPR image

**检查名称:**双侧肺动脉 CT 成像(CTPA)。

**检查方法:**CTPA 及 MPR 重建。

**检查所见:**左、右肺动脉中、远段内可见不规则充盈缺损,致局部肺动脉管腔明显狭窄,近段肺动脉轻度扩张,肺动脉干未见明显异常。

**诊断意见:**双侧肺动脉栓塞。

**Name of examination:** CT angiography (CTA) of bilateral pulmonary arteries.

**Technique:** CT angiography and MPR reconstruction.

**Findings:** Remarkable irregular filling defect can be seen in the middle and distal part of bilateral pulmonaray arteries, which give rise to the stenosis of local pulmonary artery lumens. Proximal part of the pulmonary arteries expands slightly. No abnormality is found in the pulmonary trunk.

**Diagnosis:** Embolism in bilateral pulmonary arteries.

## 5. 下肢动脉狭窄 CTA

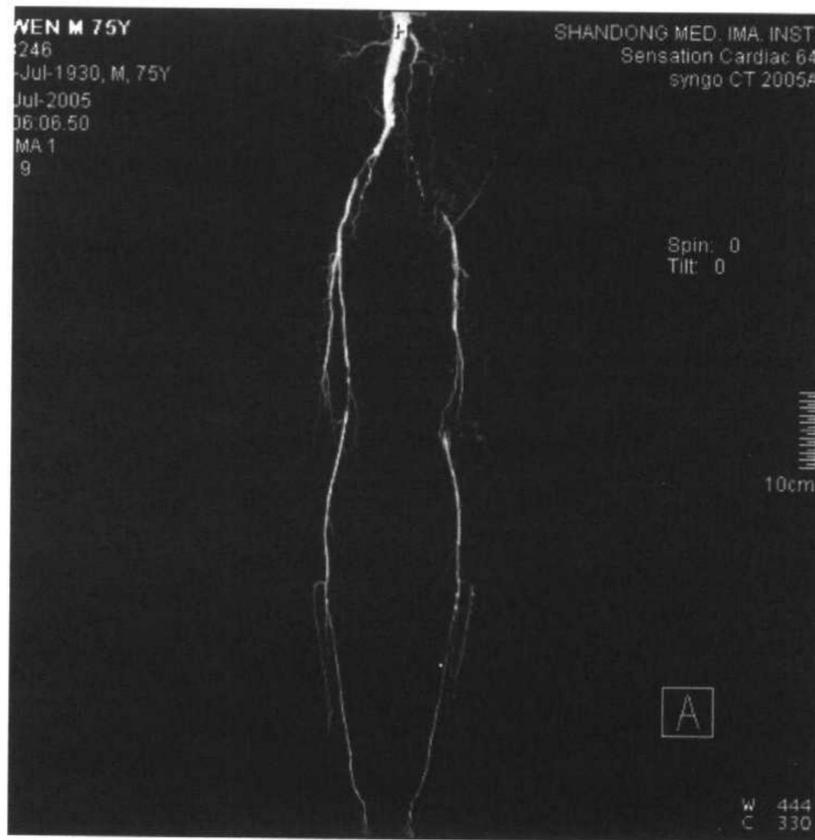


图 2-127 下肢动脉 CTA 及 MIP 重建

Fig 2 · 127 CT angiography and MIP reconstruction of lower limb

**检查名称:** 双侧下肢动脉 CT 成像 (CTA)。

**检查方法:** CTA 及 MIP 重建。

**检查所见:** 左侧髂总动脉、双侧髂外动脉、股动脉、腘动脉可见多发不规则狭窄, 以左侧明显。双侧胫前动脉、胫后动脉、腓动脉未见明显异常。

**诊断意见:** 双侧下肢动脉多发狭窄。

**Name of examination:** CT angiography (CTA) of bilateral lower limb.

**Technique:** CT angiography and MIP reconstruction.

**Findings:** Multiple irregular stenoses can be seen in left common iliac artery, bilateral external iliac arteries, femoral arteries and popliteal arteries, which are remarkable in the left side. No abnormality is found in the bilateral anterior tibial arteries, posterior arteries, and peroneal arteries.

**Diagnosis:** Multiple stenoses in bilateral lower limb arteries.

6. 正常(冠状动脉)

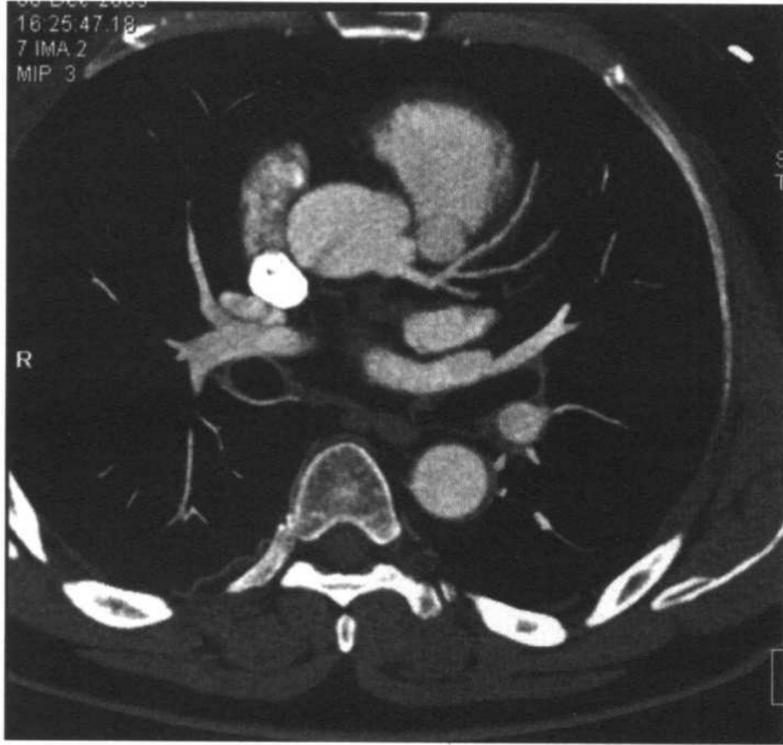


图 2-128 增强扫描轴位像  
Fig 2 · 128 Post-contrast transverse image

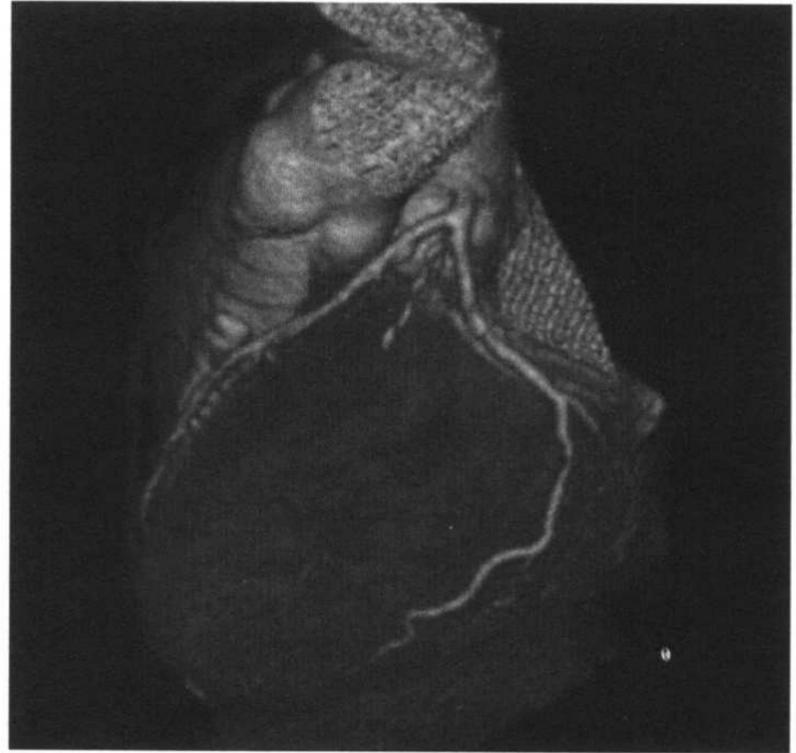


图 2-129 容积重建图像  
Fig 2 · 129 VR image

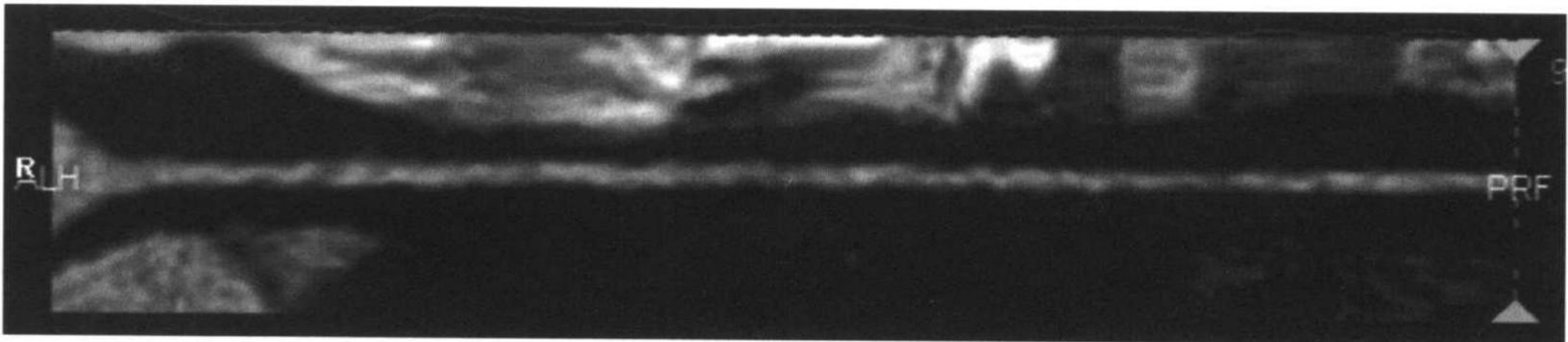


图 2-130 血管剖面图  
Fig 2 · 130 Vessel view image

检查名称:冠状动脉 CTA。

检查方法:心脏横断 CT 扫描,层厚 0.6 mm,间隔 0.6 mm。MPR、CPR、MIP、VR 重建。

检查所见:平扫冠状动脉未见明显钙化。冠状动脉钙化积分为 0。强化扫描右冠脉、左主干、左前降支、左旋支及冠状动脉各分支走行自然,未见明显狭窄及充盈缺损。

诊断意见:冠状动脉 CTA 未见异常。

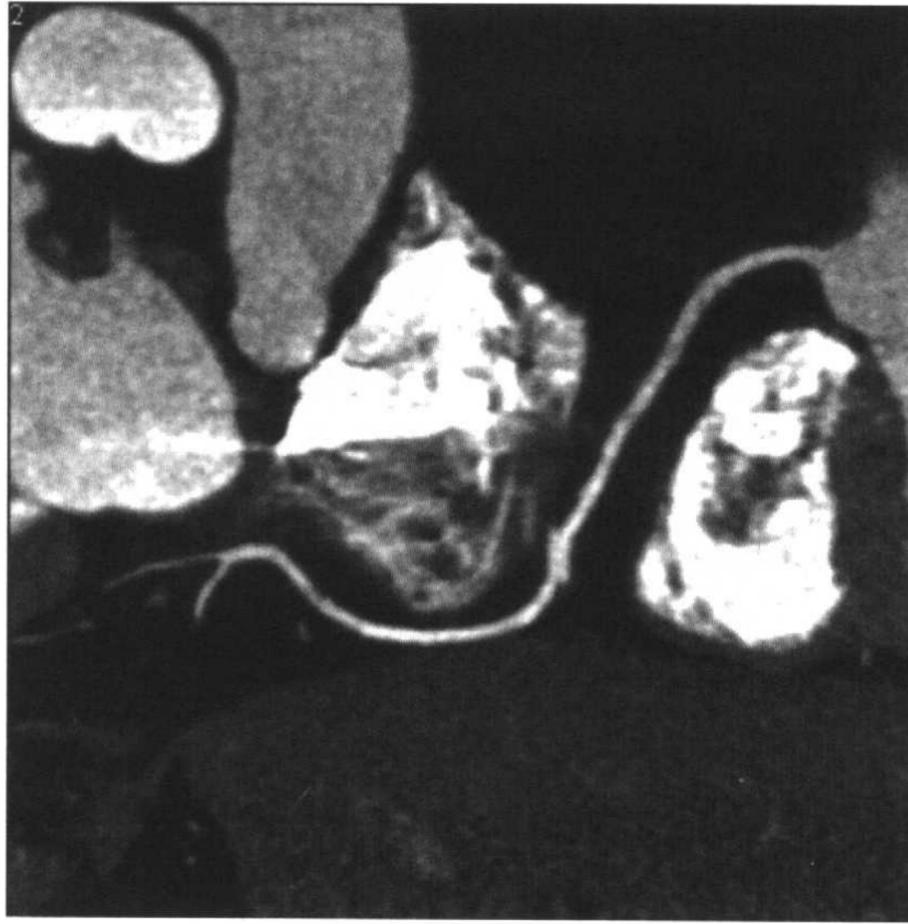


图 2 - 131 曲面重建图像

Fig 2 · 131 CPR image

**Name of examination:** CTA of the coronary artery.

**Technique:** Axial CT scan of the heart, 0.6 mm slice apart 0.6 mm, MPR, CPR, MIP, VR reconstruction.

**Findings:** On plain CT images, no calcification is found in the coronary artery, and the score of calcification is 0. After administration of contrast material, right coronary, left main, left anterior descending, left circumflex artery and branches of coronary artery present naturally, no stenosis and filling defect can be found.

**Diagnosis:** No abnormality is revealed in the CTA of coronary artery.

7. 冠状动脉斑块



图 2 - 132 增强扫描轴位像  
Fig 2 · 132 Post-contrast transverse image

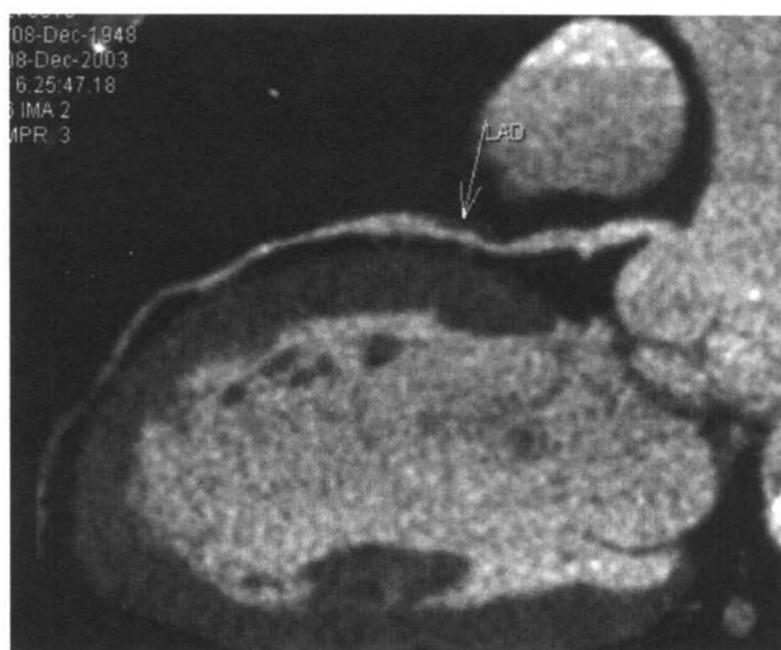


图 2 - 133 曲面重建图像  
Fig 2 · 133 CPR image

\*08-Dec-1948  
08-Dec-2003  
16:21:42.43  
11 IMA 0  
MPR 2

VA70C-W  
H-SP-CR

Artery	Number of Lesions (1)	Volume [mm <sup>3</sup> ] (3)	Equiv. Mass [mg CaHA] (4)	Score (2)
LM	0	0.0	0.00	0.0
LAD	0	0.0	0.00	0.0
CX	0	0.0	0.00	0.0
R	0	0.0	0.00	0.0
Total	0	0.0	0.00	0.0

10cm

KV 120  
GT 0.0  
SL 3.0  
266

(1) Lesion is volume based  
(2) Equivalent Agatston score  
(3) Isotropic interpolated volume  
(4) Calibration Factor: 0.744

w 400

图 2 - 134 钙化积分  
Fig 2 · 134 Calcification score

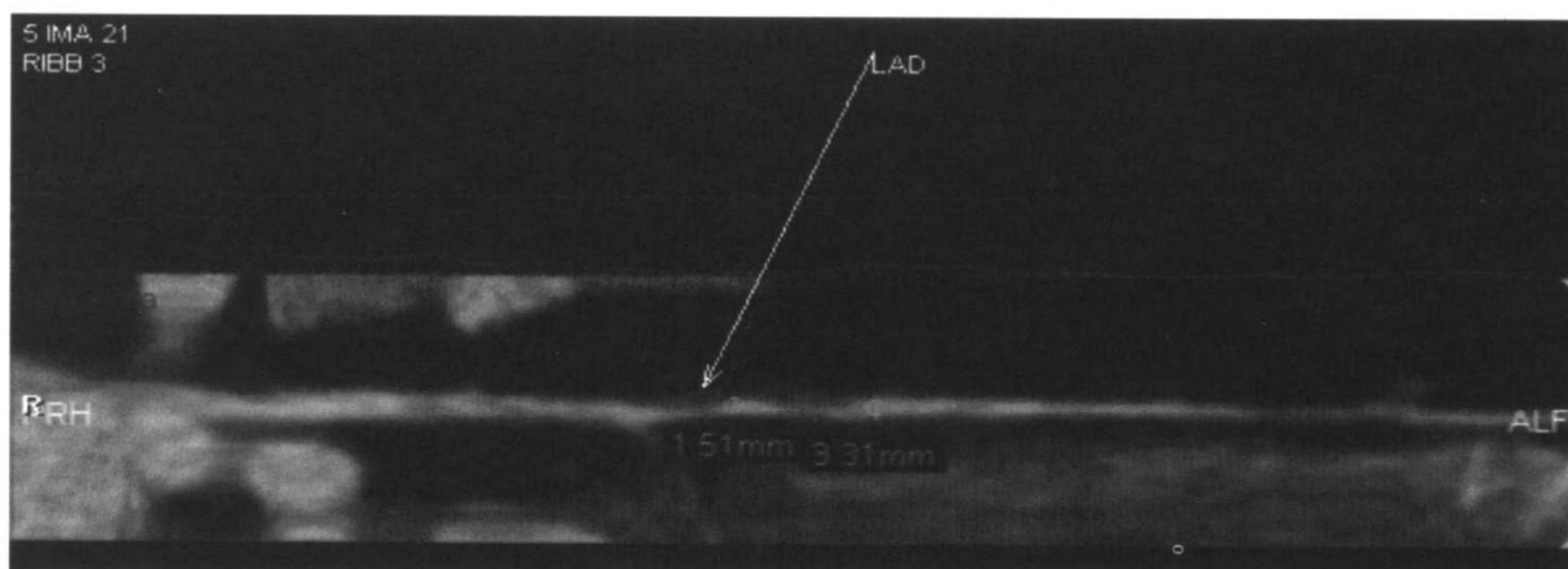


图 2 - 135 血管剖面图

Fig 2 · 135 Vessel view image

**检查名称:**冠状动脉 CTA。

**检查方法:**心脏横断 CT 扫描,层厚 0.6 mm,间隔 0.6 mm。MPR、MIP、VR 重建。

**检查所见:**平扫冠脉未见明显钙化,冠状动脉钙化积分为 0。强化扫描示左前降支内见长约 2 mm 的充盈缺损,管腔狭窄约 50%。余未见异常。

**诊断意见:**左冠状动脉前降支软斑块形成。

**Name of examination:** CTA of the coronary artery.

**Technique:** Axial CT scan of the heart, 0.6 mm slice apart 0.6 mm.

**Findings:** On plain CT images, no calcification is found in the coronary artery, and the score of calcification is 0. After administration of contrast material, a filling defect with a length of 2 mm can be detected in the LAD. Stenosis is present in LAD, the diameter of lumen reduces to 50%. No other abnormalities are remarkable.

**Diagnosis:** Soft plaque in the LAD.

# 第三章 MRI

## 一、颅脑

### 1. 脑梗死

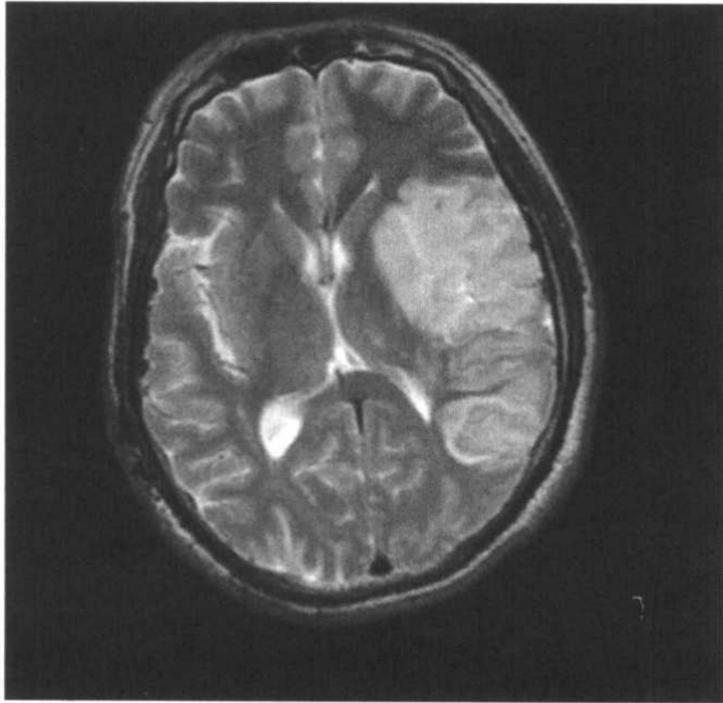


图 3-1 T<sub>2</sub>WI 轴位

Fig 3 · 1 T<sub>2</sub> weighted transverse image

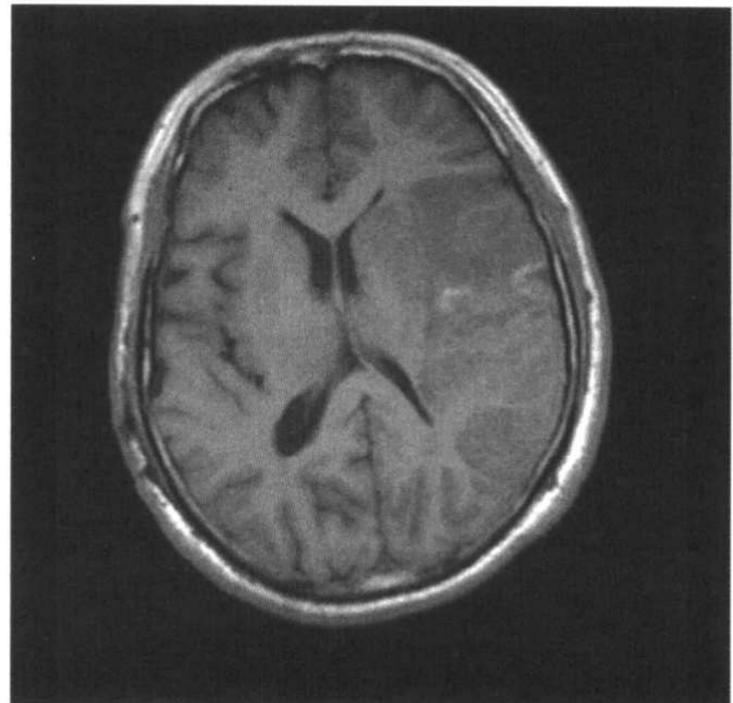


图 3-2 T<sub>1</sub>WI 轴位

Fig 3.2 T<sub>1</sub> weighted transverse image

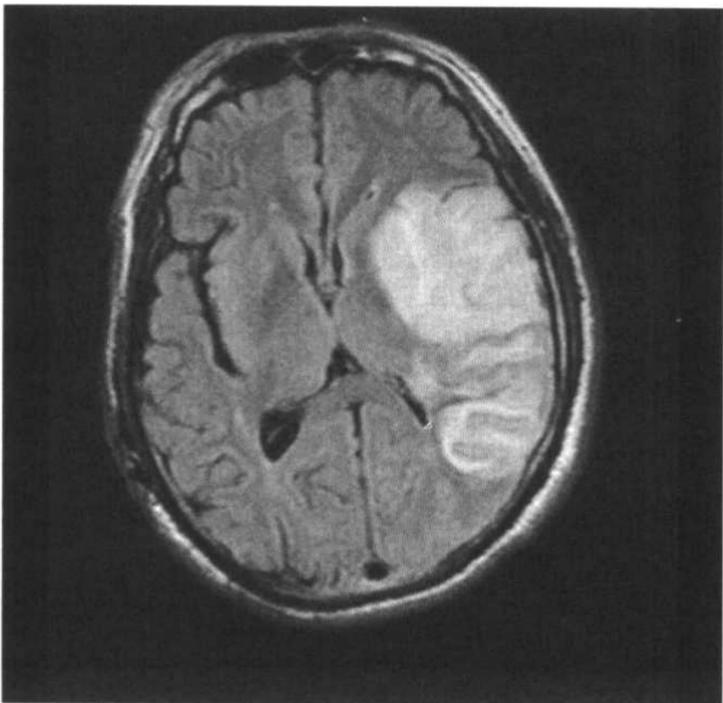


图 3-3 FLAIR 轴位

Fig 3 · 3 FLAIR transverse image



图 3-4 T<sub>2</sub>WI 矢状位

Fig 3 · 4 T<sub>2</sub> weighted sagittal image

**检查名称:**颅脑 MR 扫描。

**检查序列:**TSE-T<sub>1</sub>WI(500/8), T<sub>2</sub>WI(4000/95), FLAIR(9000/107)。

**扫描方位:**轴位、矢状位。

**检查所见:**左侧大脑半球大脑中动脉供血区见多发大片状等长 T<sub>1</sub>、等长 T<sub>2</sub>、高 FLAIR 异常信号,部分病灶呈脑回样分布,边界清晰,左侧脑室受压变小,中线结构居中。

**诊断意见:**左侧大脑半球大脑中动脉供血区多发梗死。

**Name of examination:** MR scanning of the head.

**Sequence:** TSE-T<sub>1</sub>WI(500/8), T<sub>2</sub>WI(4000/95) FLAIR(9000/107).

**Orientation:** TRA, SAG.

**Findings:** The left cerebral hemisphere which blood supply belongs to left middle cerebral artery is remarkable for multiple lesions of abnormal signal: T<sub>1</sub>WI low signal intensity, T<sub>2</sub>WI high signal intensity and FLAIR high signal intensity, the shape of some lesions just likes gyrus of brain. The left lateral ventricle is compressed and the midline structures are in the middle of the head.

**Diagnosis:** The left cerebral hemisphere infarction.

2. 脑出血

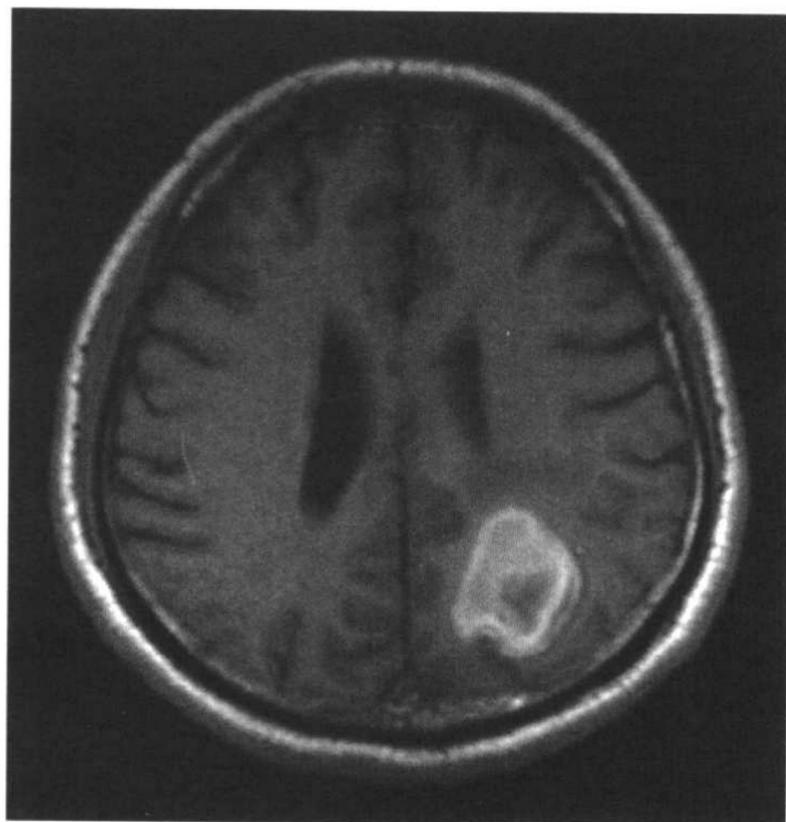


图 3-5 T<sub>1</sub>WI 轴位  
Fig 3·5 T<sub>1</sub> weighted transverse image

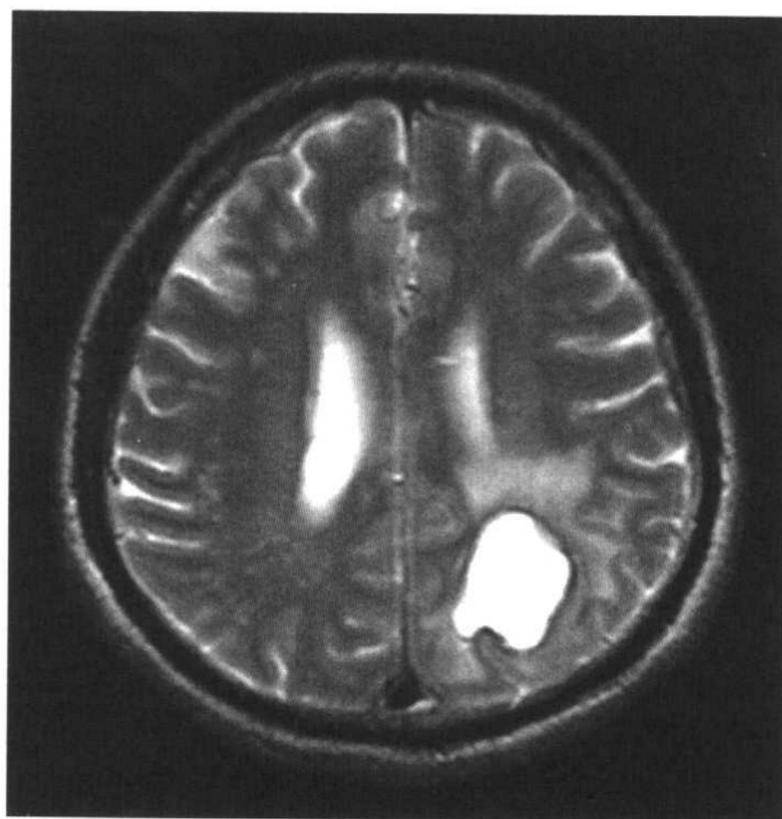


图 3-6 T<sub>2</sub>WI 轴位  
Fig 3·6 T<sub>2</sub> weighted transverse image

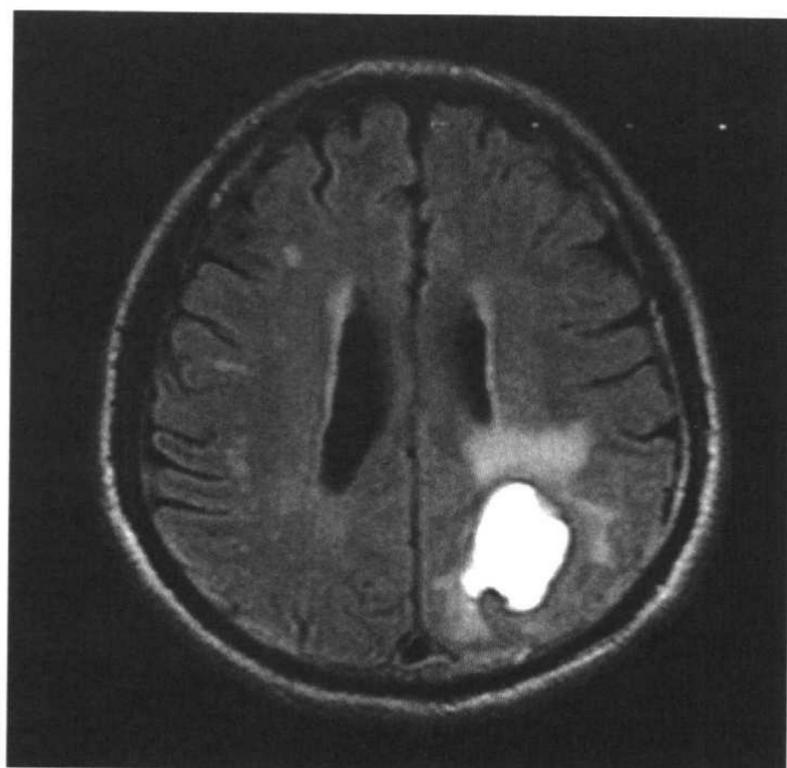


图 3-7 FLAIR 轴位  
Fig 3·7 FLAIR transverse image

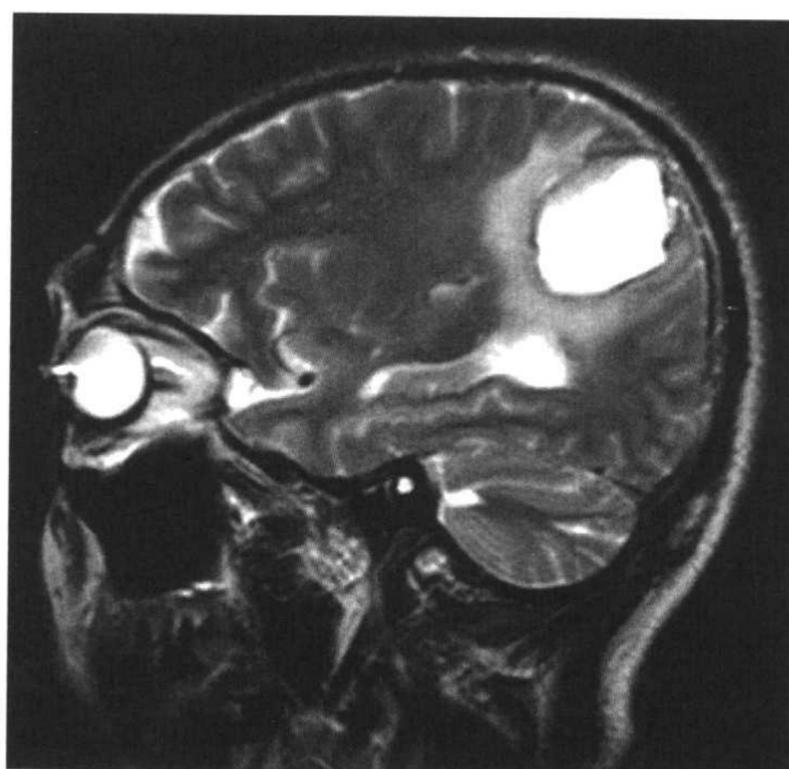


图 3-8 T<sub>2</sub>WI 矢状位  
Fig 3·8 T<sub>2</sub> weighted sagittal image

**检查名称:**颅脑 MR 扫描。

**检查序列:**TSE-T<sub>1</sub>WI(500/8), T<sub>2</sub>WI(4000/95), FLAIR(9000/107)。

**扫描方位:**轴位、矢状位。

**检查所见:**左侧顶叶内见片状短 T<sub>1</sub>、长 T<sub>2</sub>、高 FLAIR 异常信号灶,最大截面约 3 cm × 4 cm,边界清晰,在 T<sub>2</sub>WI 和 FLAIR 图像上,病灶的边缘见低信号环绕,病灶周围见片状略长 T<sub>1</sub>、略长 T<sub>2</sub>水肿带,边界不清,左侧侧脑室后脚略受压。右侧侧脑室旁见多发斑片状略长 T<sub>2</sub>、高 FLAIR 异常信号灶。中线结构居中。

**诊断意见:**

- (1) 左侧顶叶亚急性出血。
- (2) 脑内多发缺血灶。

**Name of examination:** MR scanning of the head.

**Sequence:** TSE-T<sub>1</sub>WI(500/8), T<sub>2</sub>WI(4000/95), FLAIR(9000/107).

**Orientation:** TRA, SAG.

**Findings:** The left parietal lobe is remarkable for a lesion of abnormal intensity: T<sub>1</sub>WI high signal intensity, T<sub>2</sub>WI high signal intensity and FLAIR high signal intensity. The maximal axial area of the lesion is 3 cm × 4 cm, the border of the lesion in T<sub>2</sub>WI and FLAIR is surrounded by low intensity. And a circumferential edema zone of T<sub>2</sub> high signal intensity and T<sub>1</sub> high intensity can be seen near the lesion. The left lateral ventricle is compressed and deformed. There are multiple lesions of long T<sub>2</sub> and high FLAIR abnormal signal in the area adjacent to the right lateral ventricle. The midline structures are in the middle of the head.

**Diagnosis:**

- (1) Left side parietal lobe subacute bleeding.
- (2) Multiple cerebral infarction.

3. 胼体发育不良并灰质异位

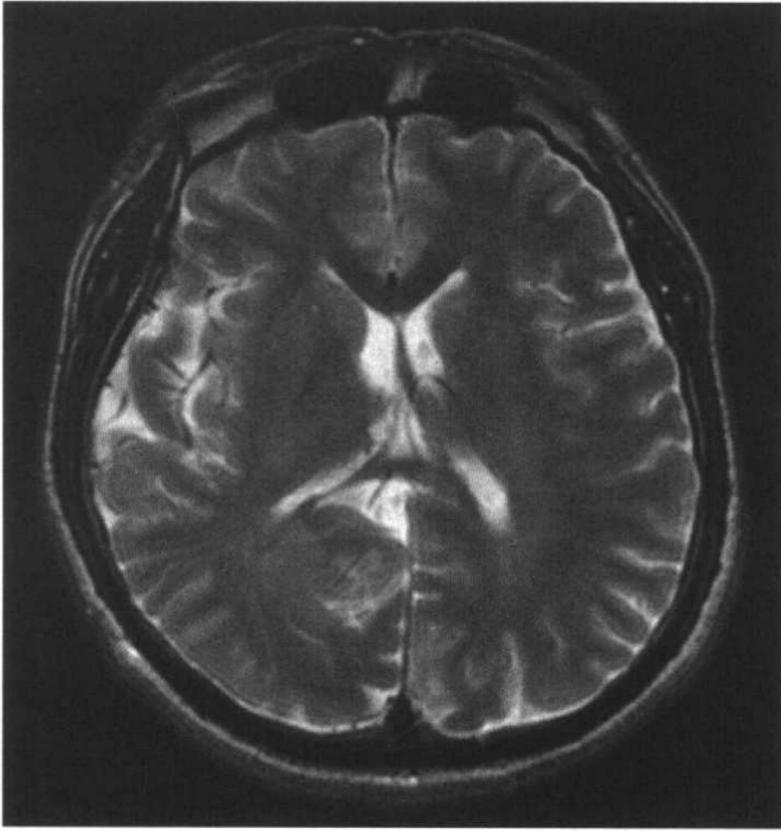


图 3-9 T<sub>2</sub>WI 轴位

Fig 3 · 9 T<sub>2</sub>weighted transverse image

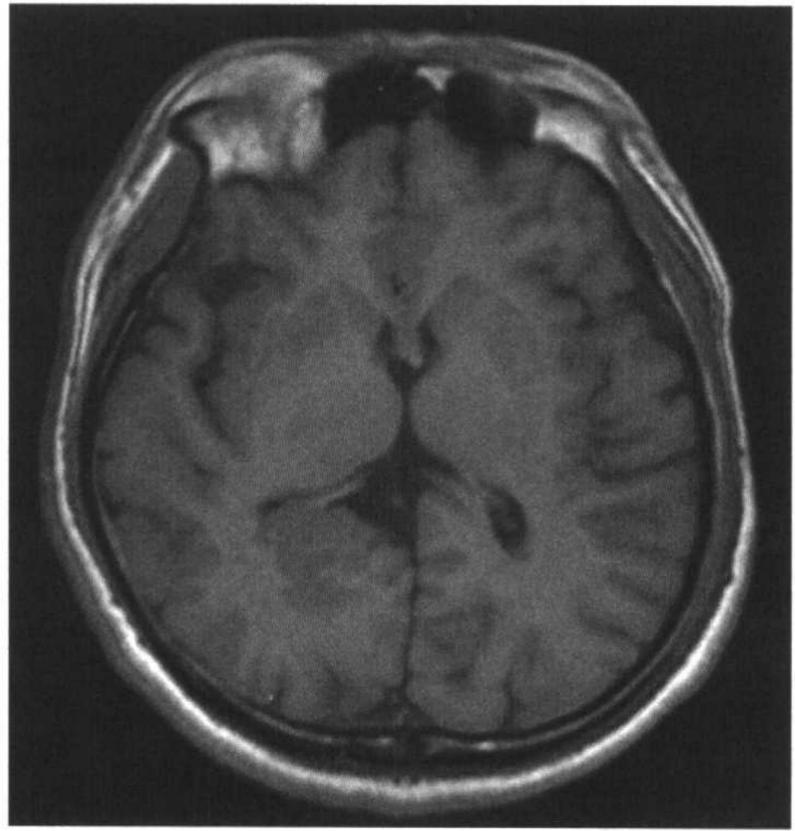


图 3-10 T<sub>1</sub>WI 轴位

Fig 3 · 10 T<sub>1</sub>weighted transverse image

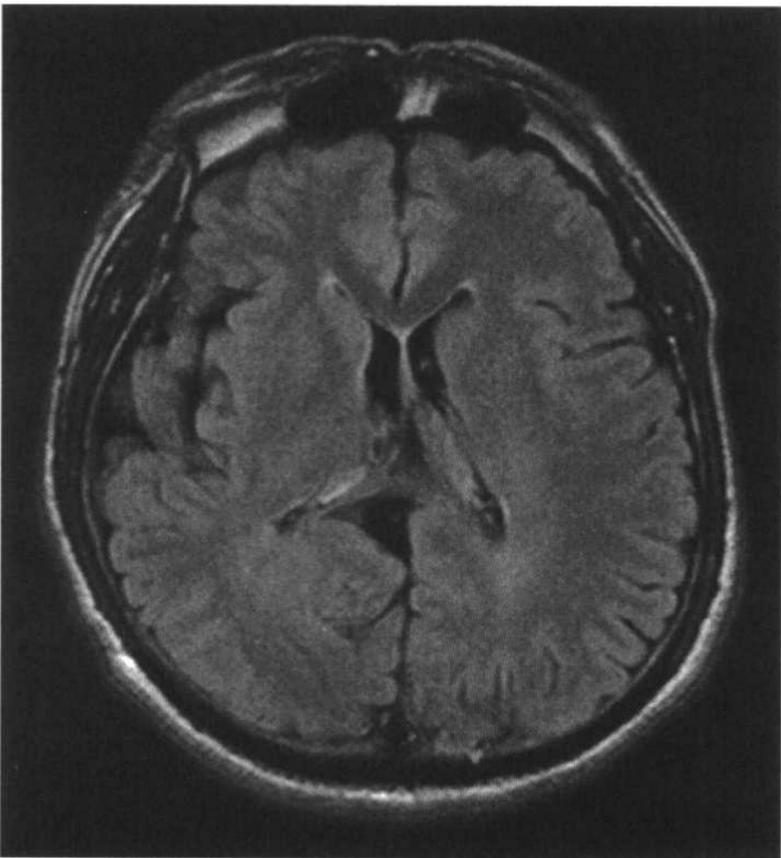


图 3-11 FLAIR 轴位

Fig 3 · 11 FLAIR transverse image



图 3-12 T<sub>1</sub>WI 矢状位

Fig 3 · 12 T<sub>1</sub>weighted sagittal image

**检查名称:** 颅脑 MR 扫描。

**检查序列:** TSE-T<sub>1</sub>WI(500/8), T<sub>2</sub>WI(4000/95), FLAIR(9000/107)。

**扫描方位:** 轴位、矢状位。

**检查所见:** 右侧侧脑室后角距状沟前方见 4 cm × 5 cm 异常信号, 信号特点与正常脑灰质信号一致, 病灶边界清晰, 前方与右侧脑室后角相邻, 胼胝体压部体积变小, 与胼胝体膝部和体部移行不成比例, 两侧脑室后角略有分离, 中线结构居中。

**诊断意见:** 胼胝体发育不良并灰质异位。

**Name of examination:** MR scanning of the head.

**Sequence:** TSE-T<sub>1</sub>WI(500/8), T<sub>2</sub>WI(4000/95), FLAIR(9000/107).

**Orientation:** TRA, SAG.

**Findings:** MR images show an abnormal intensity with a well-defined border and without occupying effect in the front of calcarine sulcus near the right posterior horn of lateral ventricle, the maximal axial area of the lesion is 4 cm × 5 cm, and the signal character of the lesion is in coincidence with that of normal cerebral gray matter. The volume of splenium of corpus callosum is decreased, and it is not in proportion with the volume of genu and body of corpus callosum. The distance between bilateral ventricles posterior horn is enlarged. The midline structures are not deviated.

**Diagnosis:** Dysplasia of corpus callosum with gray matter heterotopia.

4. 脑发育不良 - 巨脑回

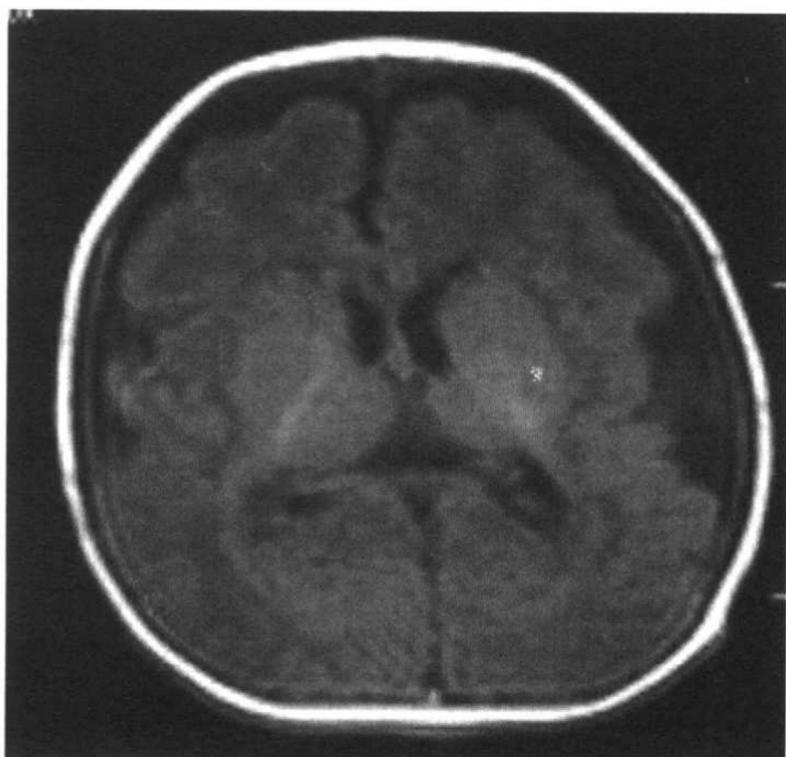


图 3-13 T<sub>1</sub>WI 轴位

Fig 3 · 13 T<sub>1</sub>weighted transverse image

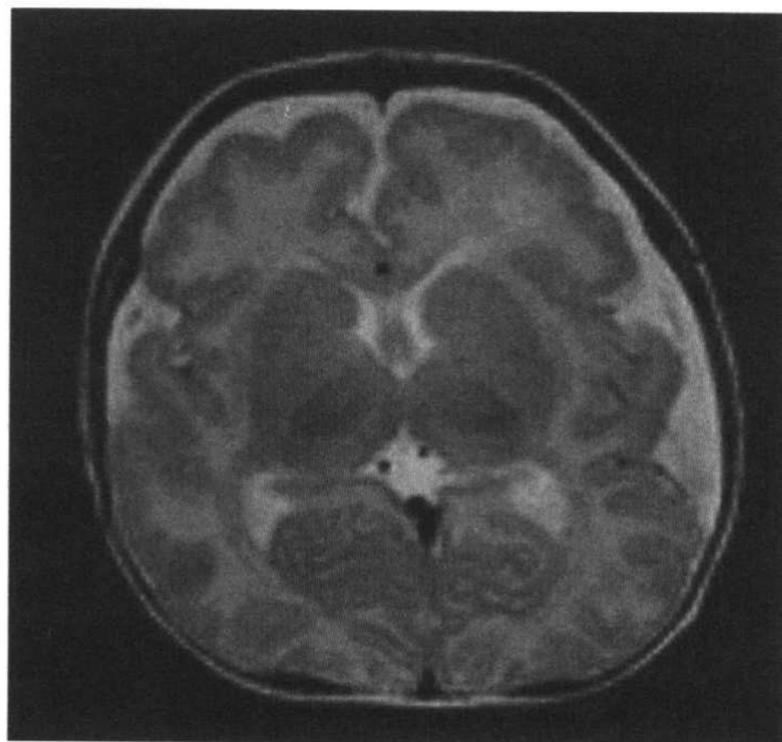


图 3-14 T<sub>2</sub>WI 轴位

Fig 3 · 14 T<sub>2</sub>weighted transverse image



图 3-15 FLAIR 轴位

Fig 3 · 15 FLAIR transverse image

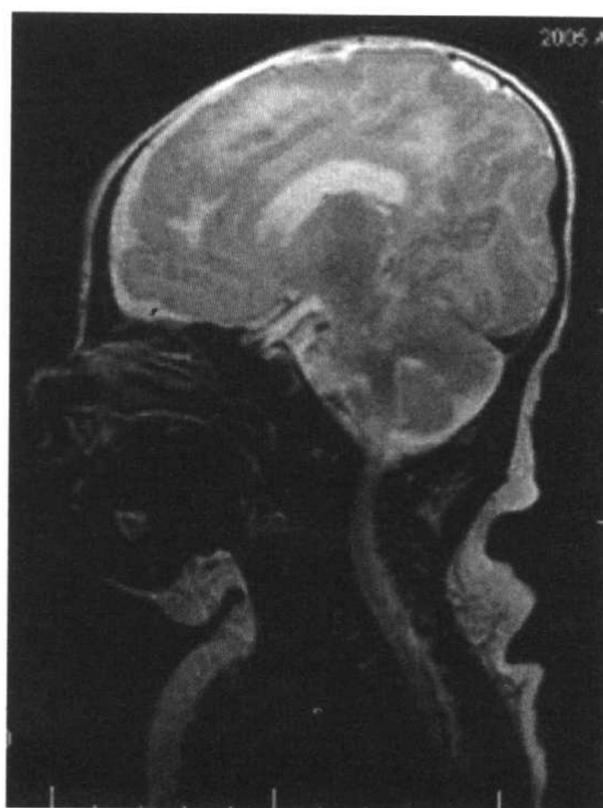


图 3-16 T<sub>2</sub>WI 矢状位

Fig 3 · 16 T<sub>2</sub> weighted sagittal image

**检查名称:**颅脑 MR 扫描。

**检查序列:**TSE-T<sub>1</sub> WI(500/8), T<sub>2</sub> WI(4000/95), FLAIR(9000/107)。

**扫描方位:**轴位、矢状位。

**检查所见:**双侧额叶脑回增宽,数量减少,结构正常。余脑叶未见异常,脑液腔系未见扩张,中线结构居中。

**诊断意见:**脑发育异常 - 巨脑回。

**Name of examination:** MR scanning of the head.

**Sequence:** TSE-T<sub>1</sub> WI(500/8), T<sub>2</sub> WI(4000/95), FLAIR(9000/107).

**Orientation:** TRA, SAG.

**Findings:** Bilateral gyrus of frontal lobe can be seen broadened and the quantity shows decreased. The constitution of gyrus is normal. No abnormal intensity is found in parenchyma. Ventricles and subarachnoid cavities are normal. The midline structures are in the middle of the head.

**Diagnosis:** Dysplasia of brain-macrogyria.

5. Chari 畸形并脊髓空洞症

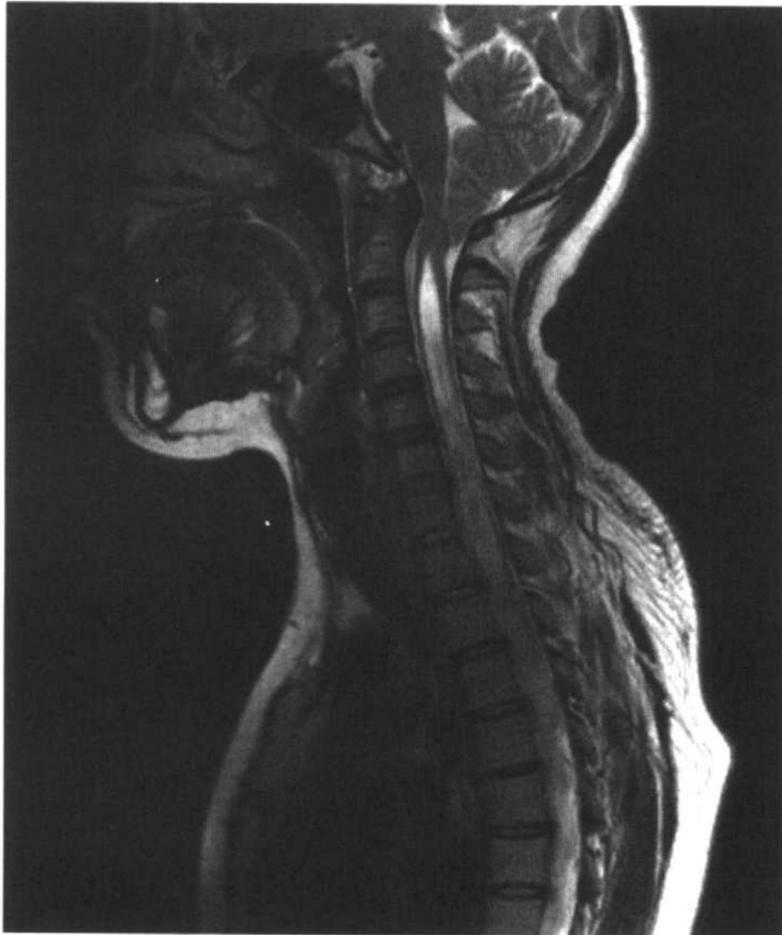


图 3-17 T<sub>2</sub>WI 矢状位  
Fig 3·17 T<sub>2</sub> weighted sagittal image

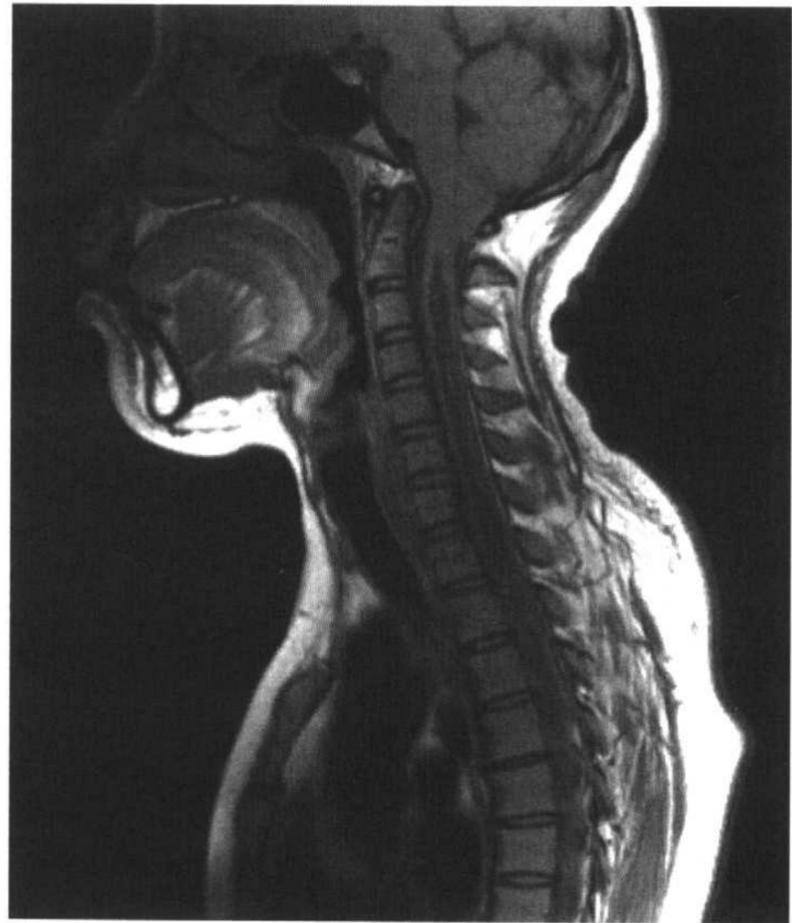


图 3-18 T<sub>1</sub>WI 矢状位  
Fig 3·18 T<sub>1</sub> weighted sagittal image

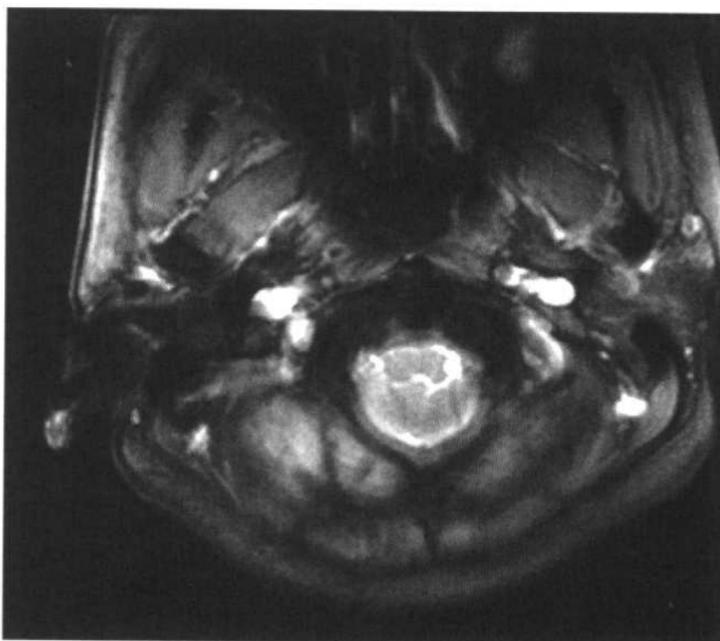


图 3-19 T<sub>2</sub>WI 轴位  
Fig 3·19 T<sub>2</sub> weighted transverse  
image

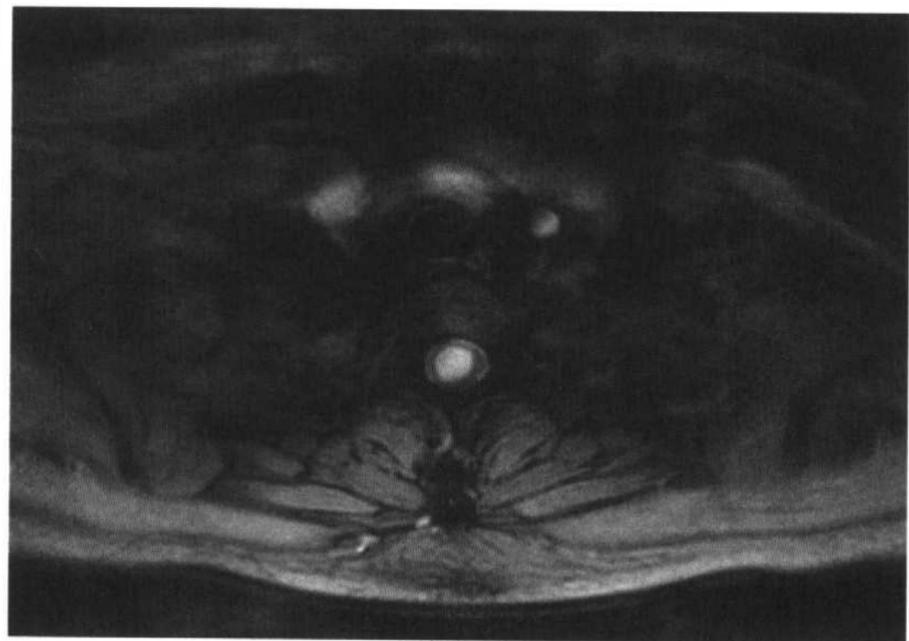


图 3-20 压脂 T<sub>2</sub>WI 轴位  
Fig 3·20 Fat-suppression T<sub>2</sub> weighted  
transverse image

**检查名称:**颅颈交界区 MR 扫描。

**检查序列:**TSE-T<sub>1</sub>WI(500/8), T<sub>2</sub>WI(4000/95), FS-T<sub>2</sub>WI(1500/20/100)。

**扫描方位:**轴位、矢状位。

**检查所见:**小脑扁桃体向下疝入颈椎管内,枕大池颅内外段均消失, C1 ~ T7 段脊髓中央管扩张,呈脑脊液样长 T<sub>1</sub>、长 T<sub>2</sub>信号。

**诊断意见:**Chiari 畸形并脊髓空洞症。

**Name of examination:** MR scanning of the relay area between cranial and cervix.

**Sequence:**TSE-T<sub>1</sub>WI(500/8), T<sub>2</sub>WI(4000/95), FS-T<sub>2</sub>WI(1500/20/100).

**Orientation:** TRA, SAG.

**Findings:**The tonsil of cerebellum is down load to cervical spinal canal. The inter-cerebral and the extro-cerebral occipital cisterns disappear. The spinal central canal of C1-T7 segments can be seen dilated. The signal intensity of cerebrospinal fluid in the spinal central canal is high in T<sub>2</sub>WI and low in T<sub>1</sub>WI.

**Diagnosis:**Chiari's malformation combine with myelosyringosis.

6. 颅咽管瘤

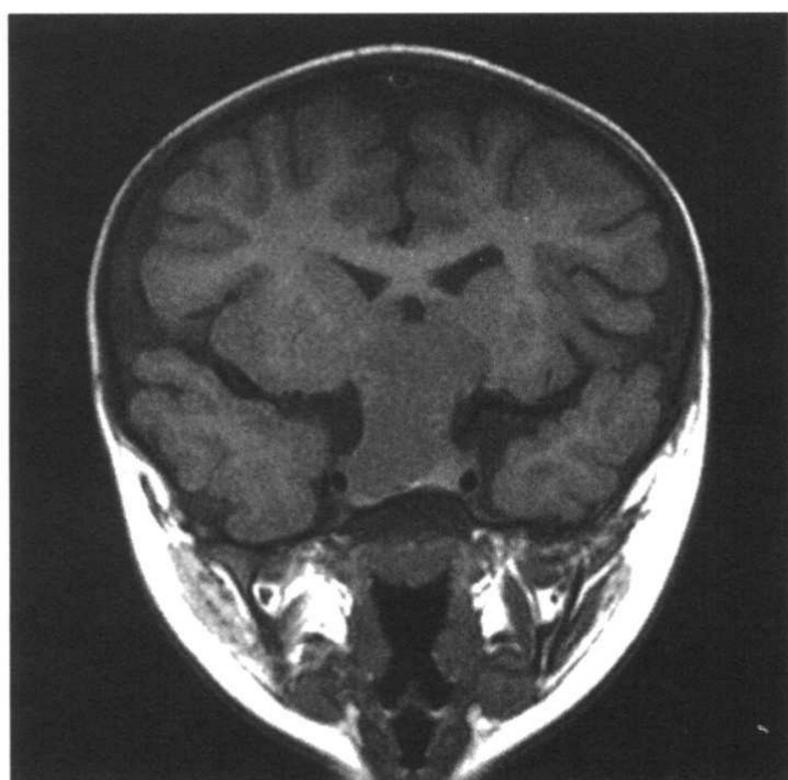


图 3-21 T<sub>1</sub>WI 冠状位  
Fig 3·21 T<sub>1</sub> weighted coronal image

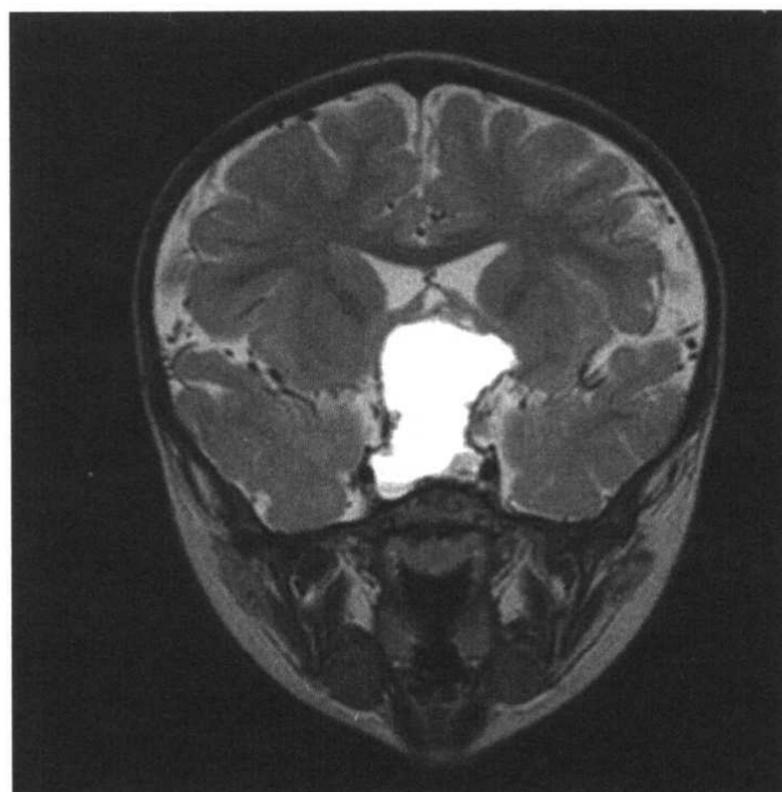


图 3-22 T<sub>2</sub>WI 冠状位  
Fig 3·22 T<sub>2</sub> weighted coronal image

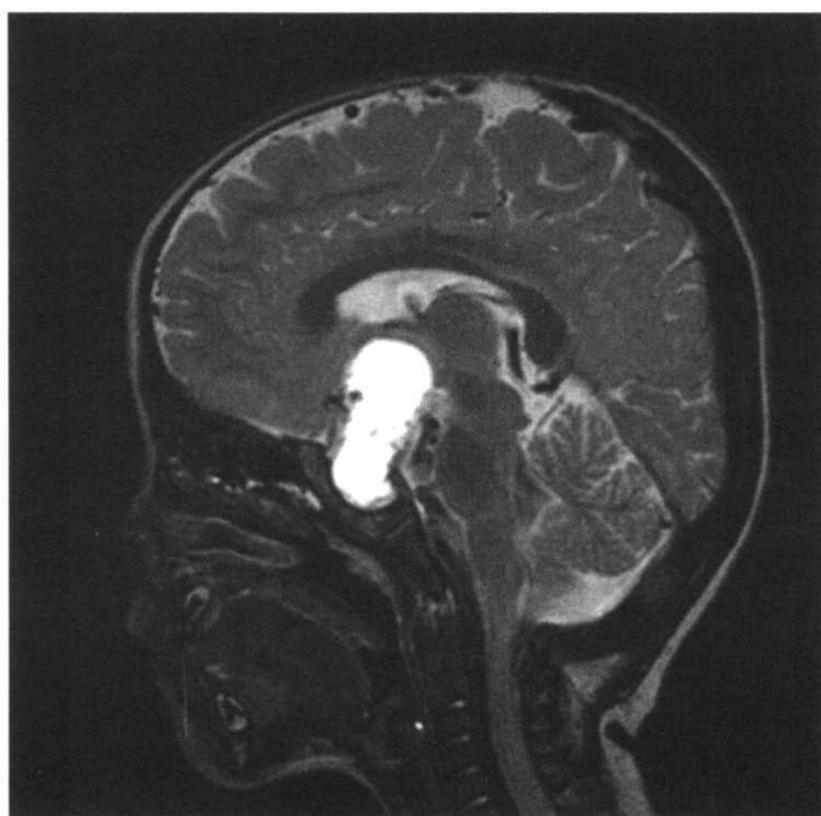


图 3-23 T<sub>2</sub>WI 矢状位  
Fig 3·23 T<sub>2</sub> weighted sagittal image



图 3-24 FLAIR 轴位  
Fig 3·24 FLAIR transverse image

**检查名称:**鞍区 MR 平扫。

**检查序列:**TSE -T<sub>1</sub> WI(500/8), T<sub>2</sub> WI(4000/95)。

**扫描方位:**冠状位、矢状位、轴位。

**检查所见:**鞍区见一椭圆形长 T<sub>1</sub>、长 T<sub>2</sub>,高 FLAIR 异常信号,边界清楚,大小约 7 cm × 4 cm,垂体明显受压变扁,视交叉上移。双侧海绵窦未见明显异常。

**诊断意见:**鞍区占位,颅咽管瘤可能性大。

**Name of examination:** MR scanning of the sellae.

**Sequence:** TSE-T<sub>1</sub> WI(500/8), T<sub>2</sub> WI(4000/95).

**Orientation:** COR, SAG, TRA.

**Findings:** There is a long T<sub>1</sub> WI, long T<sub>2</sub> WI and FLAIR high signal intensity lesion with a size of 7 cm × 4 cm and sharp border in the area of sellae. The body of pituitary is compressed and deformed, the optic chiasma is shift upwards. The sponge sinus has no evidence of abnormality.

**Diagnosis:** The mass in the area of sellae, craniopharyngeal duct tumor is suggested.

7. 垂体瘤

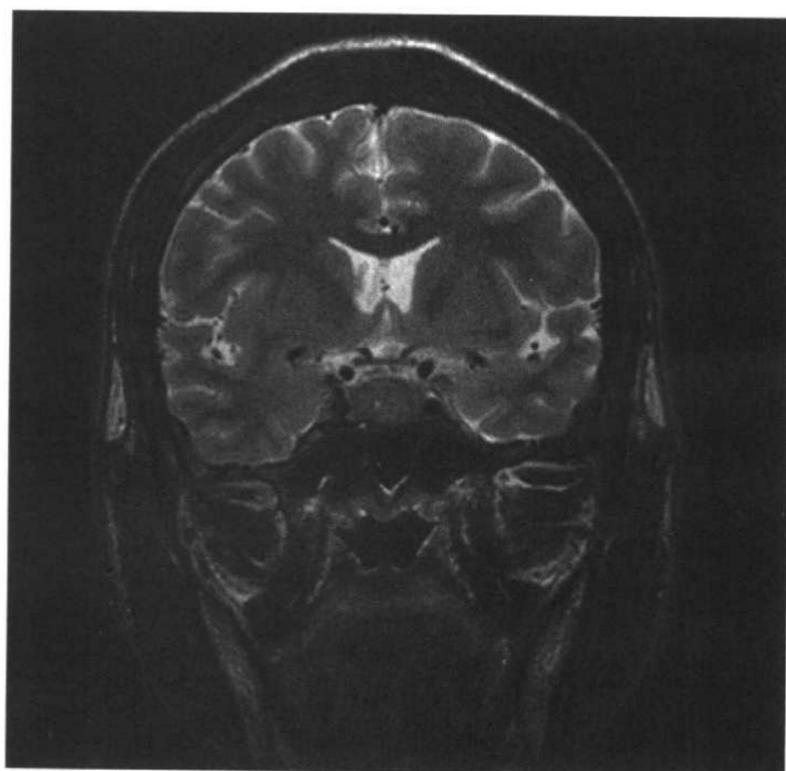


图 3-25 T<sub>2</sub>WI 冠状位  
Fig 3·25 T<sub>2</sub> weighted coronal image

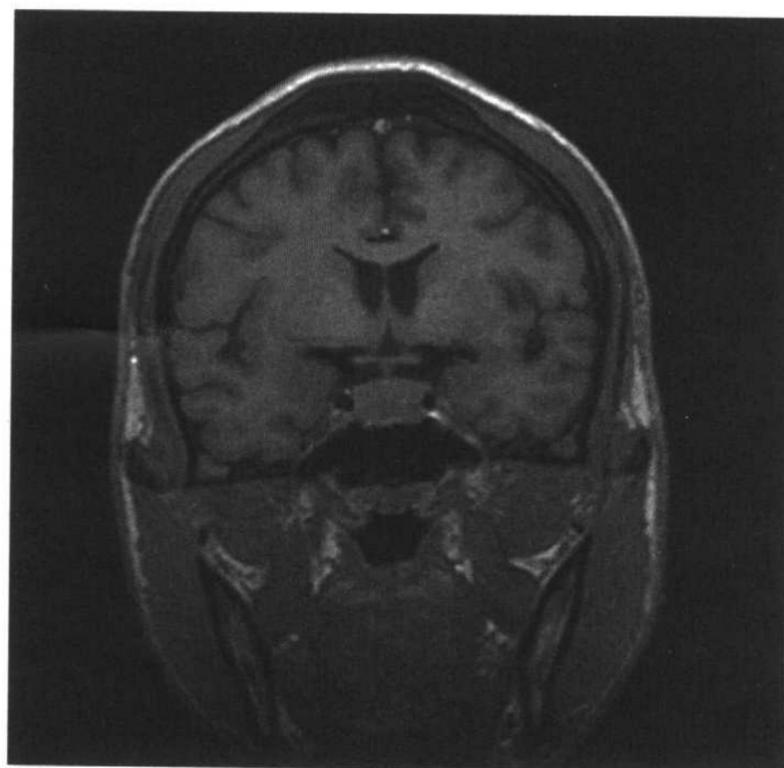


图 3-26 T<sub>1</sub>WI 冠状位  
Fig 3·26 T<sub>1</sub> weighted coronal image

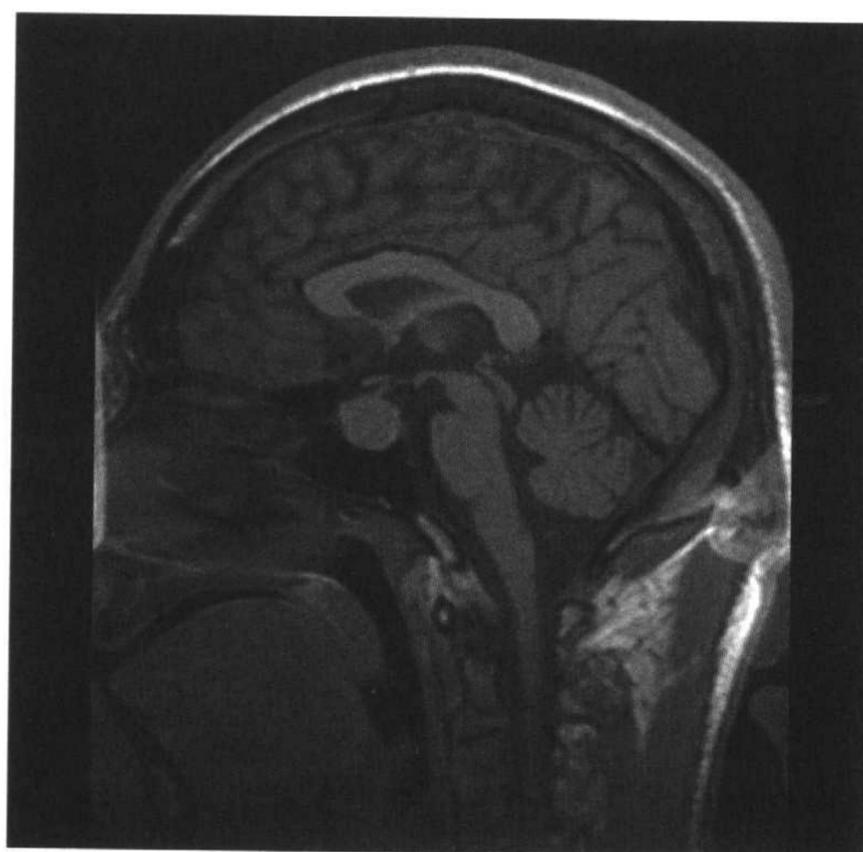


图 3-27 T<sub>1</sub>WI 矢状位  
Fig 3·27 T<sub>1</sub> weighted sagittal image

**检查名称:**鞍区 MR 平扫。

**检查序列:**TSE-T<sub>1</sub>WI(500/8), T<sub>2</sub>WI(4000/95)。

**检查方位:**冠状位、矢状位。

**检查所见:**鞍区可见一 1.4 cm × 1.0 cm 类圆形等 T<sub>1</sub>、等 T<sub>2</sub> 异常信号灶,与正常垂体分界不清,垂体柄居中,鞍底轻度下陷,视交叉及双侧海绵窦未见异常。

**诊断意见:**垂体瘤。

**Name of examination:** MR scanning of the sellae.

**Sequence:** TSE-T<sub>1</sub>WI(500/8), T<sub>2</sub>WI(4000/95).

**Orientation:** COR, SAG.

**Findings:** There is an oval T<sub>1</sub>WI iso-intensity and T<sub>2</sub>WI iso-intensity lesion with a size of 1.4 cm × 1.0 cm in sellae. The lesion has an ill-defined margin with pituitary. The stem of pituitary is in the midline. The floor of sella seems to be descent slightly. The optic chiasma and bilateral sponge sinus are normal.

**Diagnosis:** Pituitary adenoma.

8. 鞍区海绵状血管瘤

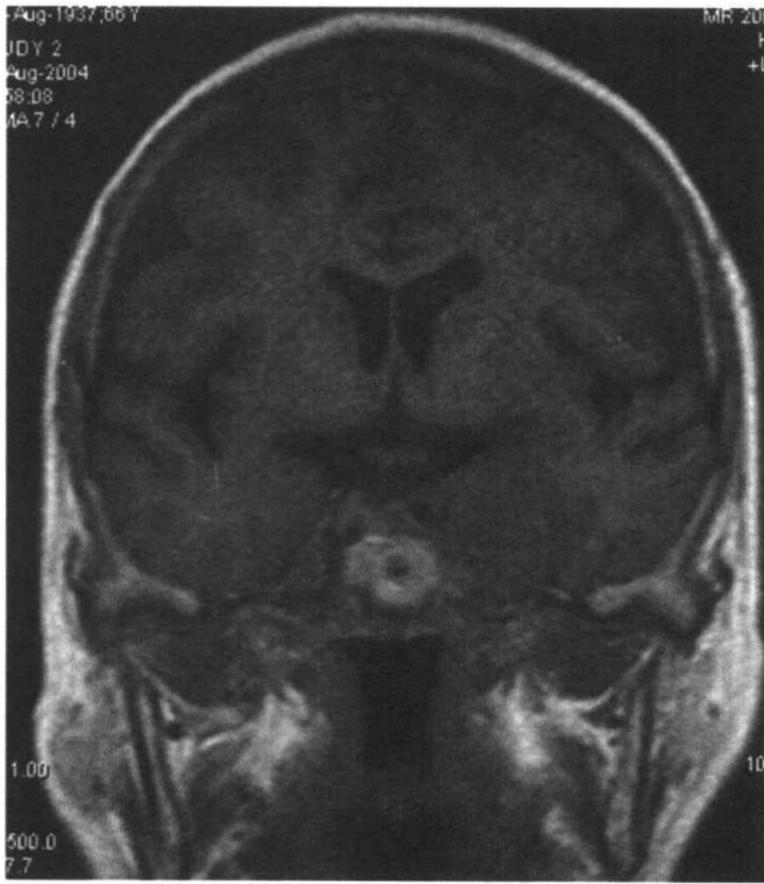


图 3-28 T<sub>1</sub>WI 冠状位

Fig 3 · 28 T<sub>1</sub> weighted coronal image

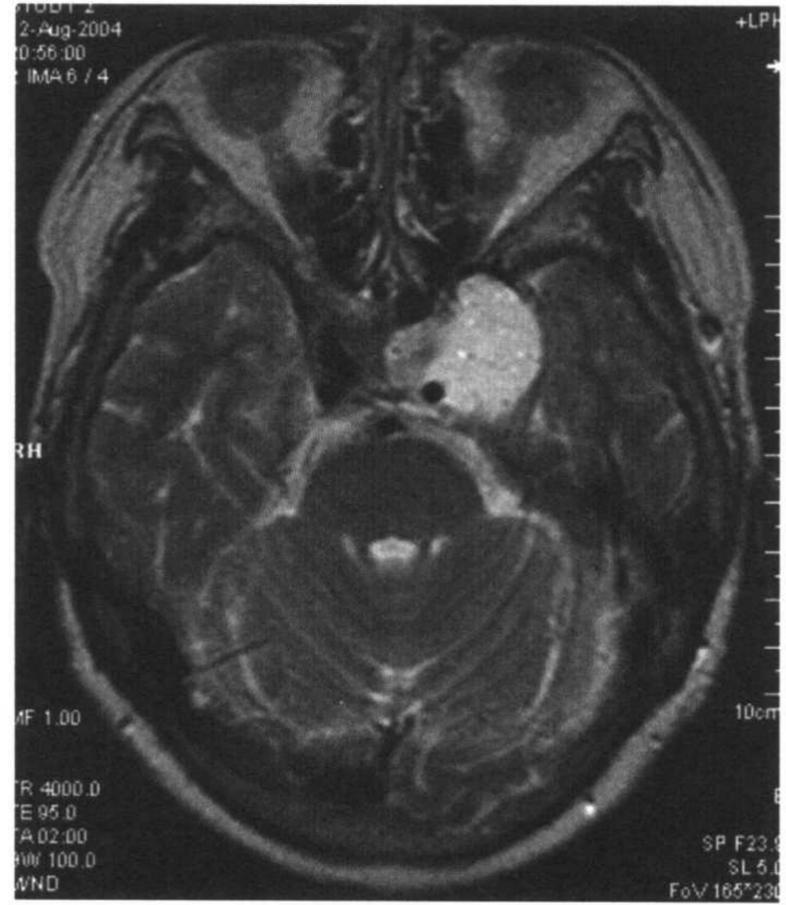


图 3-29 T<sub>2</sub>WI 轴位

Fig 3 · 29 T<sub>2</sub> weighted transverse image

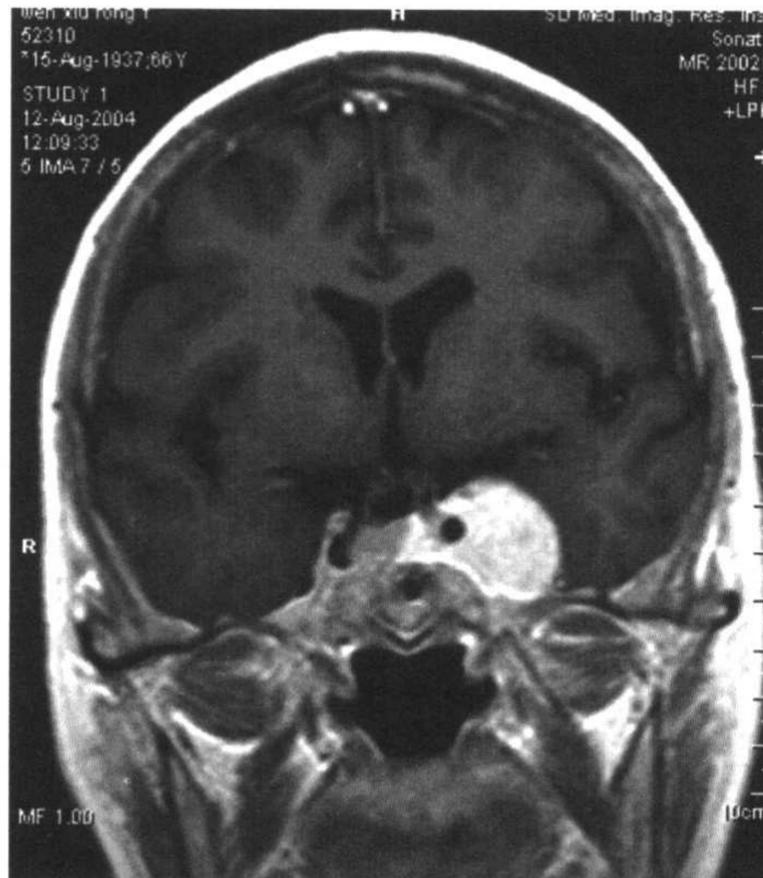


图 3-30 强化 T<sub>1</sub>WI 冠状位

Fig 3 · 30 Post-contrast coronal image

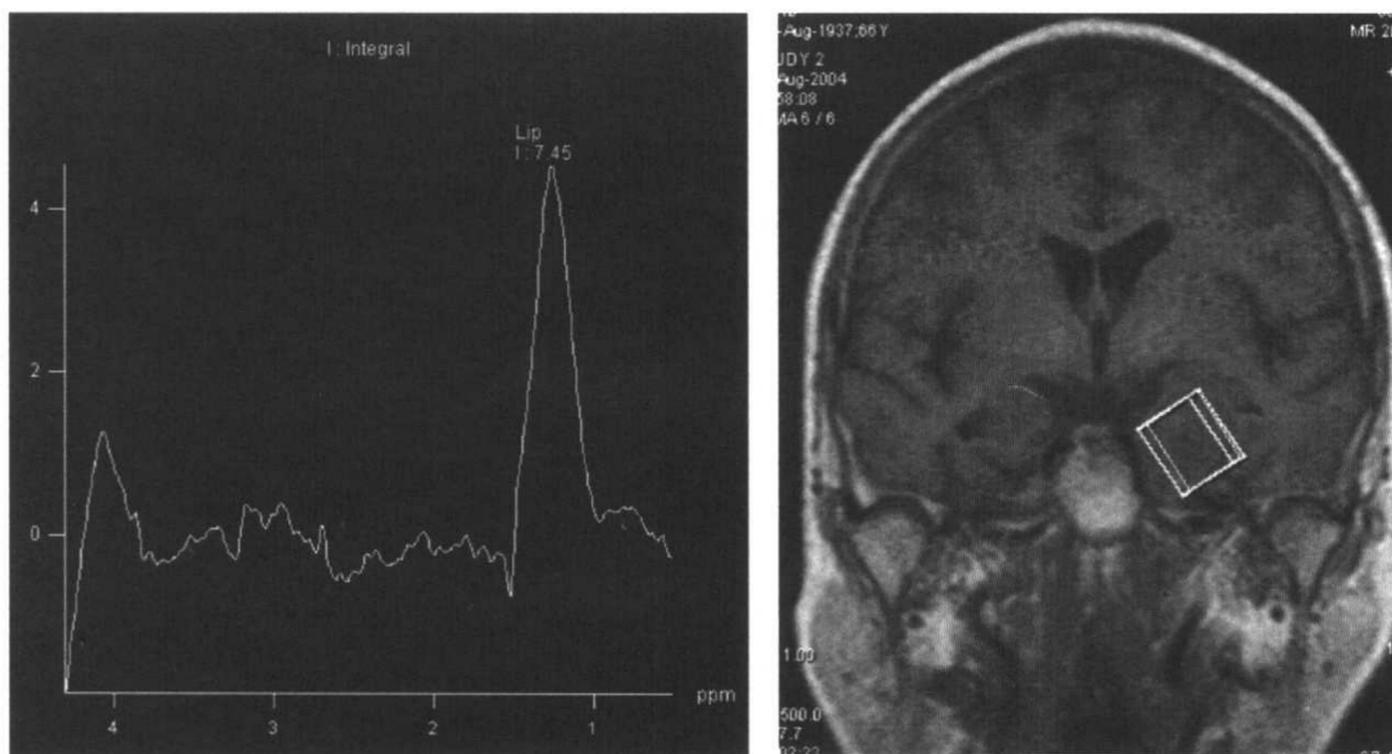


图 3-31 病灶单体素波谱及定位像

Fig 3 · 31 Single-voxel spectroscopy image

**检查名称:**鞍区 MR 平扫 + 强化。

**检查序列:** TSE-T<sub>1</sub>WI (500/7.7), T<sub>2</sub>WI (4000/95), GD-DTPA T<sub>1</sub>WI (500/8), MRS。

**检查方位:**冠状位、轴位。

**检查所见:**左侧鞍旁见一长 T<sub>1</sub>、长 T<sub>2</sub>信号,边界清晰,最大截面约 3 cm × 4 cm 的病灶,包绕左侧颈内动脉,左侧颞叶受压移位。增强扫描病灶明显均匀强化,波谱显示 LIP 峰增高。

**诊断意见:**左鞍旁海绵状血管瘤。

**Name of examination:** MR scanning of the sellae: plain scan and contrast scan.

**Sequence:** TSE-T<sub>1</sub>WI (500/8), T<sub>2</sub>WI (4000/95), GD-DTPA, MRS.

**Orientation:** TRA, COR.

**Findings:** There is a remarkably abnormal intensity lesion near the left sella. The lesion, with a size of 3 cm × 4 cm, displays low signal intensity in T<sub>1</sub>WI and high signal intensity in T<sub>2</sub>WI. The left-sidedness internal carotid is revolved, and left temporal lobe is compressed. After injection of GD-DTPA, the lesion is enhanced uniformly. MR spectrum pattern shows abnormally increased LIP cusp.

**Diagnosis:** Carvenous hemangioma near left sella.

9. 脑膜瘤

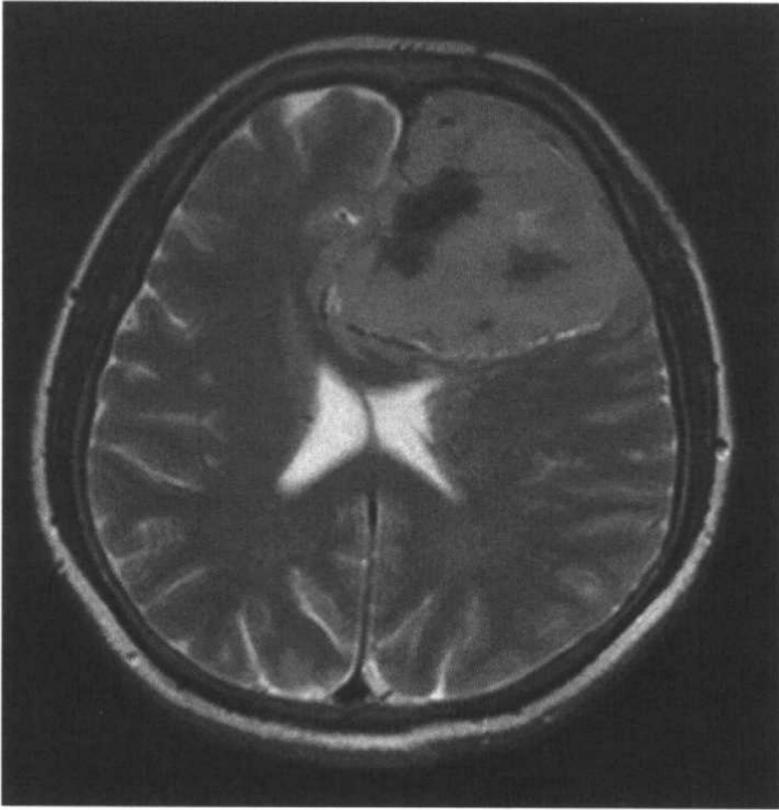


图 3-32 T<sub>2</sub>WI 轴位  
Fig 3·32 T<sub>2</sub> weighted coronal image

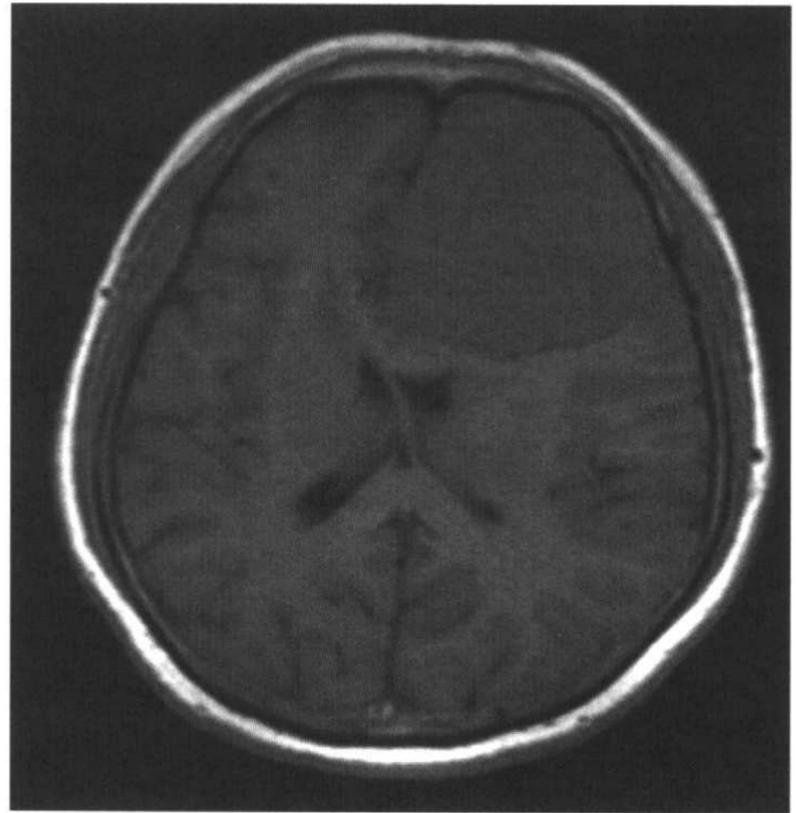


图 3-33 T<sub>1</sub>WI 轴位  
Fig 3·33 T<sub>1</sub> weighted coronal image

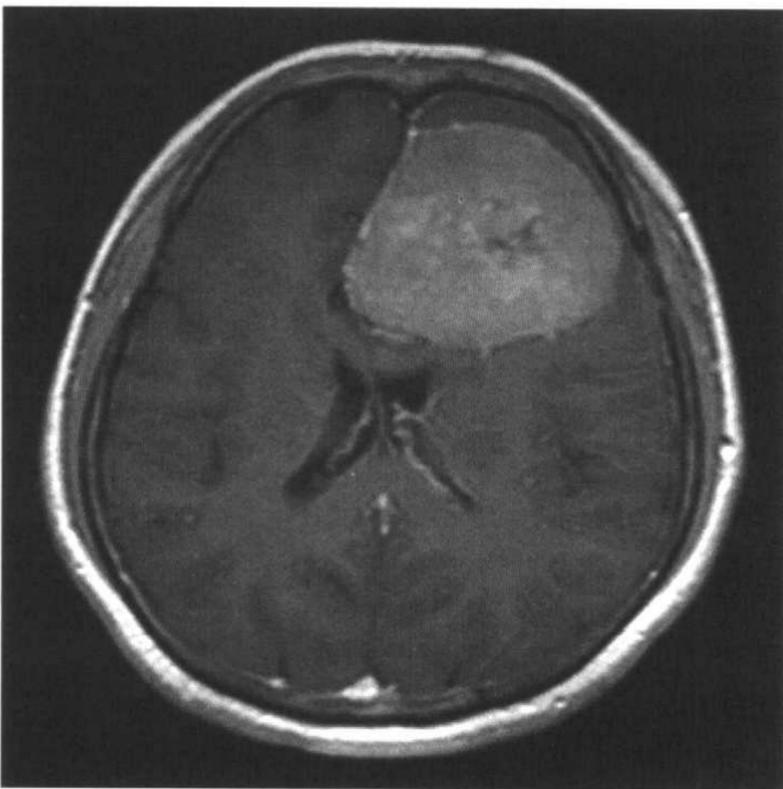


图 3-34 强化 T<sub>1</sub>WI 轴位  
Fig 3·34 Post-contrast transverse image

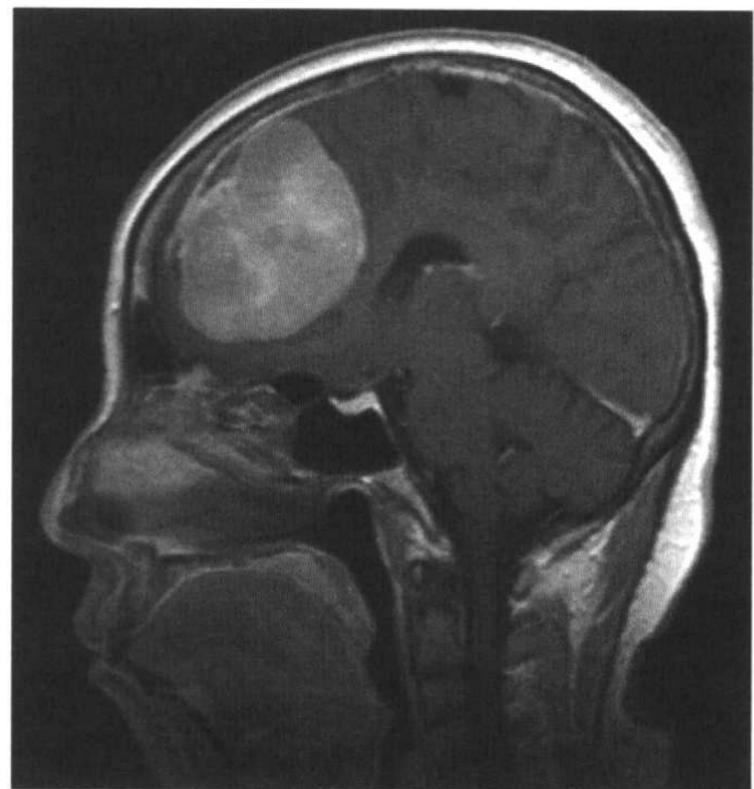


图 3-35 强化 T<sub>1</sub>WI 矢状位  
Fig 3·35 Post-contrast sagittal image

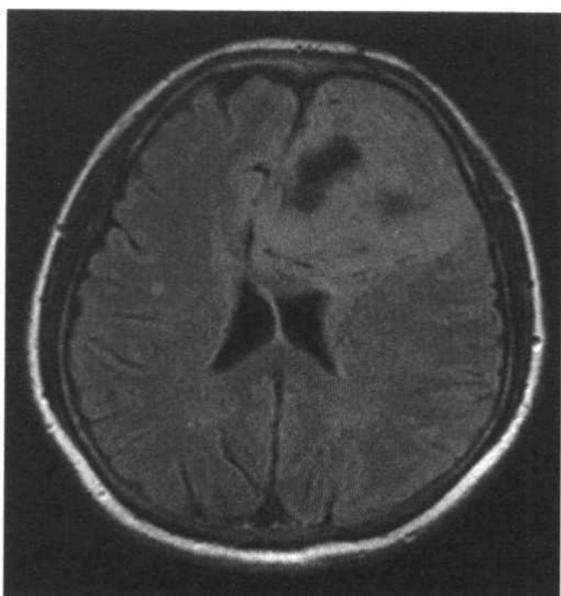


图 3-36 FLAIR 轴位  
Fig 3-36 FLAIR transverse image

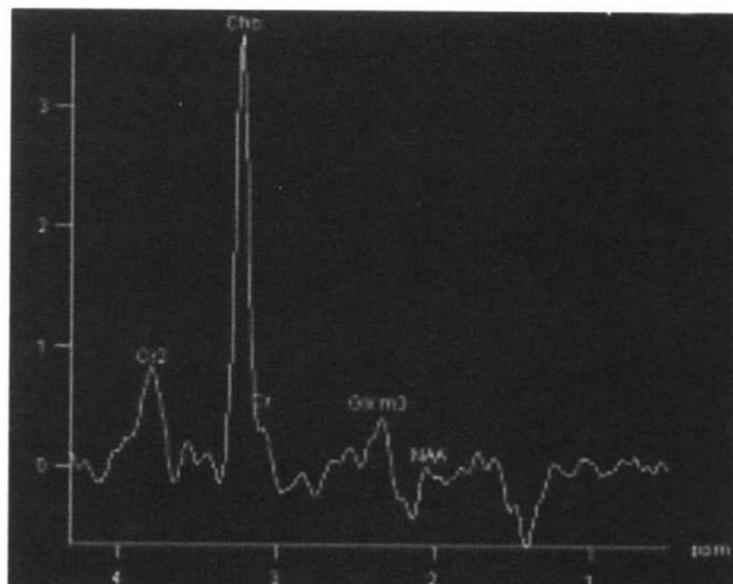


图 3-37 MR 波谱  
Fig 3-37 MR spectroscopy

检查名称: 颅脑 MR 平扫 + 强化。

检查序列: SE-T<sub>1</sub>WI (500/7.7), T<sub>2</sub>WI (4000/95), GD-DTPA T<sub>1</sub>WI (500/8), MRS。

检查方位: 轴位、矢状位。

检查所见: 左侧额部凸面颅骨内板下 3 cm × 4 cm 略长 T<sub>1</sub>、略长 T<sub>2</sub> 异常信号, 信号不均匀, 内可见坏死, 边界清晰, 宽基底贴附于硬膜, 周围脑实质受压移位, 病灶周围可见水肿带。增强扫描显示病灶明显强化, 液化坏死部分未强化, 局部脑膜有强化, 波谱显示 NAA 消失。

诊断意见: 左侧额部脑膜瘤。

**Name of examination:** MR scanning of the head; plain scan and enhancement scan.

**Sequence:** TSE-T<sub>1</sub>WI (500/7.7), T<sub>2</sub>WI (4000/95), GD-DTPA T<sub>1</sub>WI (500/8).

**Orientation:** MRS, SAG, TRA.

**Findings:** Pre-contrast images show a 3 cm x 4 cm mass with sharp border in the left frontal part convexity infra to cranial entoplastron, the lesion signal is homogeneously isointense or light low T<sub>1</sub> and light high T<sub>2</sub> intensity, and a more high T<sub>2</sub> intensity area can be seen in the center of it. The broad basis is based on dural matter. The edema zone is present around the mass. The left frontal lobe is compressed and displaced. After intravenous administration of contrast medium, the mass is enhanced markedly with some areas not enhanced in the center. And at the site of the lesion, the dural can be seen enhanced. MR spectroscopy shows abnormally decreased creatine and NAA.

**Diagnosis:** Left-side frontal lobe meningioma.

10. 听神经瘤

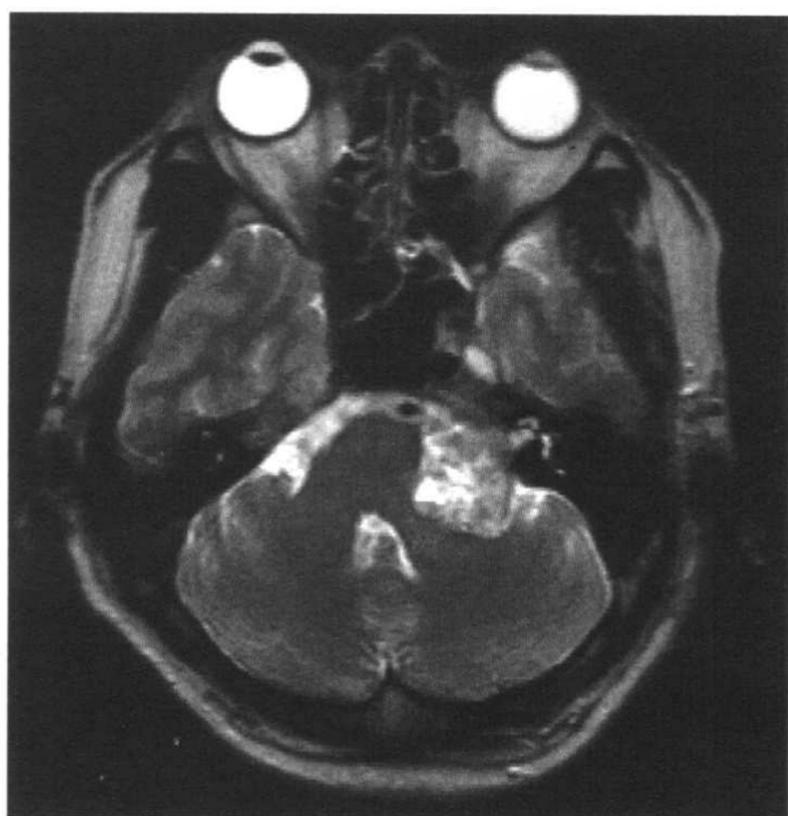


图 3-38 T<sub>2</sub>WI 轴位

Fig 3 · 38 T<sub>2</sub> weighted transverse image

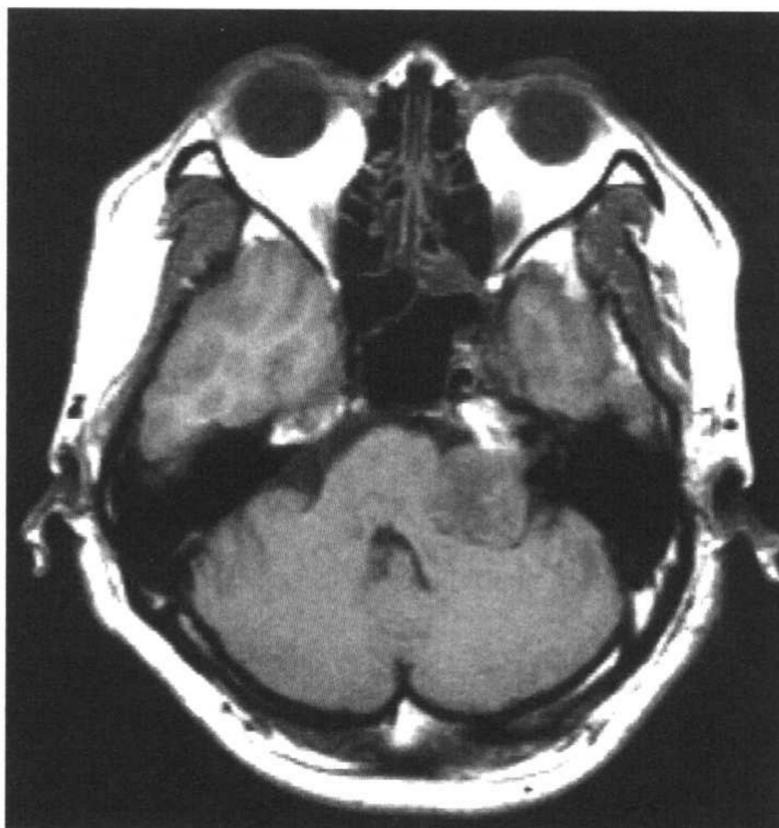


图 3-39 T<sub>1</sub>WI 轴位

Fig 3 · 39 T<sub>1</sub> weighted transverse image



图 3-40 强化 T<sub>1</sub>WI 轴位

Fig 3 · 40 Post-contrast transverse image

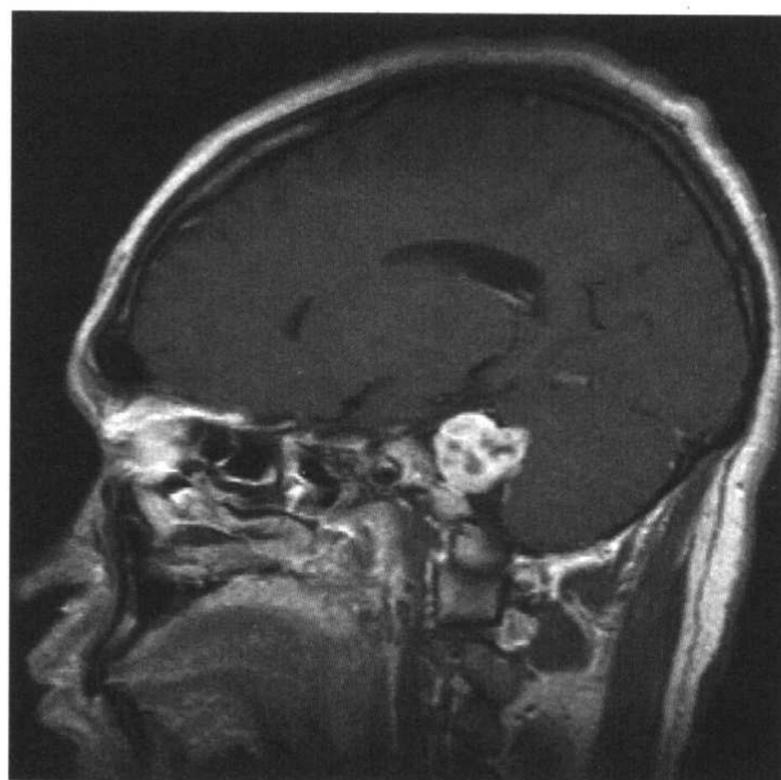


图 3-41 强化 T<sub>1</sub>WI 矢状位

Fig 3 · 41 Post-contrast sagittal image

**检查名称:**颅脑 MR 平扫 + 强化扫描。

**检查序列:**SE-T<sub>1</sub>WI(500/7.7), T<sub>2</sub>WI(4000/95), GD-DTPA T<sub>1</sub>WI(500/8)。

**检查方位:**轴位、矢状位。

**检查所见:**左侧脑桥小脑角区示块状略长 T<sub>1</sub> 略长 T<sub>2</sub> 异常信号,信号不均匀,边界清晰,最大截面约 3 cm × 4 cm,左侧脑桥小脑角池消失,左侧小脑半球、脑桥受压移位,病灶填塞内听道,显示“瓶塞征”。注射 GD-DTPA 后病灶明显强化。诸脑室未见明显扩张,中线结构居中。

**诊断意见:**左侧脑桥小脑角区占位,首先考虑听神经瘤。

**Name of examination:** MR scanning of the head plain scan and enhancement scan.

**Sequence:** TSE-T<sub>1</sub>WI(500/7.7), T<sub>2</sub>WI(4000/95), GD-DTPA T<sub>1</sub>WI(500/9) .

**Orientation:** SAG ,TRA.

**Findings:** Pre-contrast images show a 3 cm × 4 cm mass in the left sidedness bridge cerebellar peduncle region with well-defined border. The mass displays low signal intensity in T<sub>1</sub>WI and high signal in T<sub>2</sub>WI, arising from the eighth cranial nerve at the pars acoustica and displays "cork sign". The left bridge cerebellar peduncle cistern disappears and the left cerebellar hemisphere and brain stem are compressed and shifted. After intravenous administration of GD-DTPA, the mass is enhanced markedly. Ventricles are not dilated and the midline structures are not shifted.

**Diagnosis:** Left sidedness bridge cerebellar peduncle mass, acoustic nerve tumor is suggested.

11. 胆脂瘤

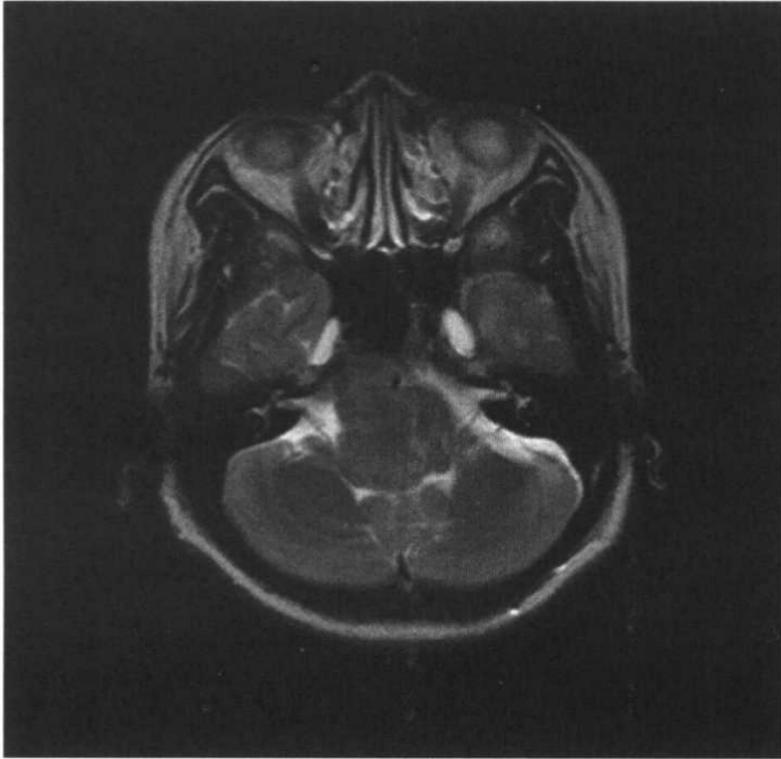


图 3-42 T<sub>2</sub>WI 轴位

Fig 3 · 42 T<sub>2</sub> weighted transverse image

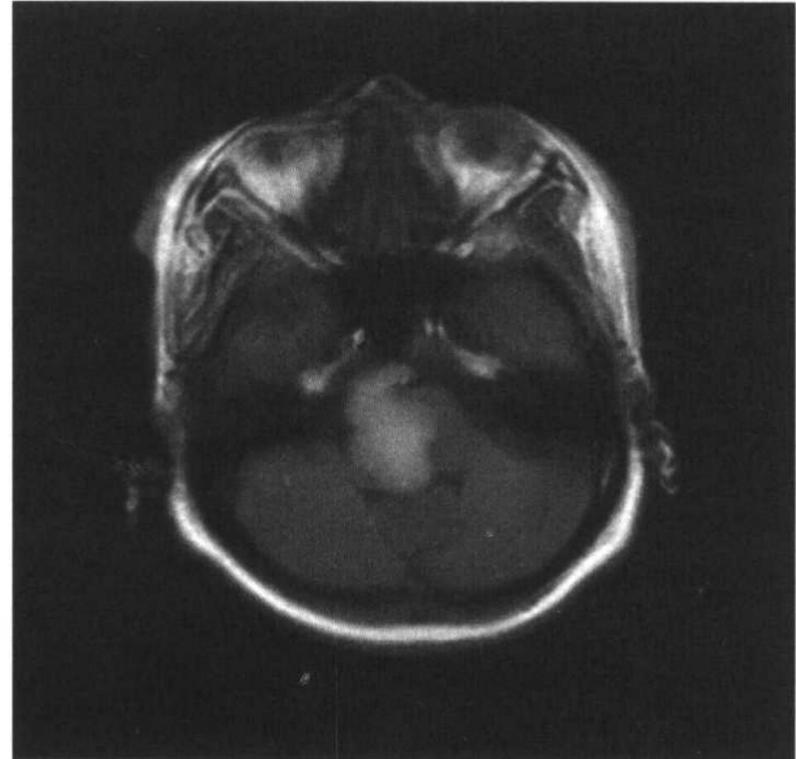


图 3-43 T<sub>1</sub>WI 轴位

Fig 3 · 43 T<sub>1</sub> weighted transverse image

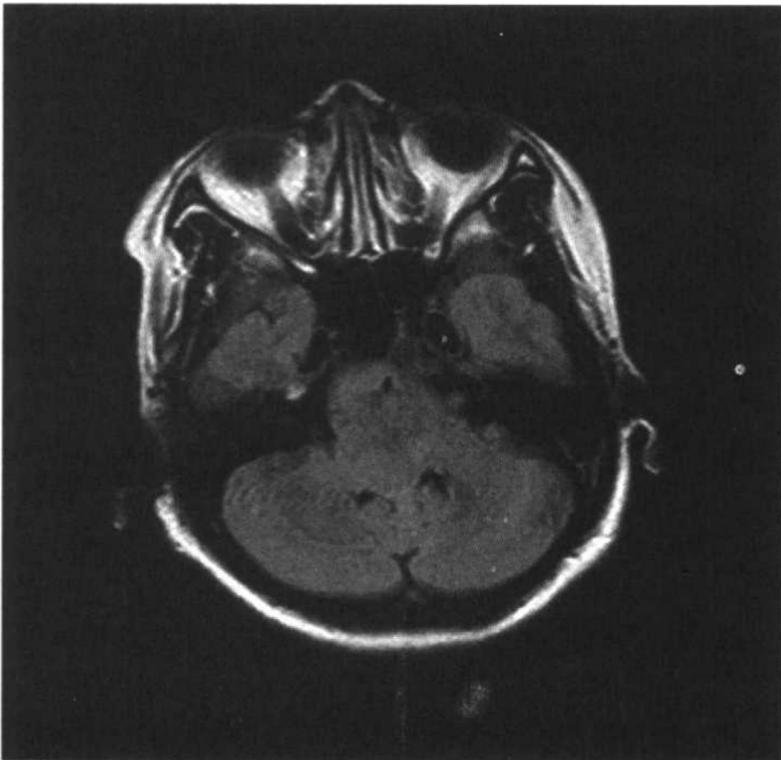


图 3-44 FLAIR 轴位

Fig 3 · 44 FLAIR transverse image

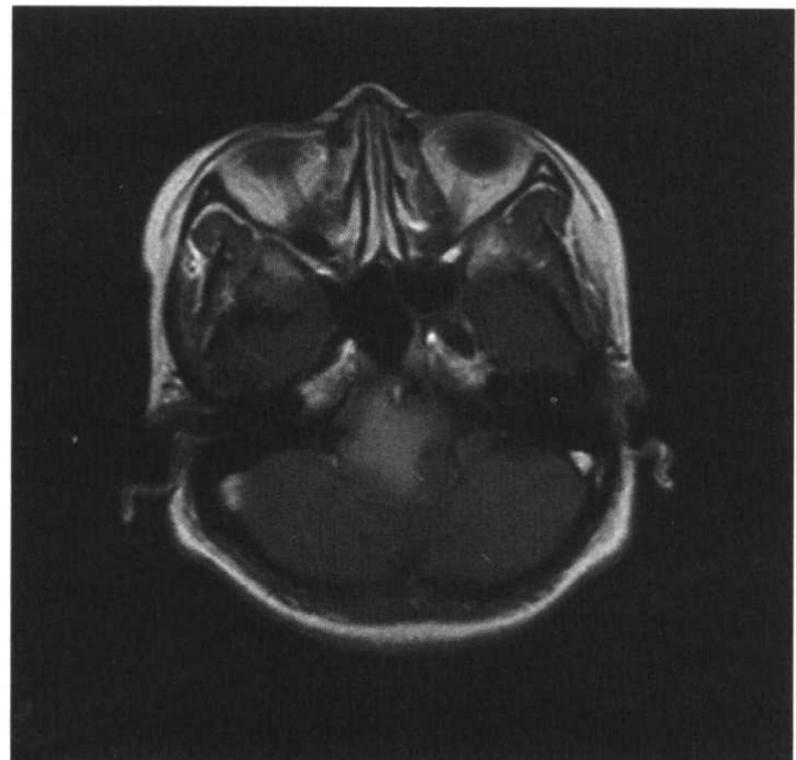


图 3-45 强化 T<sub>1</sub>WI 轴位

Fig 3 · 45 Post-contrast transverse image

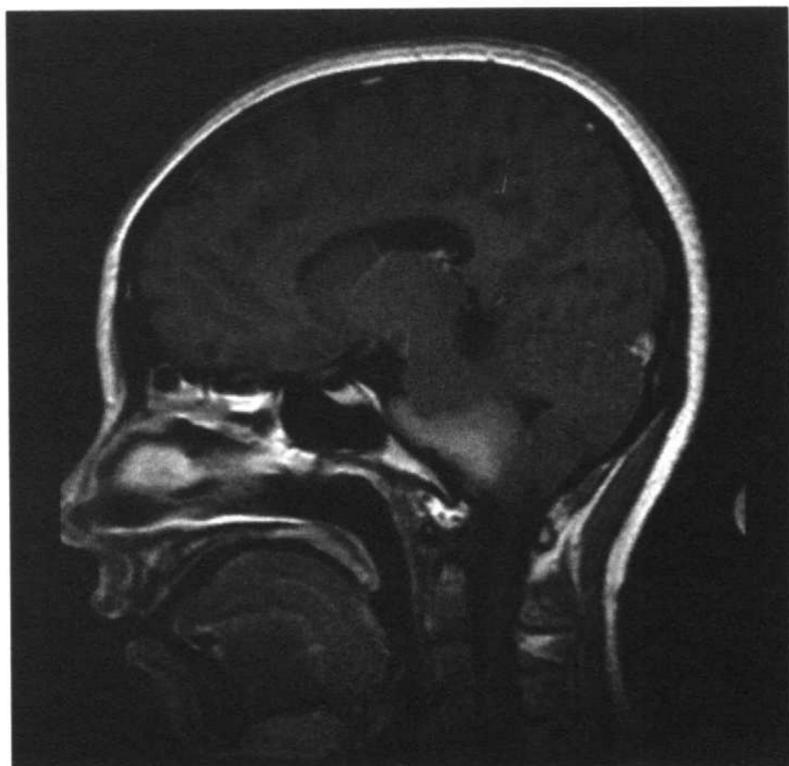


图 3-46 强化 T<sub>1</sub>WI 矢状位  
Fig 3·46 Post-contrast sagittal image

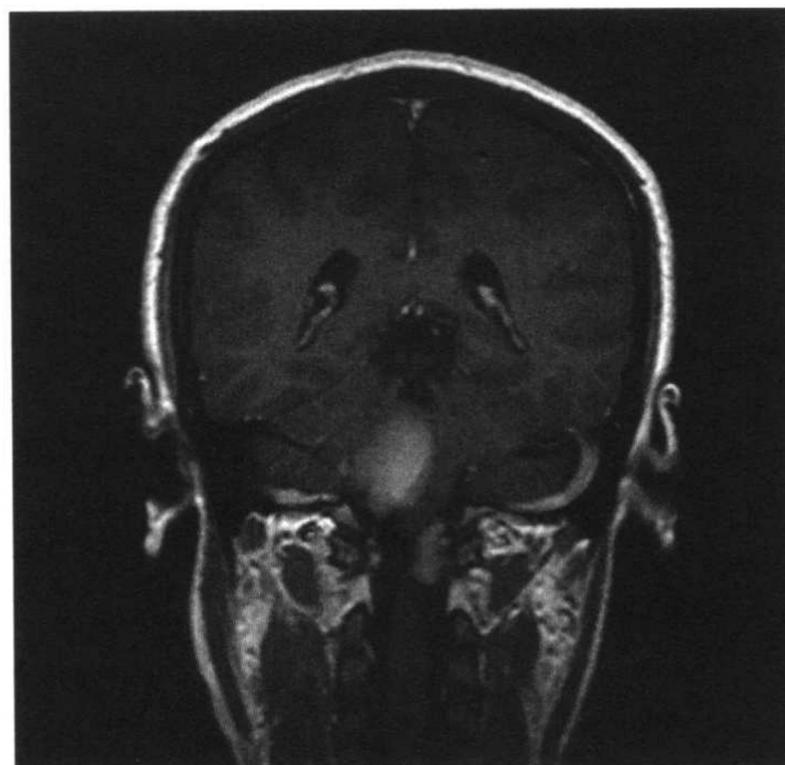


图 3-47 强化 T<sub>1</sub>WI 冠状位  
Fig 3·47 Post-contrast sagittal image

检查名称: 颅脑 MR 平扫 + 强化扫描。

检查序列: SE-T<sub>1</sub>WI(500/7.7), T<sub>2</sub>WI(4000/95), GD-DTPA T<sub>1</sub>WI(500/8)。

检查方位: 轴位、矢状位、冠状位。

检查所见: 右侧脑桥小脑角区及脑桥前池内见一不规则 2.5 cm × 3 cm 短 T<sub>1</sub>、短 T<sub>2</sub> 异常信号区, 边界较清楚, 其前部在脑桥前池内向上下方生长, 向后上突入四脑室, 包绕右侧椎动脉, 相应部位脑干受压不明显, 注入 GD-DTPA 后病灶无明显强化。诸脑室未见明显扩张, 中线结构居中。

诊断意见: 右侧脑桥小脑角区肿瘤, 考虑胆脂瘤。

**Name of examination:** MR scanning of the head plain scan and enhancement scan.

**Sequence:** TSE-T<sub>1</sub>WI(500/7.7), T<sub>2</sub>WI(4000/95), GD-DTPA T<sub>1</sub>WI(500/8) .

**Orientation:** SAG, TRA, COR.

**Findings:** Pre-contrast images show a 2.5 cm × 3 cm mass in the right cerebellopontine angle and anterior pontine cistern region with well-defined border, the lesion is remarkable for high-signal in T<sub>1</sub>WI, low or iso-signal in T<sub>2</sub>WI. The anterior parts of the lesion locate in anterior pontine cistern and the posterior parts extrude to the fourth ventricle and embed right vertebral artery, the corresponding brain stem compression is not clear. After intravenous administration of GD-DTPA, the mass is not enhanced. Ventricles are not dilated and the midline structures are not shifted.

**Diagnosis:** Right cerebellopontine angle mass, cholesteatoma is suggested.

12. 海绵状血管瘤



图 3-48 T<sub>2</sub>WI 轴位

Fig 3 · 48 T<sub>2</sub> weighted transverse image

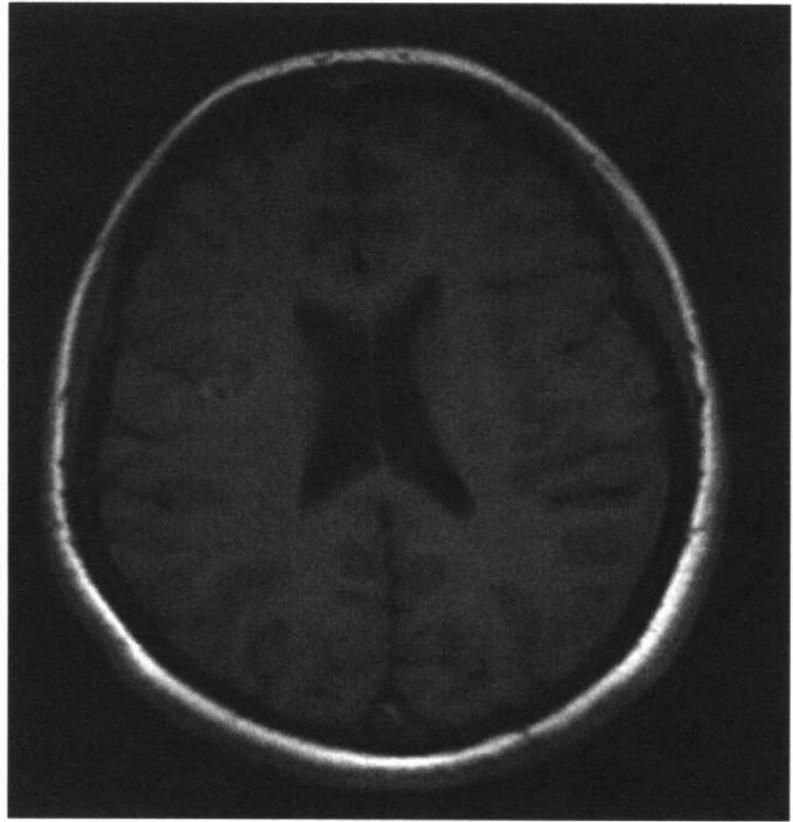


图 3-49 T<sub>1</sub>WI 轴位

Fig 3 · 49 T<sub>2</sub> weighted transverse image



图 3-50 FLAIR 轴位

Fig 3 · 50 FLAIR transverse image

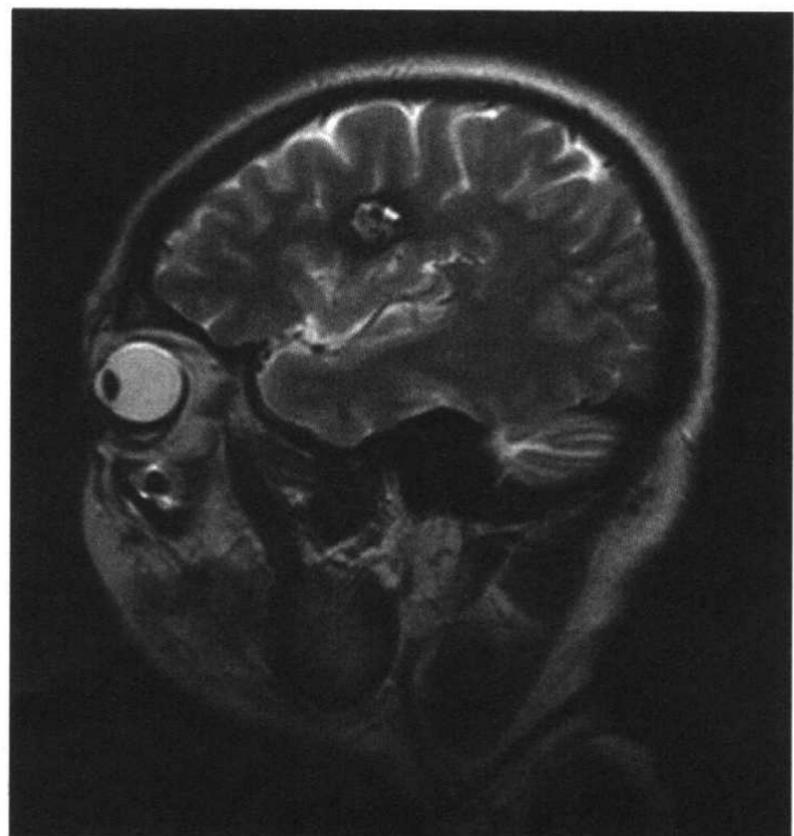


图 3-51 T<sub>2</sub>WI 矢状位

Fig 3 · 51 T<sub>2</sub> weighted sagittal image

**检查名称:**颅脑 MR 平扫。

**检查序列:**SE-T<sub>1</sub>WI(500/7.7), T<sub>2</sub>WI(4000/95), GD-DTPA T<sub>1</sub>WI(500/8)。

**检查方位:**轴位、矢状位。

**检查所见:**右侧放射冠区小块状等、短 T<sub>1</sub>、长 T<sub>2</sub>混杂异常信号,其间有点状长 T<sub>1</sub>、短 T<sub>2</sub> 信号,呈筛孔状,病灶最大截面约 2 cm × 2 cm,在 T<sub>2</sub>WI 图像上病灶周边有低信号环绕,周围无水肿及占位效应。诸脑室未见明显扩张,中线结构居中。

**诊断意见:**右侧放射冠区海绵状血管瘤。

**Name of examination:** MR scanning of the head plain scan.

**Sequence:** TSE-T<sub>1</sub>WI(500/7.7), T<sub>2</sub>WI(4000/95), GD-DTPA T<sub>1</sub>WI(500/8).

**Orientation:** SAG, TRA.

**Findings:** Pre-contrast images show a 2 cm × 2 cm nodosity lesion with well-defined border in the right-sidedness corona radiate. Its signal is hemogeneous, high T<sub>1</sub> and light high T<sub>2</sub> intensity. The light low T<sub>2</sub> and low T<sub>1</sub> intensity area also can be seen in the center of the lesion just like screen pore. T<sub>2</sub>WI images show a low signal ring around the lesion without mass effect and edema. Ventricles are not dilated and the midline structures are not shifted.

**Diagnosis:** Cavernous angioma in right-side corona radiata.

13. 胶质瘤

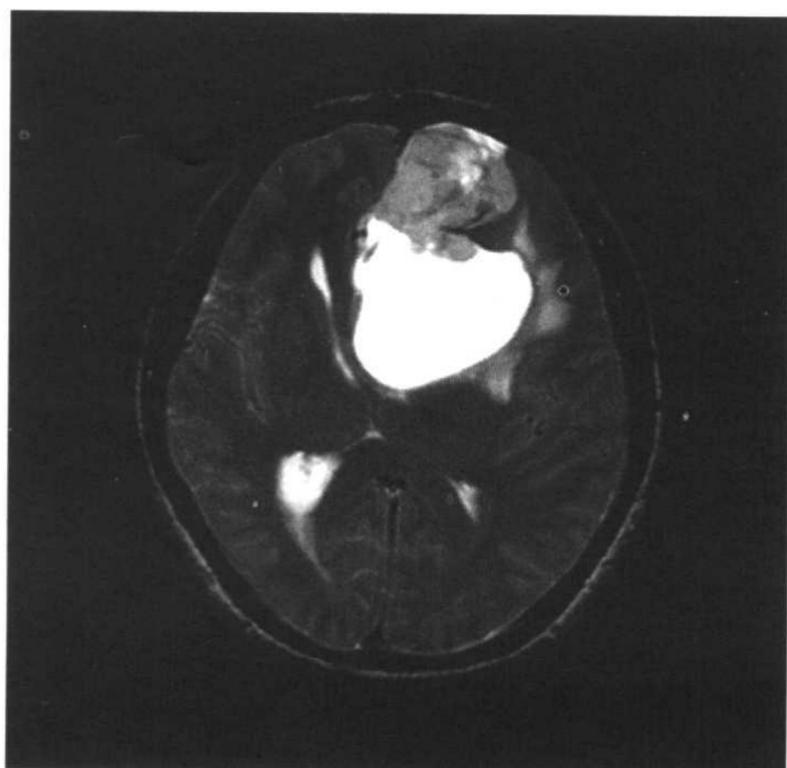


图 3-52 T<sub>2</sub>WI 轴位

Fig 3 · 52 T<sub>2</sub>weighted transverse image

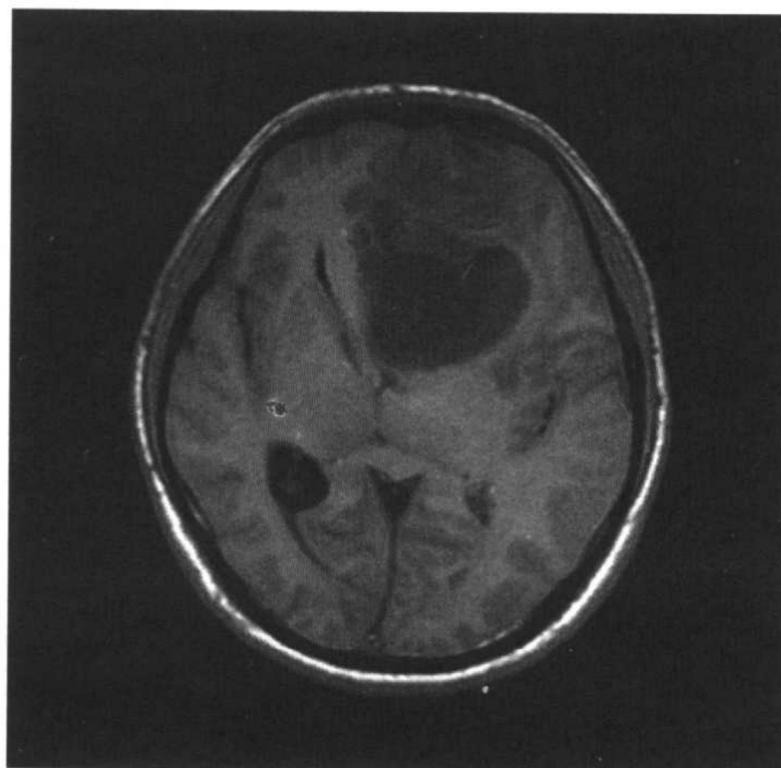


图 3-53 T<sub>1</sub>WI 轴位

Fig 3 · 53 T<sub>1</sub>weighted transverse image

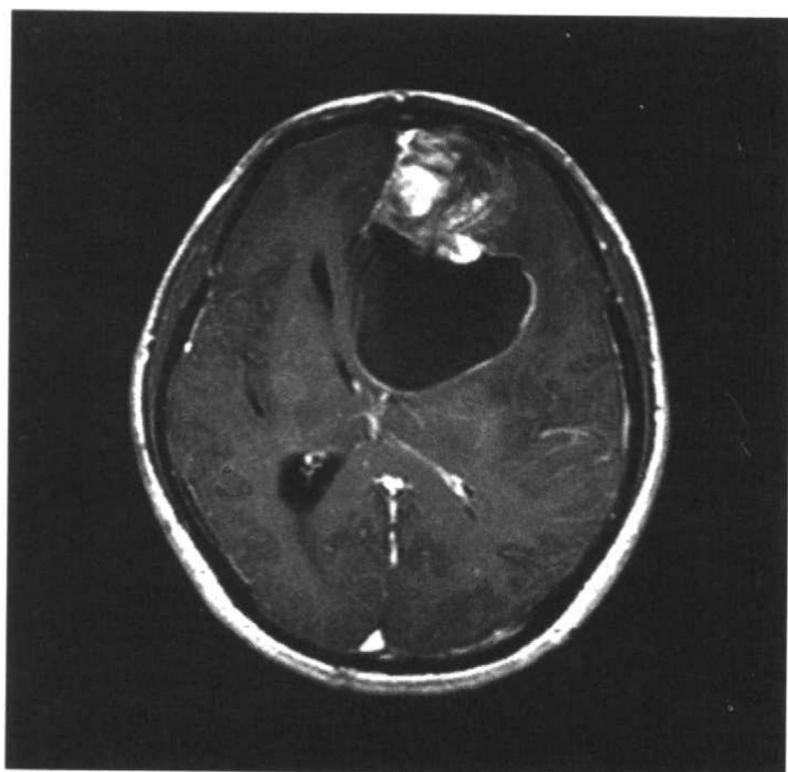


图 3-54 强化 T<sub>1</sub>WI 轴位

Fig 3 · 54 Post-contrast transverse image

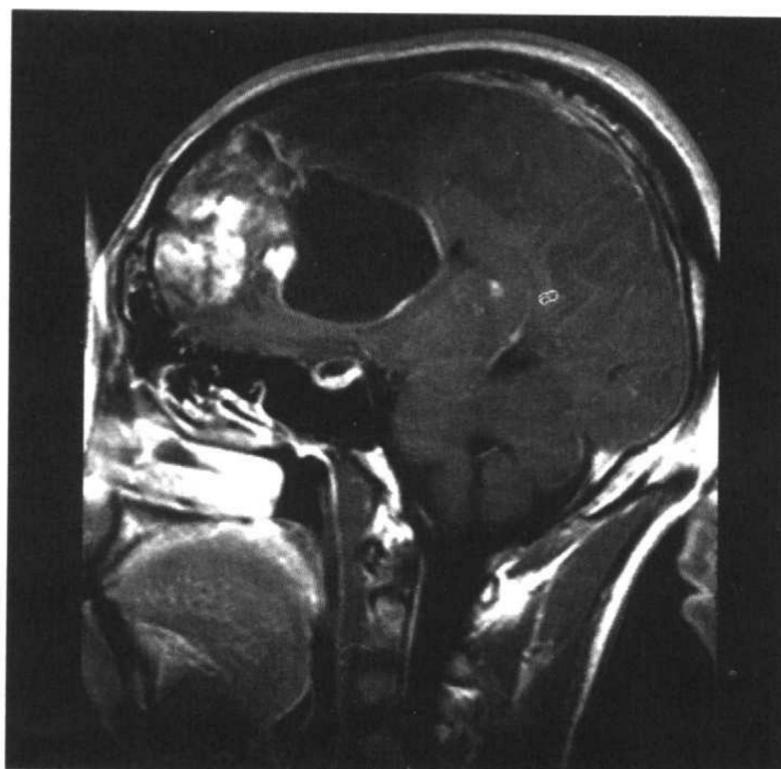


图 3-55 强化 T<sub>1</sub>WI 矢状位

Fig 3 · 55 Post-contrast sagittal image



图 3-56 强化  $T_1$  WI 冠状位  
Fig 3·56 post-contrast coronal image

**检查名称:** 颅脑 MR 平扫 + 强化扫描。

**检查序列:** SE- $T_1$  WI(500/7.7),  $T_2$  WI(4000/95), FLAIR(9000/107), GD-DTPA  $T_1$  WI(500/8)。

**检查方位:** 轴位、冠状位、矢状位。

**检查所见:** 左侧额叶见一形态不规则的长  $T_1$ 、略长  $T_2$  异常信号灶,其内信号不均匀,最大截面约 8 cm × 5 cm,边界不清,病灶中心和周围有更长  $T_2$  信号带,周围脑实质和侧脑室受压移位变形,中线结构向右侧略偏移。注入 GD-DTPA 后,病灶不均质明显强化,病灶内有囊状不强化区。

**诊断意见:** 左额恶性胶质瘤。

**Name of examination:** MR scanning of the head.

**Sequence:** SE- $T_1$  WI(500/7.7), SE- $T_2$  WI(4000/95), GD-DTPA  $T_1$  WI(500/8).

**Orientation:** SAG, TRA, COR.

**Findings:** Pre-contrast images show a 8 cm × 5 cm lesion with ill-defined border in the left frontal lobe. The mass signal is nonhomogeneous low  $T_1$  and high  $T_2$  intensity, and more high  $T_2$  intensity areas can be seen in the center of the mass and around it. The genu of corpus callosum is involved and the left lateral ventricle is compressed. The midline structures are shifted to the right side. After intravenous administration of GD-DTPA, the mass is nonhomogeneously enhanced with some areas not enhanced in the center of mass.

**Diagnosis:** Malignant glioma in the left frontal.

14. 髓母细胞瘤

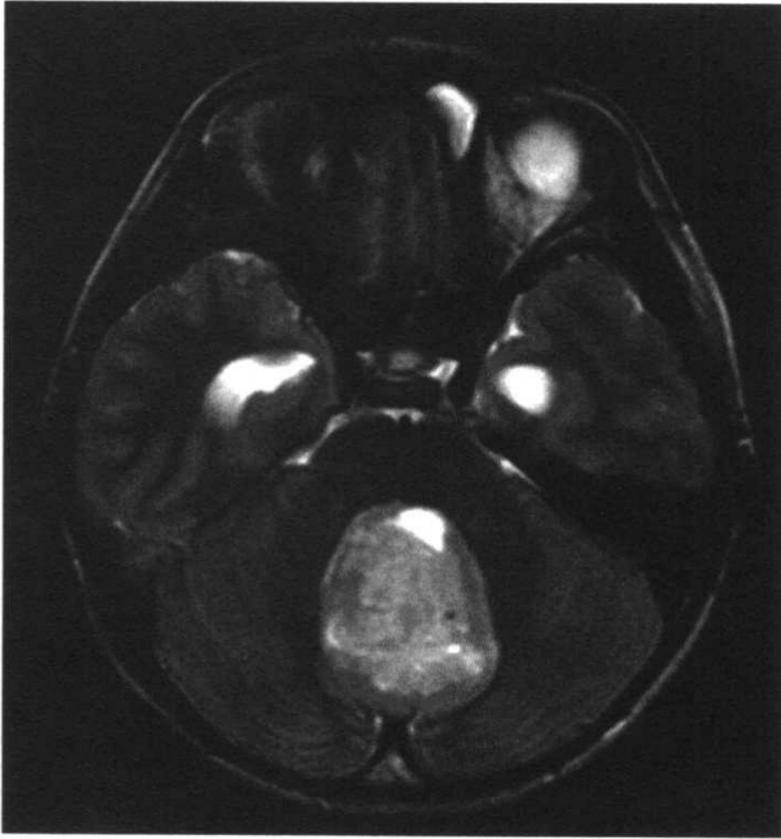


图 3-57 T<sub>2</sub>WI 轴位

Fig 3 · 57 T<sub>2</sub> weighted transverse image

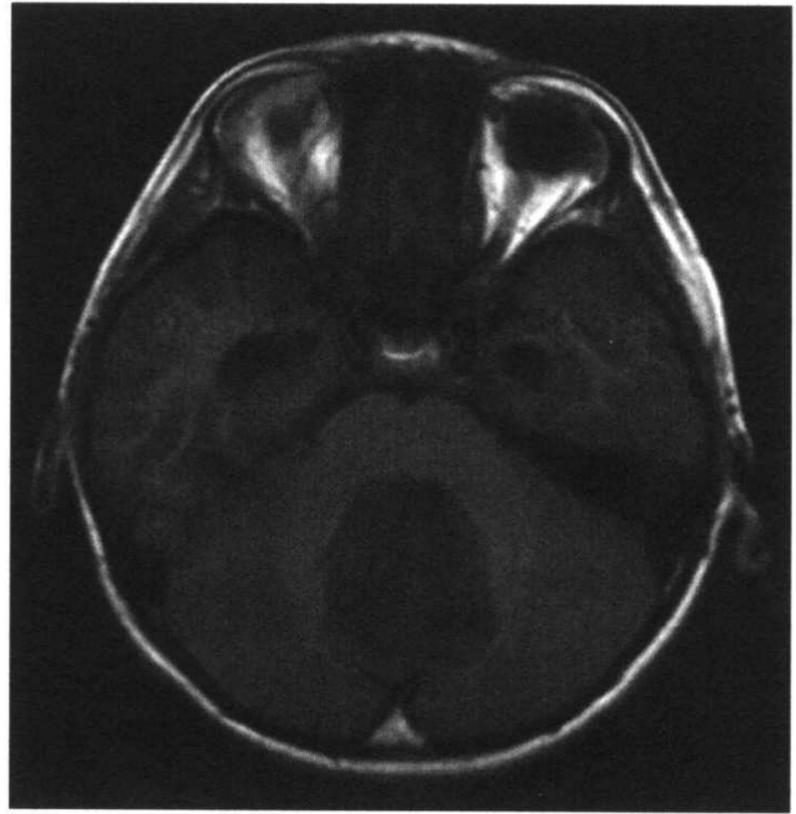


图 3-58 T<sub>1</sub>WI 轴位

Fig 3 · 58 T<sub>2</sub> weighted transverse image



图 3-59 FLAIR 轴位

Fig 3 · 59 FLAIR transverse image



图 3-60 强化 T<sub>1</sub>WI 矢状位

Fig 3 · 60 Post-contrast sagittal image

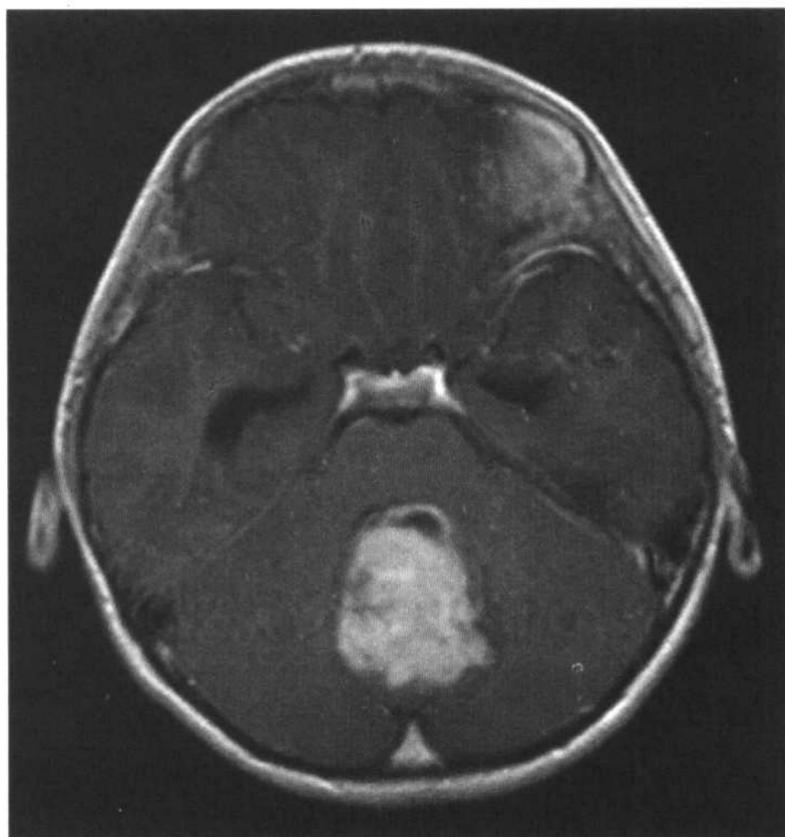


图 3 - 61 强化 T<sub>1</sub>WI 轴位

Fig 3 · 61 Post-contrast transverse image



图 3 - 62 强化 T<sub>1</sub>WI 冠状位

Fig 3 · 62 Post-contrast coronal image

检查名称: 颅脑 MR 平扫 + 强化扫描。

检查序列: SE-T<sub>1</sub>WI(500/7.7), T<sub>2</sub>WI(4000/95), GD-DTPA T<sub>1</sub>WI(500/8)。

检查方位: 轴位、冠状位、矢状位。

检查所见: 颅后凹小脑下蚓部结节状等 T<sub>1</sub>、略长 T<sub>2</sub> 异常信号, 最大截面约 3 cm × 4 cm, 病灶充填第四脑室, 前方仅见新月形脑脊液环绕, 脑干受压前移, 幕上脑室略扩张。增强扫描示病灶不均一强化。

诊断意见: 小脑蚓部占位, 首先考虑髓母细胞瘤。

**Name of examination:** MR scanning of the head plain scan and enhancement scan.

**Sequence:** TSE-T<sub>1</sub>WI(500/7.7), T<sub>2</sub>WI(4000/95), GD-DTPA T<sub>1</sub>WI(500/8).

**Orientation:** SAG, TRA, COR.

**Findings:** Pre-contrast images show a 3 cm × 4 cm isointense T<sub>1</sub> and light high signal intensity mass arising from the inferior medullary velum, projecting forward into the fourth ventricle. And the anterior part of the lesion is surrounded by line cerebrospinal fluid, the brain stem shifts to the anterior. The aqueduct third and lateral ventricles are dilated. After intravenous administration of contrast medium, the mass shows heterogeneous enhancement.

**Diagnosis:** Cerebellar vermis mass, medulloblastoma is suggested.

15. 血管母细胞瘤

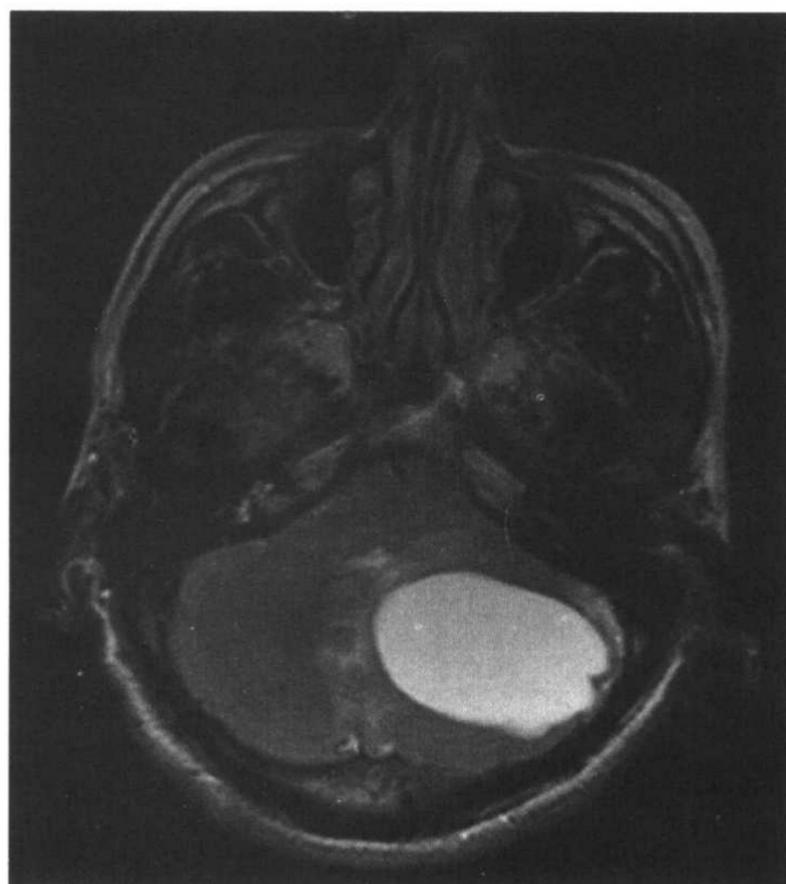


图 3-63 T<sub>2</sub>WI 轴位

Fig 3 · 63 T<sub>2</sub> weighted transverse image

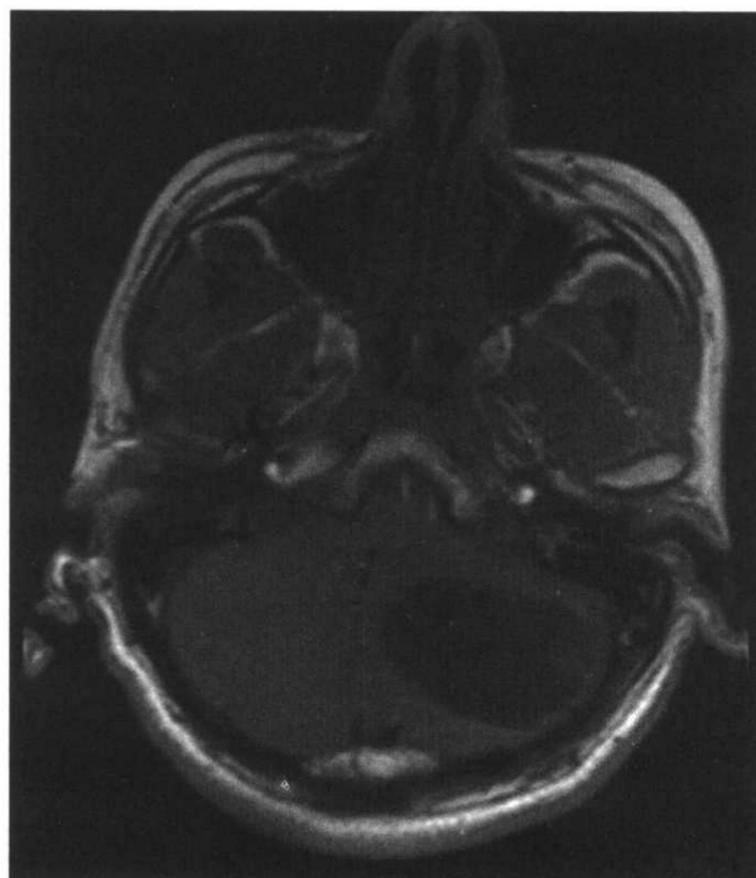


图 3-64 T<sub>1</sub>WI 轴位

Fig 3 · 64 T<sub>1</sub> weighted transverse image

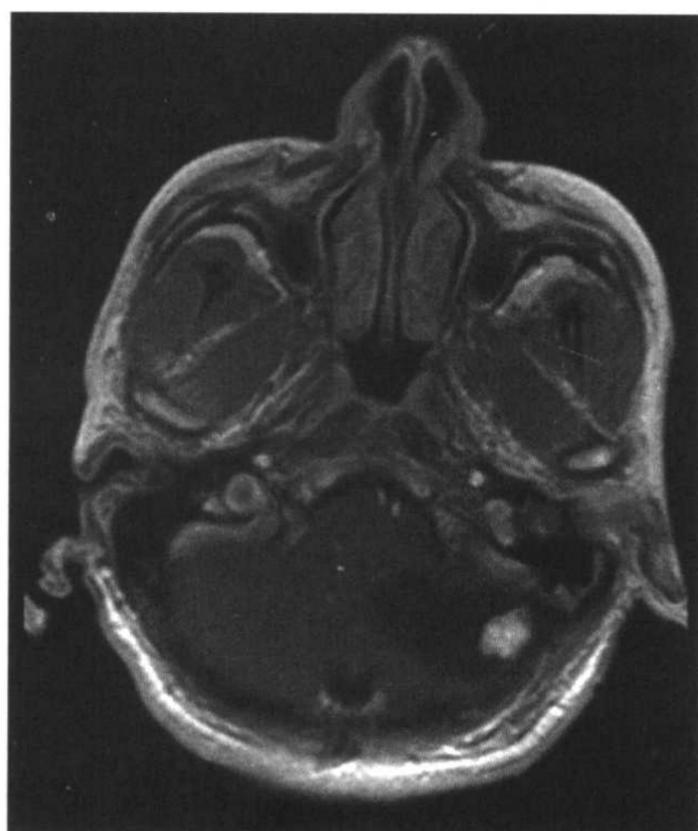


图 3-65 强化 T<sub>1</sub>WI 轴位

Fig 3 · 65 Post-contrast  
transverse image



图 3-66 强化 T<sub>1</sub>WI 矢状位

Fig 3 · 66 Post-contrast sagittal image

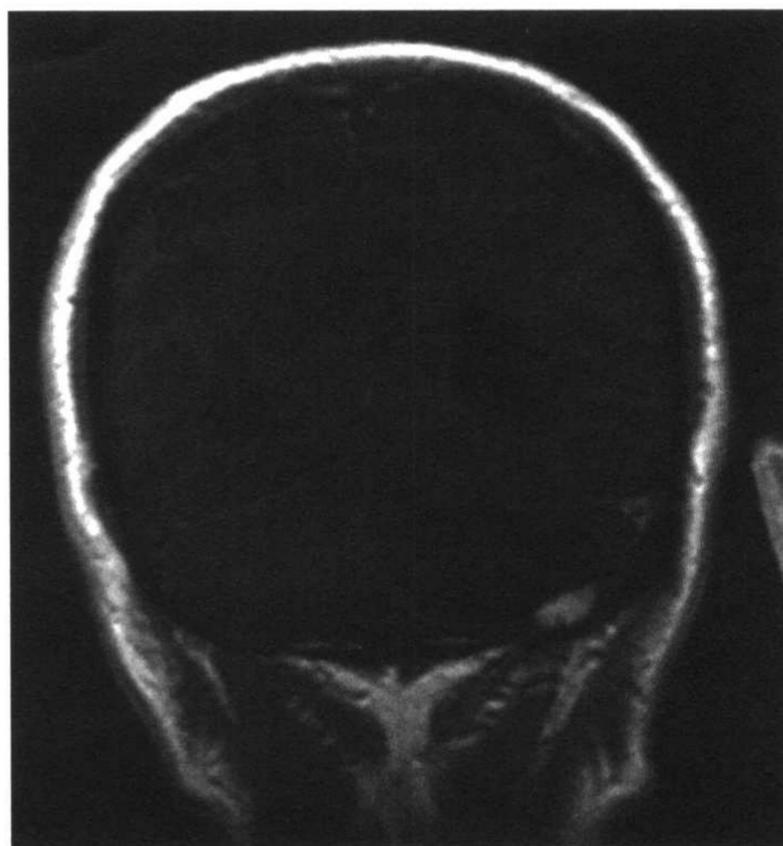


图 3 - 67 强化 T<sub>1</sub>WI 冠状位

Fig 3 · 67 post-contrast coronal image

**检查名称:** 颅脑 MR 平扫 + 强化。

**检查序列:** SE-T<sub>1</sub>WI(500/7.7), T<sub>2</sub>WI(4000/95), GD-DTPA T<sub>1</sub>WI(500/8)。

**检查方位:** 轴位、冠状位、矢状位。

**检查所见:** 左侧小脑半球囊实性长 T<sub>1</sub>、长 T<sub>2</sub> 异常信号, 最大截面约 4 cm × 5 cm, 边界清晰, 有明显占位效应, 周边无水肿。增强扫描后, 病灶外侧壁见一明显强化结节, 囊壁无强化。

**诊断意见:** 左小脑半球囊实性占位, 首先考虑血管母细胞瘤。

**Name of examination:** MR scanning of the head plain scan and enhancement scan.

**Sequence:** TSE-T<sub>1</sub>WI(500/7.7), T<sub>2</sub>WI(4000/95), GD-DTPA T<sub>1</sub>WI(500/8).

**Orientation:** SAG, TRA, COR.

**Findings:** Pre-contrast images show a 4 cm × 5 cm low T<sub>1</sub> and high T<sub>2</sub> signal intensity cystic mass in the left cerebellum with sharp border and transparent mass effect. There is no edema surrounding the mass. On the post-contrast images, a contrast-enhanced mural tumor nodule can be seen in the lateral wall of the cystic mass and the cystic wall is not enhanced.

**Diagnosis:** Left-side cerebellar hemisphere cystic mass, hemangioblastoma is suggested.

16. 肝豆状核变性

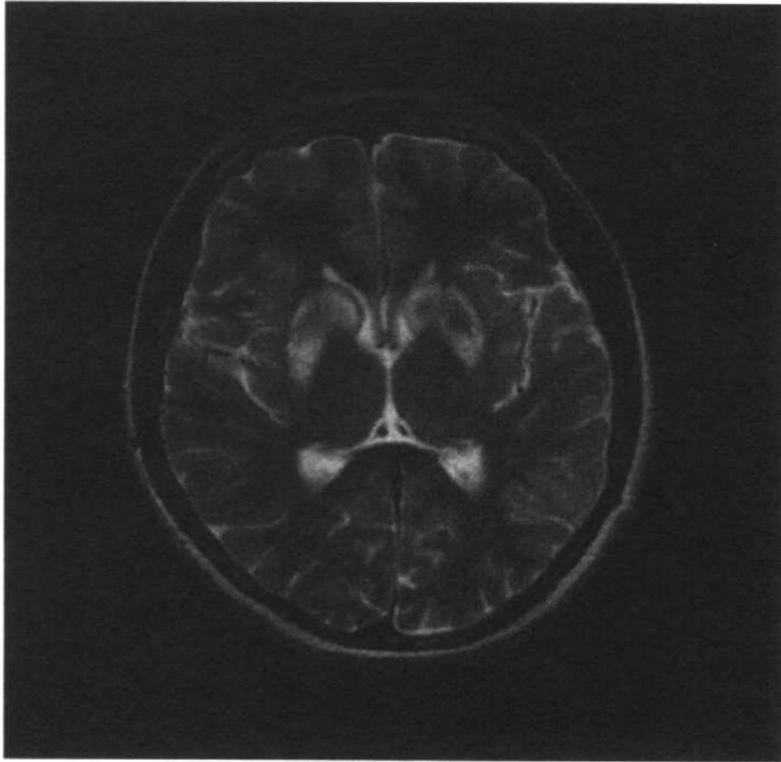


图 3 - 68 T<sub>2</sub>WI 轴位

Fig 3 · 68 T<sub>2</sub> weighted transverse image

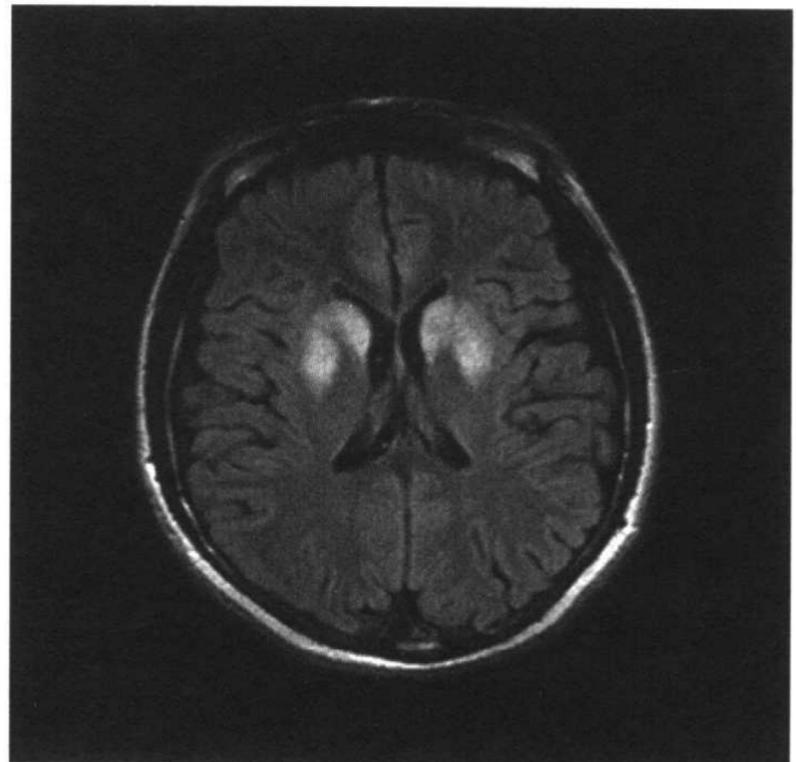


图 3 - 69 FLAIR 轴位

Fig 3 · 69 FLAIR transverse image

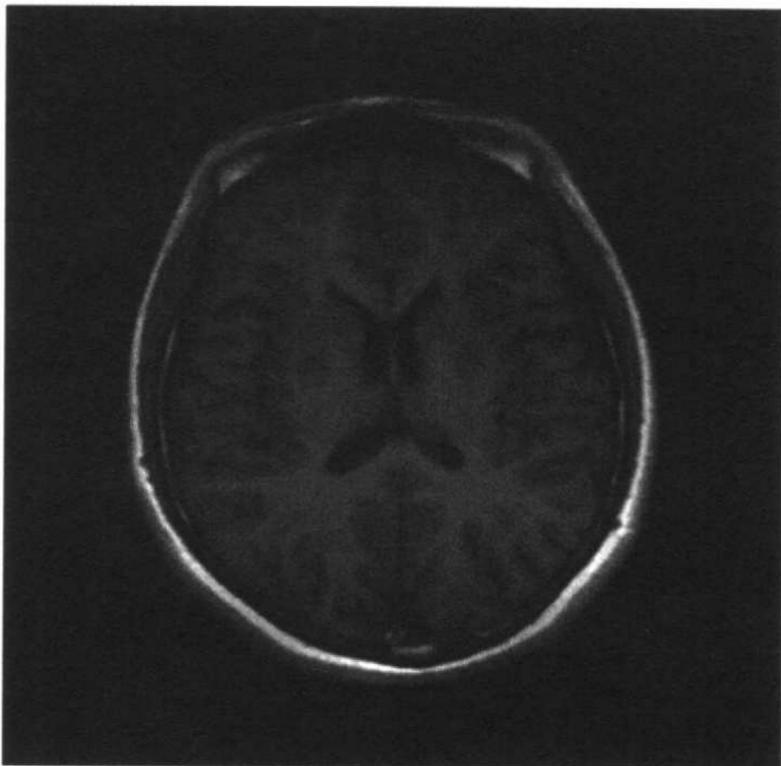


图 3 - 70 T<sub>1</sub>WI 轴位

Fig 3 · 70 T<sub>1</sub> weighted transverse image

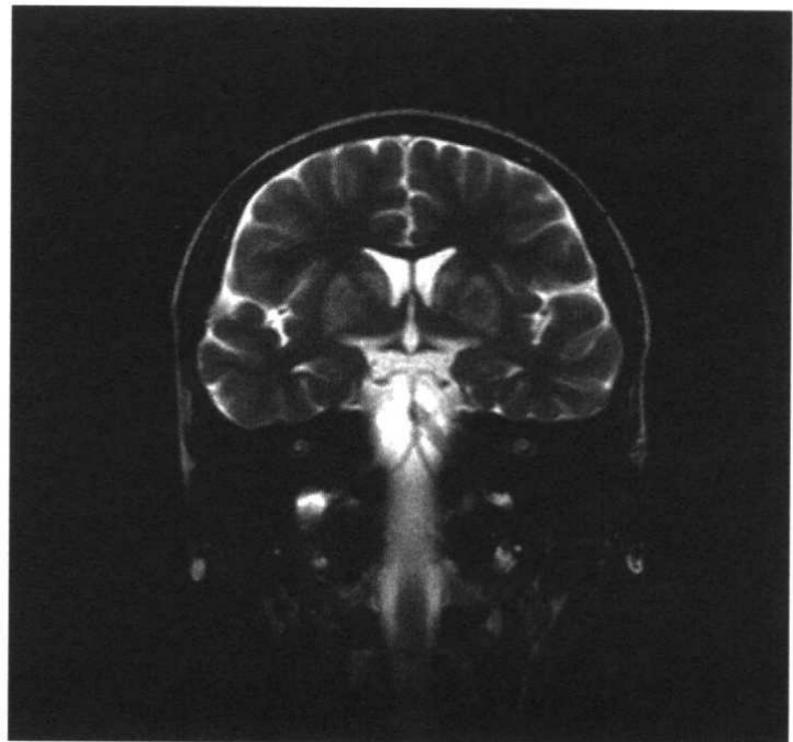


图 3 - 71 T<sub>2</sub>WI 冠状位

Fig 3 · 71 T<sub>2</sub> weighted coronal image

**检查名称:**颅脑 MR 扫描。

**检查序列:**SE-T<sub>1</sub>WI(500/7.7), T<sub>2</sub>WI(4000/95), FLAIR(9000/107)。

**检查方位:**轴位、冠状位。

**检查所见:**双侧豆状核、尾状核区、脑干前叶及相邻扣带回内可见多发片状略长 T<sub>1</sub>略长 T<sub>2</sub>、高 FLAIR 异常信号灶,边界模糊,诸脑室沟未见明显扩张,中线结构居中。

**诊断意见:**结合病史,符合肝豆状核变性 MR 检查所见。

**Name of examination:** MR scanning of the head.

**Sequence:** TSE-T<sub>1</sub>WI(500/8), T<sub>2</sub>WI(4000/95), FLAIR(9000/107).

**Orientation:** TRA, COR.

**Findings:** There are multiple widespread slightly low T<sub>1</sub> and high T<sub>2</sub> abnormal signals with clouding border in bilateral lenticular nucleus, caudate nucleus, brain stem, precuneus and close together cingulate gyrus. The occupying effect is not remarkable. The brain ventricle and sulcus are unremarkable and the midline structures are in the middle of the head.

**Diagnosis:** Binding the history, coincidence with MR manifestation of hepatolenticular degeneration.

17. 多发性硬化症



图 3-72 T<sub>2</sub>WI 轴位  
Fig 3·72 T<sub>2</sub>weighted transverse image

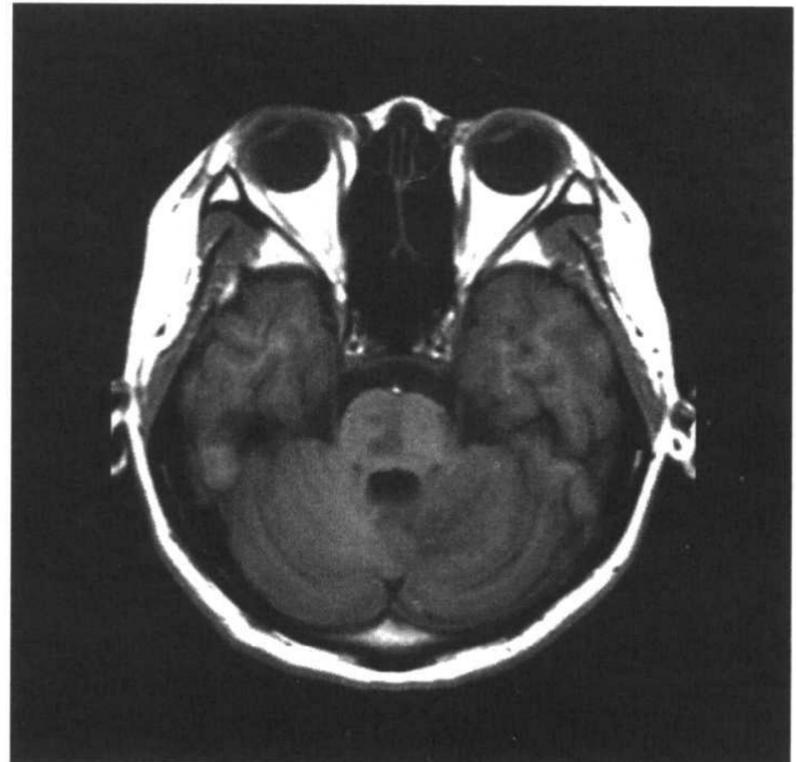


图 3-73 T<sub>1</sub>WI 轴位  
Fig 3·73 T<sub>1</sub>weighted transverse image

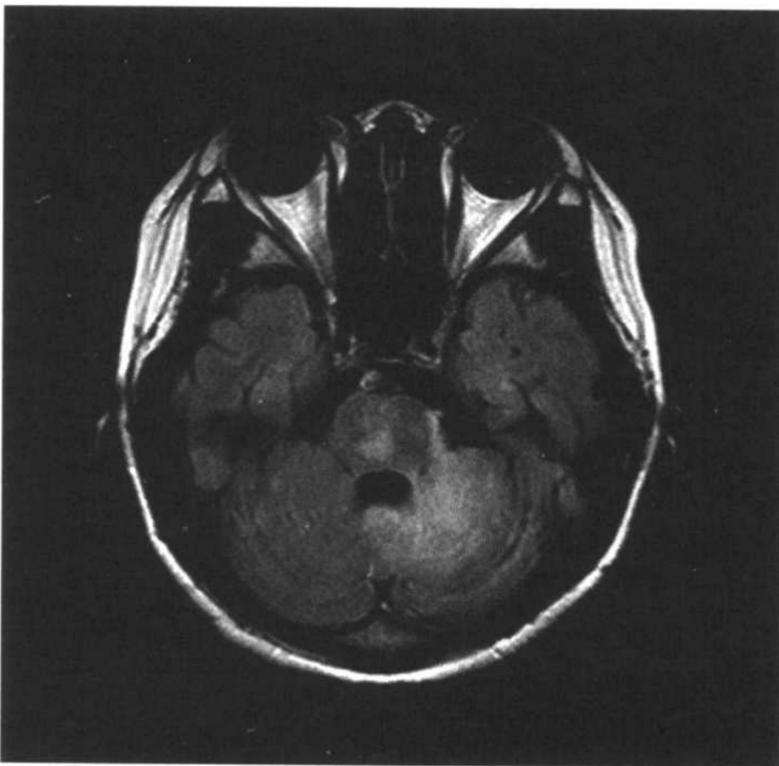


图 3-74 FLAIR 轴位  
Fig 3·74 FLAIR transverse image

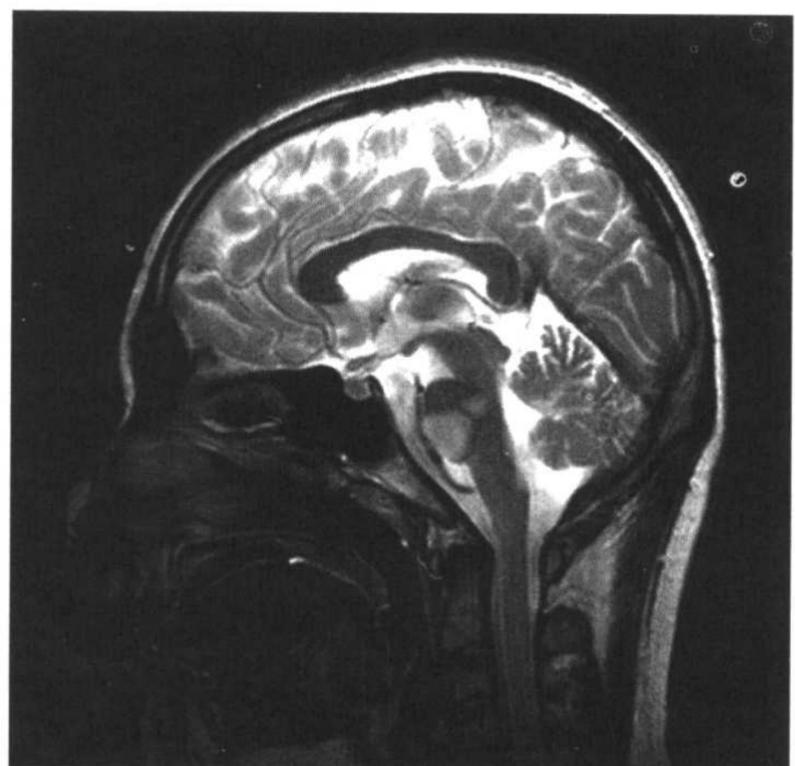


图 3-75 T<sub>2</sub>W 矢状位  
Fig 3·75 T<sub>2</sub> weighted sagittal image

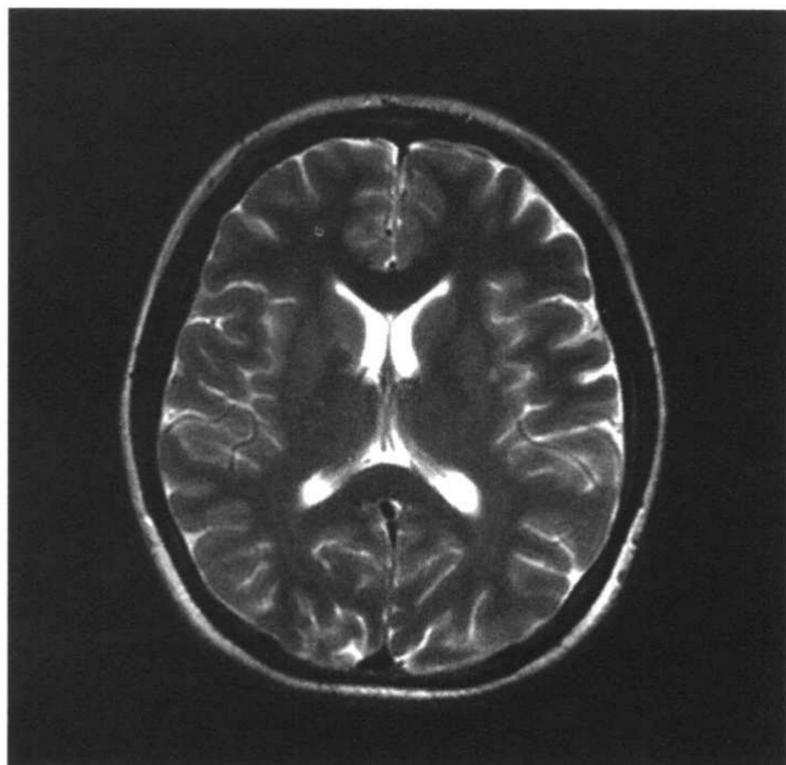


图 3 - 76 T<sub>2</sub>WI 轴位

Fig 3 · 76 T<sub>2</sub> weighted transverse image



图 3 - 77 T<sub>2</sub>WI 矢状位

Fig 3 · 77 T<sub>2</sub> weighted sagittal image

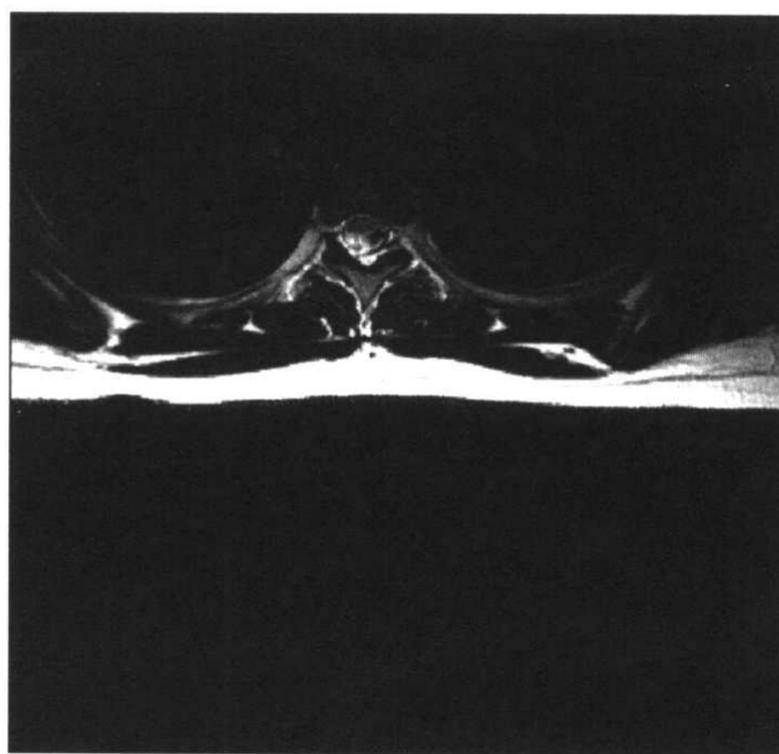


图 3 - 78 T<sub>2</sub>WI 轴位

Fig 3 · 78 T<sub>2</sub> weighted transverse image

**检查名称:**颅脑 + 胸椎 MR 扫描。

**检查序列:**SE-T<sub>1</sub>WI(500/7.7), T<sub>2</sub>WI(4000/95), FLAIR(9000/107)。

**检查方位:**轴位、矢状位。

**检查所见:**双侧基底节区、左小脑半球、左侧颞叶、脑干内见多发斑点、结节样等长 T<sub>1</sub>、长 T<sub>2</sub>、高 FLAIR 异常信号灶,左侧小脑区病变占位效应明显,周围有明显水肿,双侧脑室未见明显扩大,中线结构无移位。左侧上颌窦黏膜增厚,呈等 T<sub>1</sub>长 T<sub>2</sub>信号改变。

胸椎生理曲度自然,椎体形态规则,椎间盘未见明显膨出及突出征象,胸4水平脊髓内见长条状等 T<sub>1</sub>长 T<sub>2</sub>异常信号灶。

**诊断意见:**

- (1) 脑内、胸髓内多发异常信号灶,考虑为多发性硬化症 MR 检查所见。
- (2) 左侧上颌窦炎 MR 检查所见。

**Name of examination:** MR scanning of the head.

**Sequence:** TSE-T<sub>1</sub>WI(500/8), T<sub>2</sub>WI(4000/95), FLAIR(9000/107).

**Orientation:** SAG, TRA.

**Findings:** Bilateral basiglobus area, left cerebellar hemisphere, left temporal lobe and brain stem are remarkable for multiple widespread iso- or low T<sub>1</sub>, high T<sub>2</sub>, and high FLAIR abnormal intensity. The occupying effect is very remarkable in left cerebellar hemisphere with a circumferential edema zone. The brain ventricle and sulcus are within the normal limits and the midline structures are normal. The signal of left maxillary sinus mucous membrane increases in T<sub>2</sub>WI.

The physio-curvature of thoracic vertebra is normal. There are no remarkable intensity and configuration changes in vertebral body. The intervertebral disc had no significant bulging. In T4 spinal cord level, a long strip iso- T<sub>1</sub>, high T<sub>2</sub> abnormal intensity lesion can be seen.

**Diagnosis:**

- (1) Multi-abnormal lesions in brain and spinal cord, the multiple sclerosis is suggested.
- (2) Left maxillary sinusitis MR appearance.

18. 黑色素瘤

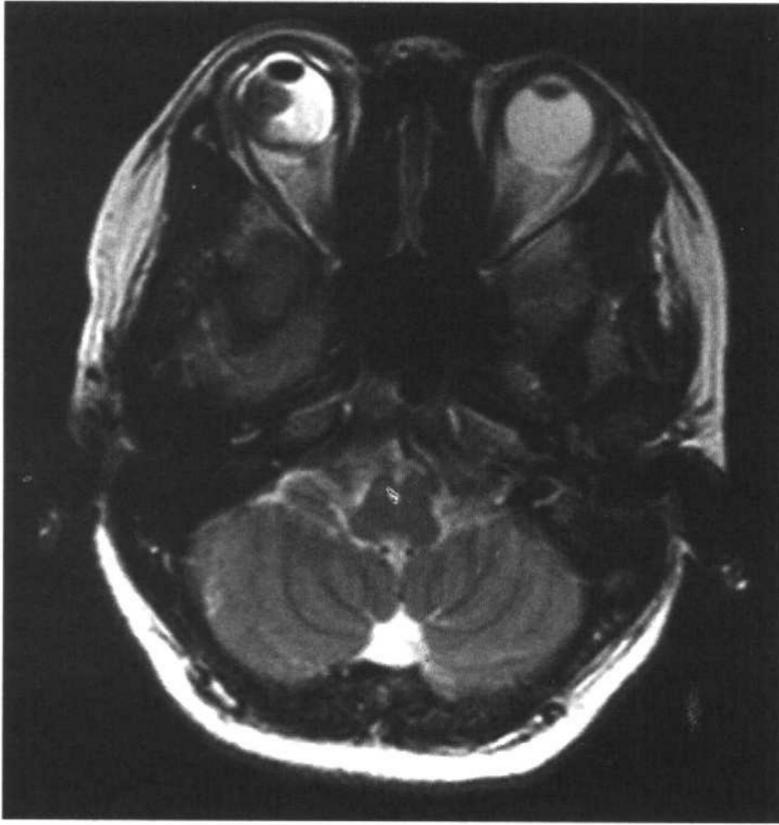


图 3-79 T<sub>2</sub>WI 轴位

Fig 3 · 79 T<sub>2</sub> weighted transverse image

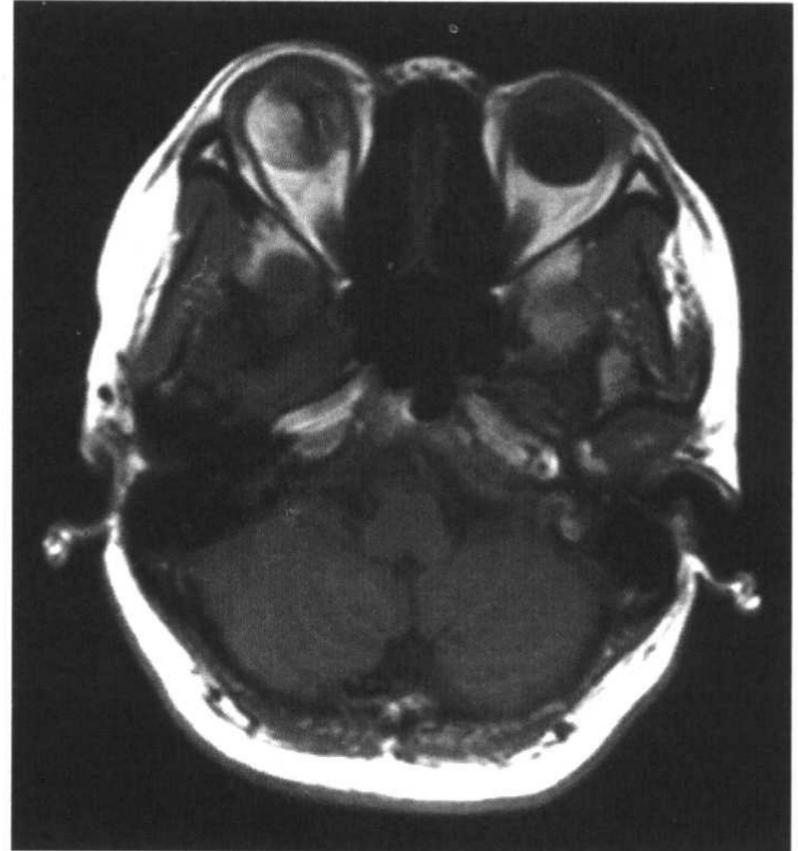


图 3-80 T<sub>1</sub>WI 轴位

Fig 3 · 80 T<sub>1</sub> weighted transverse image

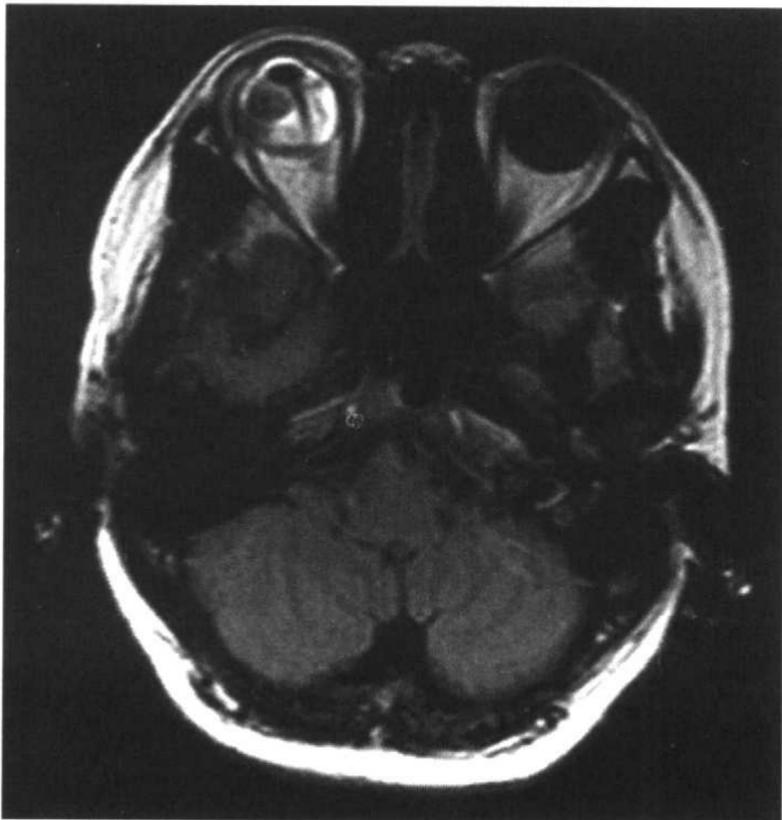


图 3-81 FLAIR 轴位

Fig 3 · 81 FLAIR transverse image

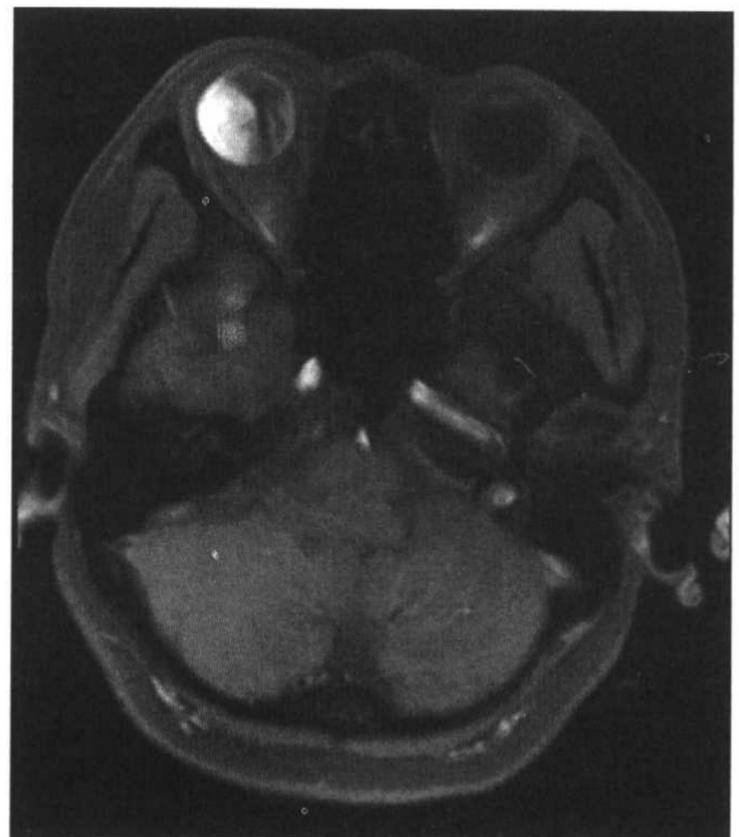


图 3-82 T<sub>1</sub>WI 压脂像轴位

Fig 3 · 82 T<sub>1</sub> weighted fat-suppressed transverse image

**检查名称:**眼眶 MR 平扫。

**检查序列:**SE-T<sub>1</sub>WI(500/7.7),T<sub>2</sub>WI(4000/95),STIR(2000/20/100)。

**检查方位:**轴位。

**检查所见:**右侧眼球前外侧壁有一大小约 0.9 cm × 1.3 cm 的异常信号, T<sub>1</sub>WI 呈高信号, T<sub>2</sub>WI 呈低信号, 压脂像上呈高信号, 病灶边界清晰, 眼眶内其他结构未见明显异常。

**诊断意见:**右侧眼球占位性病变, 首先考虑黑色素瘤。

**Name of examination:** MR scanning of the eye.

**Sequence:** TSE-T<sub>1</sub>WI(500/7.7), T<sub>2</sub>WI(4000/95), STIR(2000/20/100).

**Orientation:** TRA .

**Findings:** There is a 0.9 cm × 1.3 cm abnormal nodular with clear border in anterior-lateral wall of right eyeball, the lesion is remarkable for the high-signal in T<sub>1</sub>WI, low-signal in T<sub>2</sub>WI and high-signal in T<sub>1</sub>WI fat-supressed images. The other structures of eyeball and orbit have no abnormal appearance.

**Diagnosis:** The mass of right eyeball, melanoma is suggested.

19. 鼻咽癌



图 3-83 T<sub>2</sub>WI 轴位

Fig 3 · 83 T<sub>2</sub> weighted transverse image

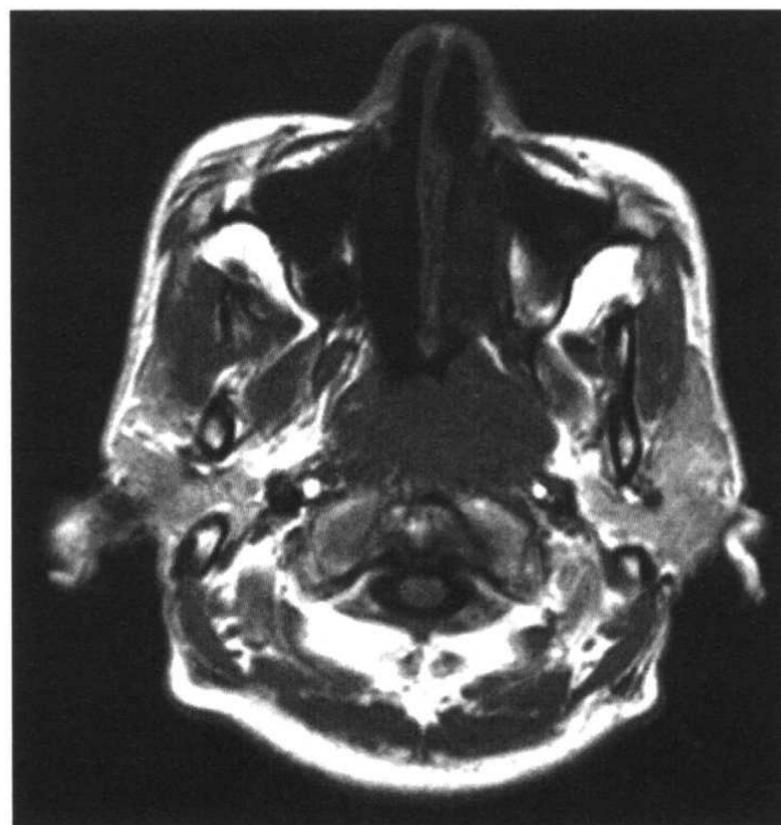


图 3-84 T<sub>1</sub>WI 轴位

Fig 3 · 84 T<sub>1</sub> weighted transverse image



图 3-85 FLAIR 轴位

Fig 3 · 85 FLAIR transverse image



图 3-86 强化 T<sub>1</sub>WI 轴位

Fig 3 · 86 Post-contrast transverse image

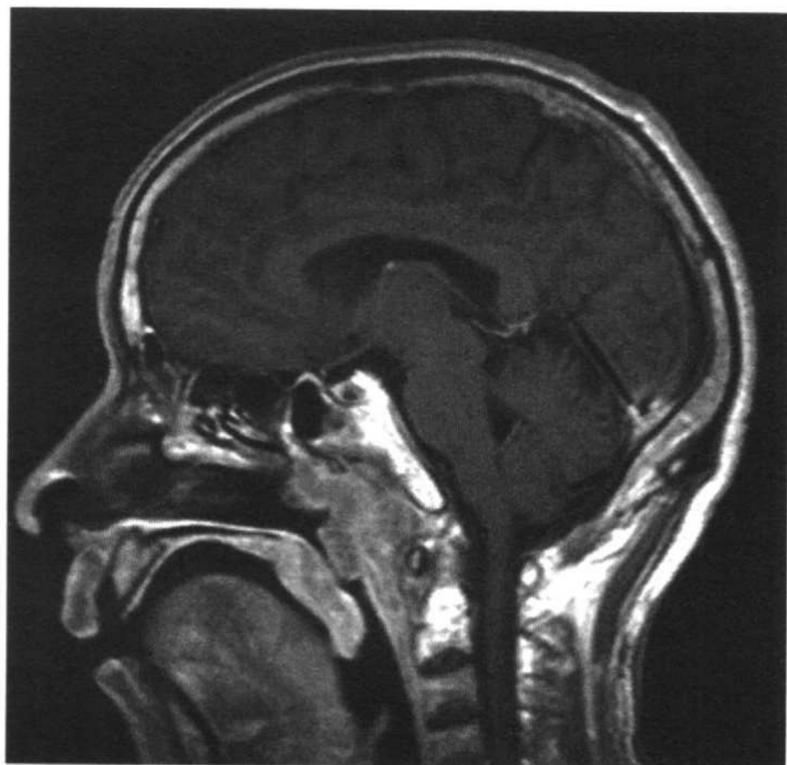


图 3-87 强化 T<sub>1</sub>WI 矢状位

Fig 3 · 87 Post-contrast sagittal image



图 3-88 强化 T<sub>1</sub>WI 冠状位

Fig 3 · 88 Post-contrast coronal image

检查名称:鼻咽部 MR 平扫 + 强化扫描。

检查序列:SE-T<sub>1</sub>WI(500/7.7), T<sub>2</sub>WI(4000/95), GD-DTPA T<sub>1</sub>WI(500/8)。

检查方位:轴位、矢状位、冠状位。

检查所见:鼻咽后部软组织增厚,呈等 T<sub>1</sub>,略短 T<sub>2</sub>异常信号,咽隐窝消失,增强后,咽后壁软组织明显强化,并向鼻咽腔内突入,蝶窦、斜坡、硬脑膜受累。

诊断意见:鼻咽癌并侵及颅底。

**Name of examination:** MR scanning of the nasal part of pharyngeal cavity: plain and enhancement scan.

**Sequence:** TSE-T<sub>1</sub>WI(500/7.7), T<sub>2</sub>WI(4000/95), GD-DTPA T<sub>1</sub>WI(500/8).

**Orientation:** SAG, TRA, COR.

**Findings:** On the pre-contrast images, the soft tissue of posterior nasopharynx is thickened, the lesion displays iso-signal in T<sub>1</sub>WI and light low signal in T<sub>2</sub>WI. The pharyngeal recess is obliterated. On the post-contrast images, the mass shows enhancement obviously and projects forward into nasopharyngeal cavity. Sphenoid sinus, clivus and local dura matter are involved.

**Diagnosis:** Nasopharyngeal carcinoma with skull base invasion.

## 二、脊柱和脊髓

### 1. 正常脊髓



图 3-89 T<sub>2</sub>WI 矢状位

Fig 3·89 T<sub>2</sub> weighted sagittal image

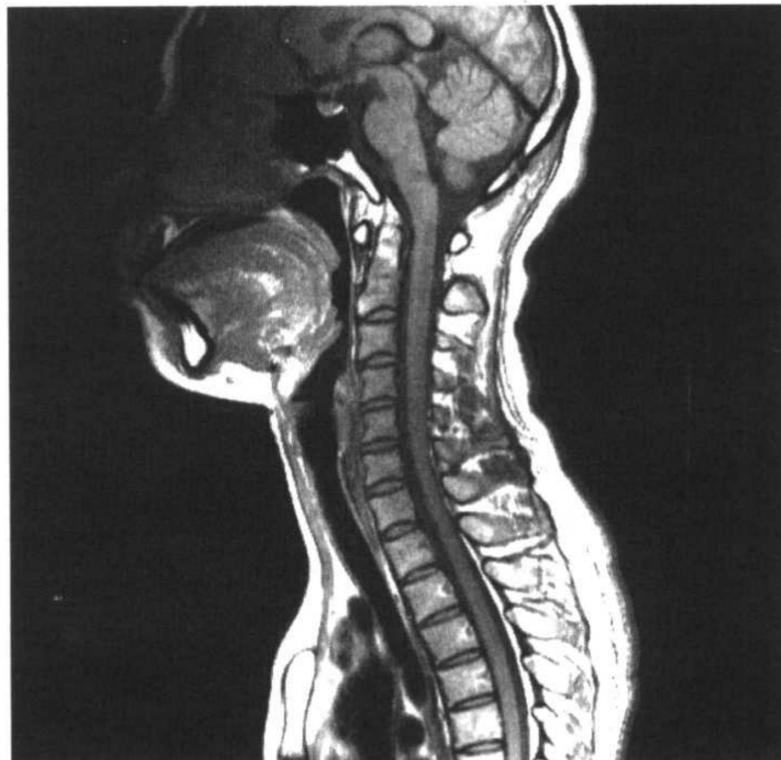


图 3-90 T<sub>1</sub>WI 矢状位

Fig 3·90 T<sub>1</sub> weighted sagittal image

检查名称:颈椎 MR 扫描。

检查序列:SE-T<sub>1</sub>WI(515/11),T<sub>2</sub>WI(3280/102)。

检查方位:矢状位。

检查所见:颈椎生理曲度自然,诸椎体形态和信号未见异常,诸椎间盘未见明显突出及膨出征象,扫描野内脊髓未见异常信号。

诊断意见:颈椎 MR 扫描未见异常。

**Name of examination:** MR scanning of the cervical vertebra.

**Sequence:** SE-T<sub>1</sub>WI(515/11),T<sub>2</sub>WI(3280/102).

**Orientation:** SAG.

**Findings:** The physio-curvature of cervical vertebra is normal. There are no remarkable intensity and configuration changes in vertebral body, the intervertebral disc significant bulging and spinal cord abnormal intensity can't be seen.

**Diagnosis:** No abnormality is seen according to cervical vertebra MR scanning.

2. 腰椎间盘突出

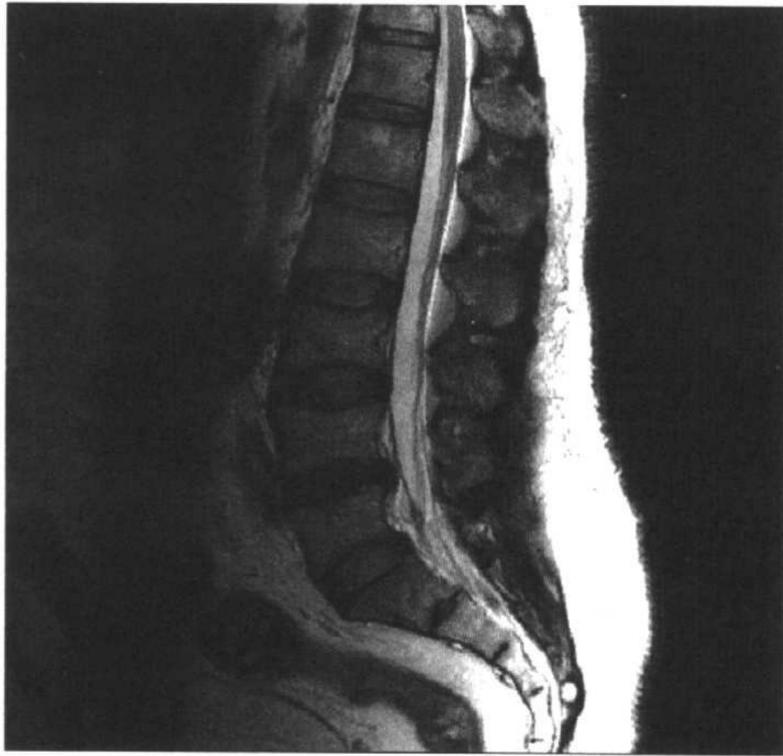


图 3-91 T<sub>2</sub>WI 矢状位  
Fig 3·91 T<sub>2</sub> weighted sagittal image



图 3-92 T<sub>1</sub>WI 矢状位  
Fig 3·92 T<sub>1</sub> weighted sagittal image



图 3-93 T<sub>2</sub>WI 轴位  
Fig 3·93 T<sub>2</sub> weighted transverse image

**检查名称:**腰椎 MR 扫描。

**检查序列:**SE-T<sub>1</sub>WI(515/11),T<sub>2</sub>WI(3280/102)。

**检查方位:**矢状位、轴位。

**检查所见:**腰椎生理曲度尚可,诸椎体有不同程度的骨质增生征象,L4/5 椎间盘 T<sub>2</sub>信号减低并向后方突出 0.4 cm,压迫硬膜囊,椎管矢状径约为 0.8 cm,扫描野内脊髓未见异常信号。

**诊断意见:**L4/5 椎间盘突出并椎管狭窄。

**Name of examination:**MR scanning of the lumbar vertebra.

**Sequence:**SE-T<sub>1</sub>WI(515/11),T<sub>2</sub>WI(3280/102).

**Orientation:**SAG ,TRA.

**Findings:**The physio-curvature of lumbar vertebra is normal. Osteophyte formation can be seen in multiple vertebral bodies, the disc at L4 - L5 is remarkable for loss of signal in T<sub>2</sub>WI images. The disc bulges with 0.4 cm exceeding the posterior margin of the vertebral bodies of L4 and L5, which causes the dura mater compressed, the sagittal diameter of dura mater is 0.8 cm. No other abnormalities are noted in the spinal cord.

**Diagnosis:** Posterior herniation of L4/5 disc, with veterbral canal stenosis.

3. 脊柱裂并脊髓脊膜膨出

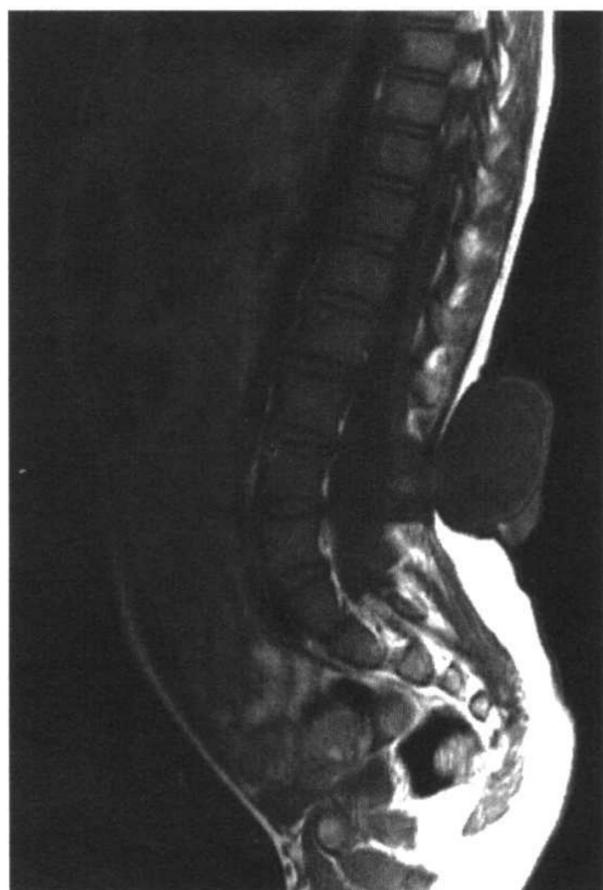


图 3-94 T<sub>1</sub>WI 矢状位

Fig 3 · 94 T<sub>1</sub> weighted sagittal image



图 3-95 T<sub>2</sub>WI 矢状位

Fig 3 · 95 T<sub>2</sub> weighted sagittal image

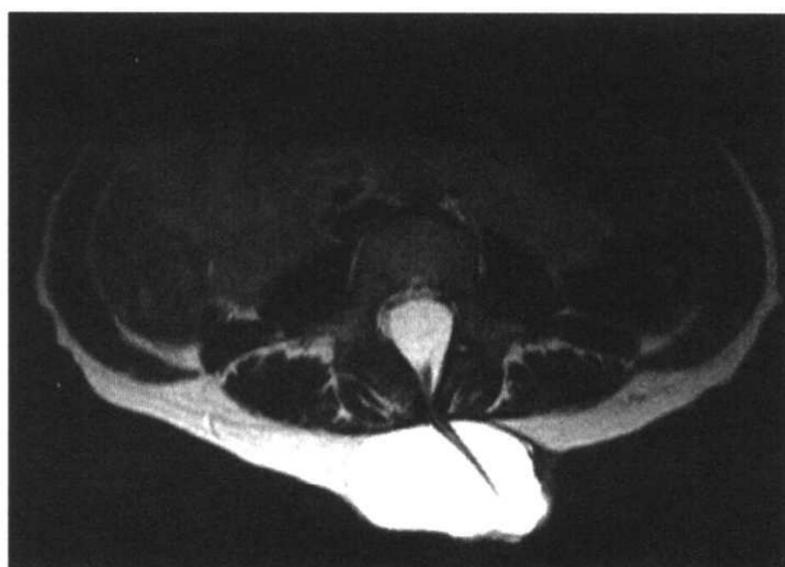


图 3-96 T<sub>2</sub>WI 轴位

Fig 3 · 96 T<sub>2</sub> weighted transverse image

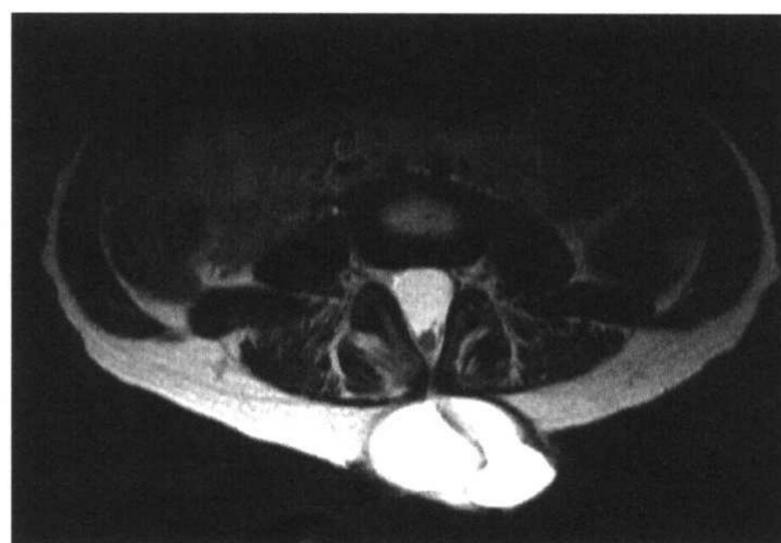


图 3-97 T<sub>2</sub>WI 轴位

Fig 3 · 97 T<sub>2</sub> weighted transverse image

**检查名称:**腰椎 MR 扫描。

**检查序列:**TSE-T<sub>1</sub>WI(500/8), T<sub>2</sub>WI(4000/95), FLAIR(9000/107)。

**检查方位:**矢状位、轴位。

**检查所见:**L4 - 5 水平腰椎部分椎板、棘突缺如,局部脊髓与脊膜、脑脊液向外膨出,在背部形成一个大囊,腰段蛛网膜下腔扩大,皮下脂肪增厚,脊髓圆锥低位,并有栓系表现。

**诊断意见:**脊柱裂并脊髓脊膜膨出。

**Name of examination:**MR scanning of lumber spine.

**Sequence:**TSE-T<sub>1</sub>WI(500/8), T<sub>2</sub>WI(4000/95), FLAIR(9000/107).

**Orientation:**SAG ,TRA.

**Findings:**Pre-contrast images show part depletion of lumber lamina of vertebra posterior and spinous process, local spinal cord, menigo-matter and spinal fluid project forward to outer bladder which lie in the back of lumber 4/5 segment, local subarachnoid space is amplified and extensive fatty infiltrates in the subchondral bony endplates at L4-5. The medullary cone downward and cork to dura mater.

**Diagnosis:**Bifid spine combining with meningomyelocele.

4. 脊索瘤



图 3 - 98 T<sub>2</sub>WI 矢状位

Fig 3 · 98 T<sub>2</sub> weighted sagittal image



图 3 - 99 T<sub>2</sub>WI 矢状位

Fig 3 · 99 T<sub>2</sub> weighted sagittal image



图 3 - 100 T<sub>1</sub>WI 矢状位

Fig 3 · 100 T<sub>1</sub> weighted sagittal image



图 3 - 101 T<sub>1</sub>WI 矢状位

Fig 3 · 101 T<sub>1</sub> weighted sagittal image

**检查名称:**腰骶部 MR 扫描。

**检查序列:**TSE-T<sub>1</sub>WI(500/8), T<sub>2</sub>WI(4000/95), FLAIR(9000/107)。

**检查方位:**矢状位。

**检查所见:**骶尾椎正常结构消失,代之以等低 T<sub>1</sub>、高 T<sub>2</sub> 异常信号肿块,形态不规则,其内可见斑点状低信号,直肠受压移位。增强扫描病灶明显强化。

**诊断意见:**符合骶骨脊索瘤 MR 检查所见。

**Name of examination:** MR scanning of lumber spine and sacral vertebra.

**Sequence:** TSE-T<sub>1</sub>WI(500/8), T<sub>2</sub>WI(4000/95), FLAIR(9000/107).

**Orientation:** SAG.

**Findings:** Pre-contrast images demonstrate low-signal T<sub>1</sub>WI and high-signal T<sub>2</sub>WI mass in sacral bone in which normal high-marrow signal is replaced by bony destruction. Proton density images show a mass with high signal intensity. Blotch low-signals in the mass can be seen in T<sub>2</sub>WI, the arch is compressed and shifts to anterior. On the post contrast images, the mass is obviously enhanced.

**Diagnosis:** Sacral bone chordoma is suggested.

5. 神经鞘瘤



图 3 - 102 T<sub>2</sub>WI 矢状位

Fig 3 · 102 T<sub>2</sub> weighted sagittal image

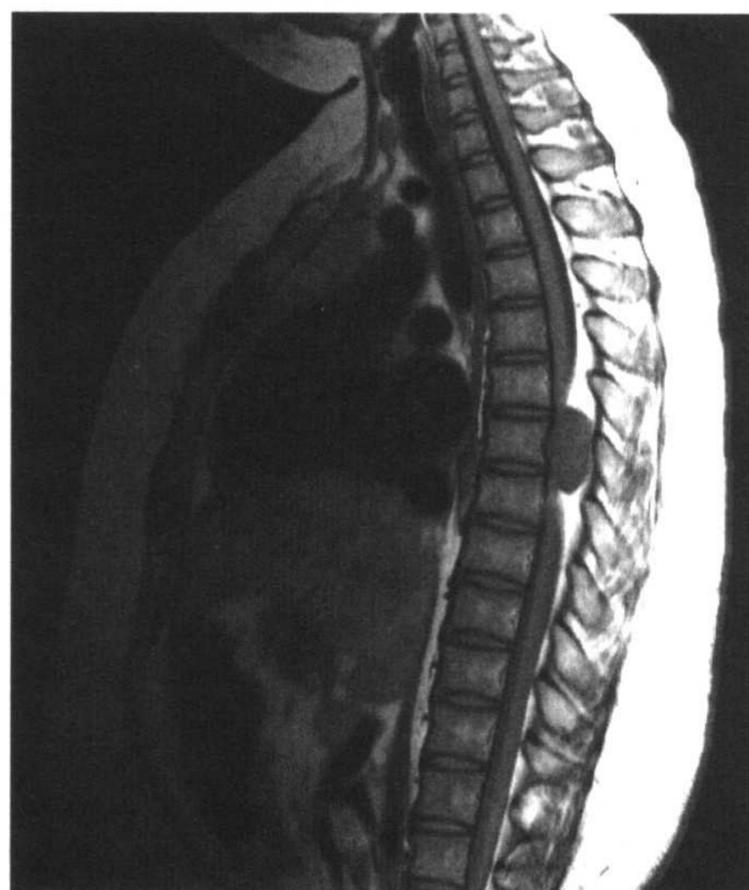


图 3 - 103 T<sub>1</sub>WI 矢状位

Fig 3 · 103 T<sub>1</sub> weighted sagittal image



图 3 - 104 强化 T<sub>1</sub>WI 矢状位

Fig 3 · 104 Post-contrast sagittal image

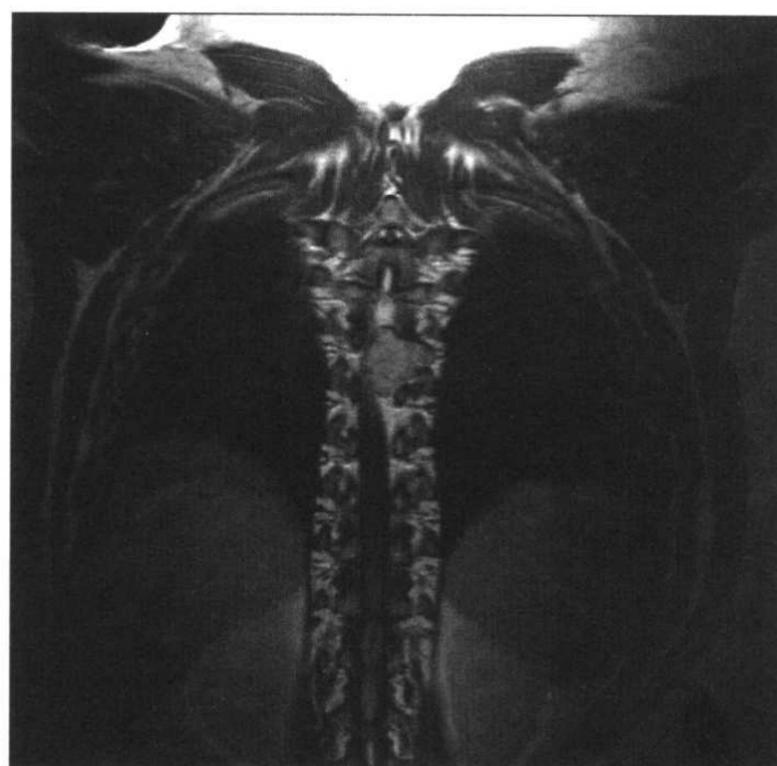


图 3 - 105 强化 T<sub>1</sub>WI 冠状位

Fig 3 · 105 Post-contrast coronal image

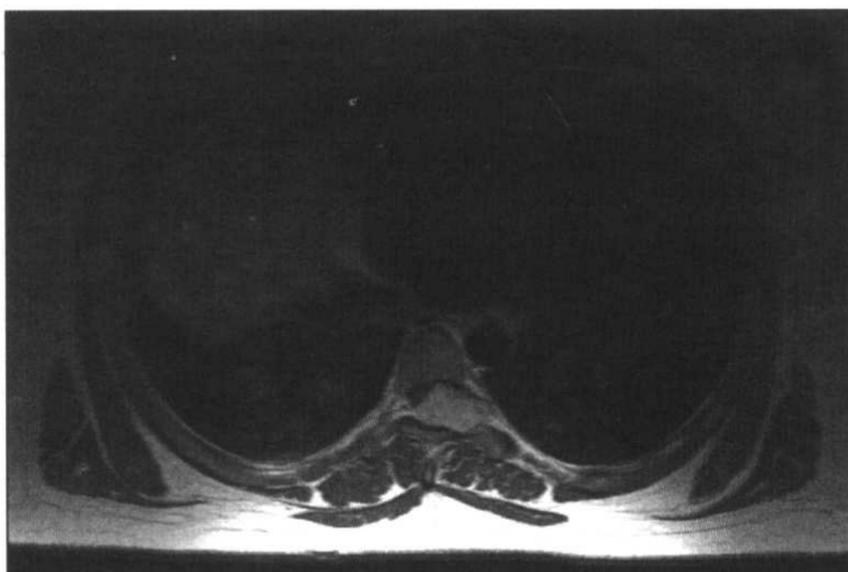


图 3-106 强化 T<sub>1</sub>WI 轴位

Fig 3 · 106 Post-contrast transverse image

检查名称:胸椎 MR 扫描。

检查序列:TSE-T<sub>1</sub>WI(500/8),T<sub>2</sub>WI(4000/95),FLAIR(9000/107)。

检查方位:矢状位、冠状位、轴位。

检查所见:胸 5 水平椎管内左侧见略长 T<sub>1</sub>、长 T<sub>2</sub>异常信号结节,边界清晰,局部蛛网膜下腔增宽,相邻脊髓受压右移,轴位显示病灶向左侧椎间孔移行,增强扫描病灶明显强化。

诊断意见:胸 5 水平神经源性肿瘤。

**Name of examination:** MR scanning of thoracic spine.

**Sequence:** TSE-T<sub>1</sub>WI(500/8),T<sub>2</sub>WI(4000/95),FLAIR(9000/107).

**Orientation:** SAG, TRA, COR.

**Findings:** Pre-contrast images demonstrate light low-signal T<sub>1</sub>WI and high-signal T<sub>2</sub>WI abnormal nodular with well-defined margin in vertebral canal which is parallel to T5 segment. The local subarachnoid space is enlarged. The corresponding spinal cord is compressed and shifts to the right-side. The axial images show that the nodular projects forward into left intervertebral foramen. On the post contrast images, the nodular is obviously enhanced.

**Diagnosis:** Neurogenic tumor lies in T5 level.

6. 脊膜瘤



图 3 - 107 T<sub>1</sub>WI 矢状位

Fig 3 · 107 T<sub>1</sub> weighted sagittal image



图 3 - 108 T<sub>2</sub>WI 矢状位

Fig 3 · 108 T<sub>2</sub> weighted sagittal image



图 3 - 109 强化 T<sub>1</sub>WI 矢状位

Fig 3 · 109 Post-contrast sagittal image

**检查名称:**胸椎 MR 扫描。

**检查序列:**TSE-T<sub>1</sub> WI(500/8), T<sub>2</sub> WI(4000/95), FLAIR(9000/107)。

**检查方位:**矢状位。

**检查所见:**胸 6 水平椎管内硬膜下块状等 T<sub>1</sub>、略高 T<sub>2</sub> 异常信号,局部脊髓受压右移,病灶上方蛛网膜下腔呈倒置杯口状,增强扫描病灶明显强化。

**诊断意见:**胸 6 水平脊膜瘤。

**Name of examination:** MR scanning of thoracic spine.

**Sequence:** TSE-T<sub>1</sub> WI(500/8), T<sub>2</sub> WI(4000/95), FLAIR(9000/107).

**Orientation:** SAG.

**Findings:** Pre-contrast images demonstrate iso-signal T<sub>1</sub> WI and light high-signal T<sub>2</sub> WI abnormal nodular with well-defined margin lying below the dura matter in vertebral canal, which is parallel to T6 segment. The local subarachnoid space is enlarged like cup placing upside down. The corresponding spinal cord is compressed and shifted to the right-side. On the post contrast images, the nodular is obviously enhanced.

**Diagnosis:** Spinal meningioma in T6 level.

7. 髓内畸胎瘤

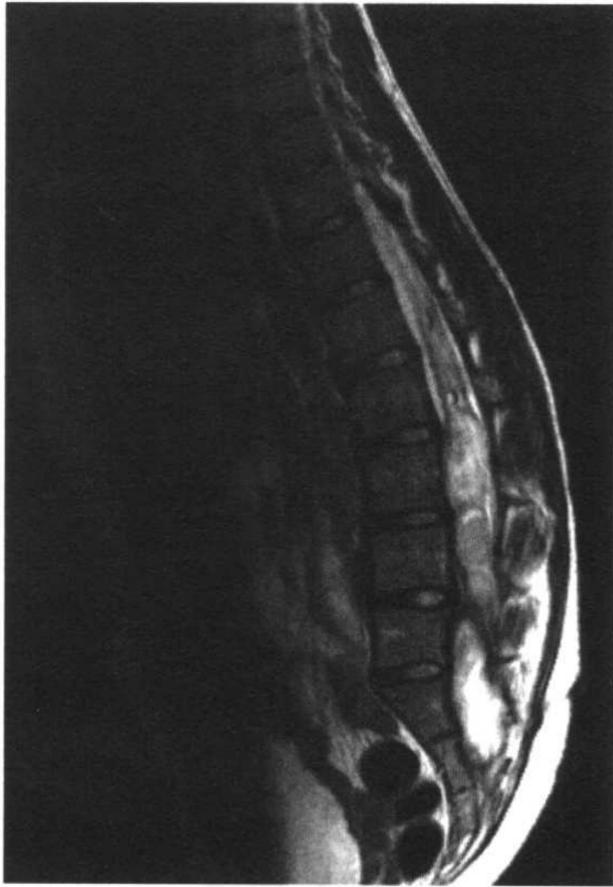


图 3 - 110 T<sub>2</sub>WI 矢状位  
Fig 3 · 110 T<sub>2</sub> weighted sagittal image



图 3 - 111 T<sub>1</sub>WI 矢状位  
Fig 3 · 111 T<sub>1</sub> weighted sagittal image

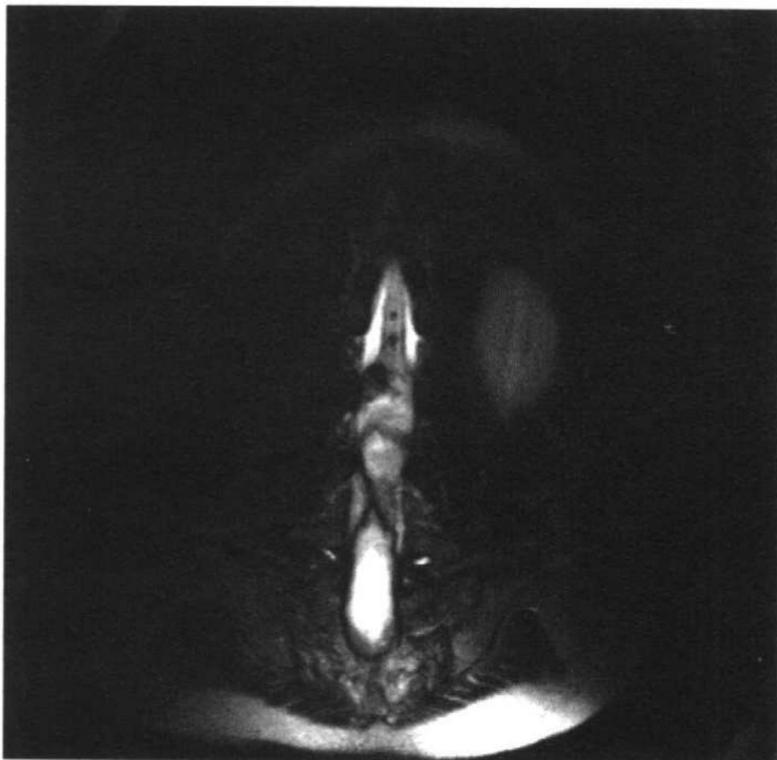


图 3 - 112 T<sub>2</sub>WI 冠状位  
Fig 3 · 112 T<sub>2</sub> weighted coronal image



图 3 - 113 T<sub>1</sub>WI 轴位  
Fig 3 · 113 T<sub>1</sub> weighted transverse image

**检查名称:**腰椎 MR 扫描。

**检查序列:**TSE-T<sub>1</sub>WI(500/8), T<sub>2</sub>WI(4000/95), FLAIR(9000/107)。

**检查方位:**矢状位、冠状位、轴位。

**检查所见:**胸 12 - 骶 1 水平椎管内见长条状等低 T<sub>1</sub>、略高 T<sub>2</sub>异常信号,其内可见点滴高 T<sub>1</sub>、等 T<sub>2</sub>异常信号,病变沿椎管长轴走行,相应水平正常脊髓无法显示,蛛网膜下腔受压变窄。

**诊断意见:**胸 12 - 骶 1 水平脊髓畸胎瘤。

**Name of examination:** MR scanning of lumbar spine.

**Sequence:** TSE-T<sub>1</sub>WI(500/8), T<sub>2</sub>WI(4000/95), FLAIR(9000/107).

**Orientation:** SAG, TRA, COR.

**Findings:** Images demonstrate iso-signal or low-signal T<sub>1</sub>WI and light high-signal T<sub>2</sub>WI abnormal lesion in vertebral canal, which is parallel to T12-S1 vertebral body segments. The lesion with well-defined margin is remarkable for the raindrops high-signal intensity in T<sub>1</sub>WI. And the local subarachnoid space is compressed. The normal structure of spinal cord does not appear.

**Diagnosis:** Teratoma in T12-S1 level spinal cord.

8. 脊柱转移

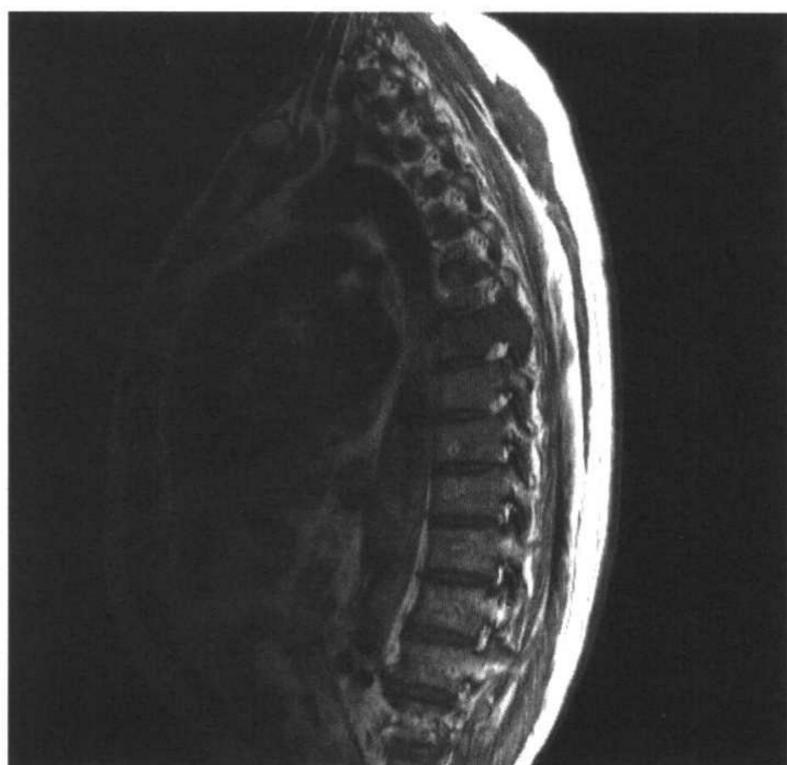


图 3 - 114  $T_1$  WI 矢状位  
Fig 3 · 114  $T_1$  weighted sagittal image



图 3 - 115 强化  $T_1$  WI 矢状位  
Fig 3 · 115 Post-contrast  $T_1$  weighted  
sagittal image

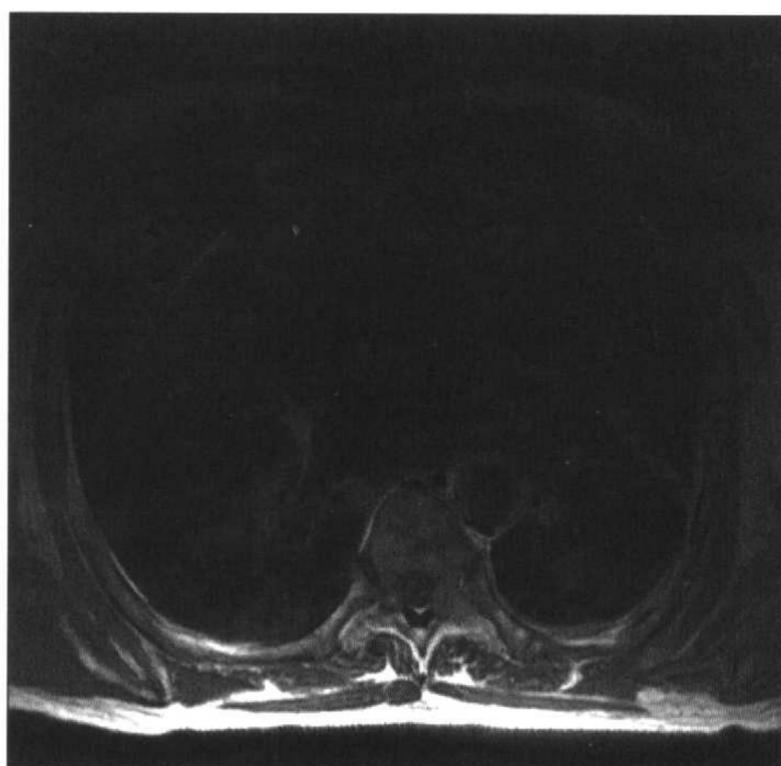


图 3 - 116 强化  $T_1$  WI 轴位  
Fig 3 · 116 Post-contrast  $T_1$  weighted  
transverse image

**检查名称:**胸椎 MR 扫描。

**检查序列:** SE-T<sub>1</sub> WI(515/11), T<sub>2</sub> WI(3280/102)。

**检查方位:**矢状位、轴位。

**检查所见:**胸椎生理曲度尚可, T<sub>2</sub>、T<sub>7</sub> 椎体及附件内见长 T<sub>1</sub>、短 T<sub>2</sub> 异常信号, 增强扫描后略有强化。胸椎椎间盘未见明显突出征象, 扫描野内脊髓未见异常信号灶。

**诊断意见:** T<sub>2</sub>、T<sub>7</sub> 椎体转移。

**Name of examination:** MR scanning of the thoracic vertebra.

**Sequence:** SE-T<sub>1</sub> WI(515/11), T<sub>2</sub> WI(3280/102).

**Orientation:** SAG, TRA.

**Findings:** The physio-curvature of lumbar vertebra is normal, the normal marrow signals of thoracic vertebra T<sub>2</sub>, T<sub>7</sub> are replaced by a hypointensive area on T<sub>1</sub> WI and T<sub>2</sub> WI, the appendix of T<sub>7</sub> is involved, there is no evidence of compression fracture. After administration of GD-DTPA, the lesion is enhanced slightly. The intervertebral disc significant bulging and spinal cord abnormal intensity are not seen.

**Diagnosis:** Metastatic process involving the T<sub>2</sub> and T<sub>7</sub>.

### 三、腹部和盆腔

#### 1. 肝脏血管瘤

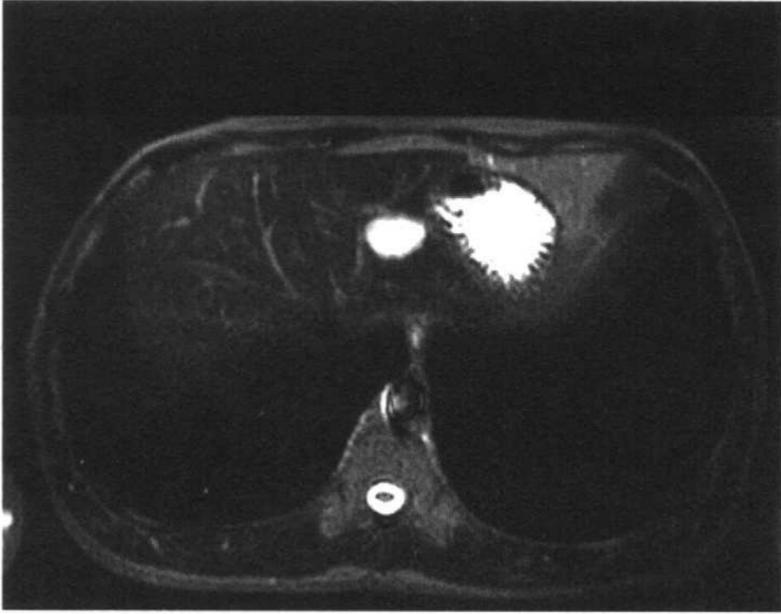


图 3 - 117 压脂  $T_2$ WI 轴位  
Fig 3 · 117 Fat-supressed  $T_2$  weighted transverse image

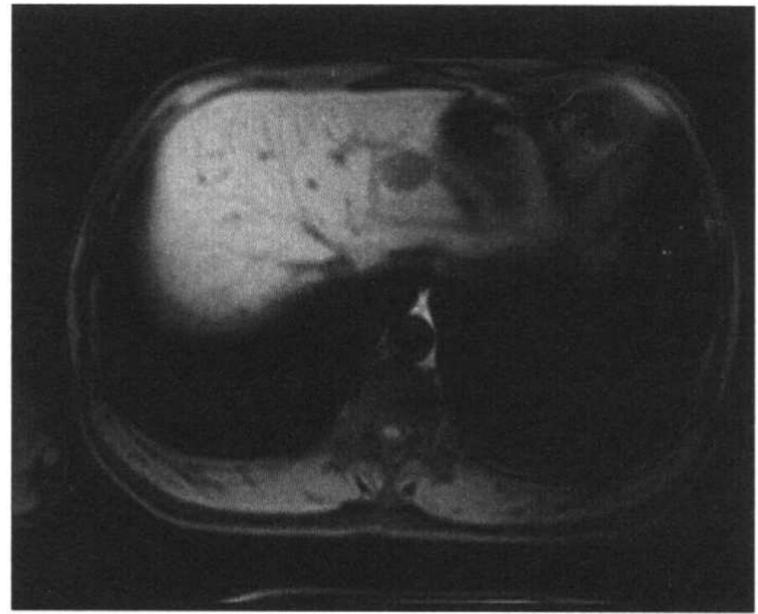


图 3 - 118  $T_1$ WI 轴位  
Fig 3 · 118  $T_1$  weighted transverse image

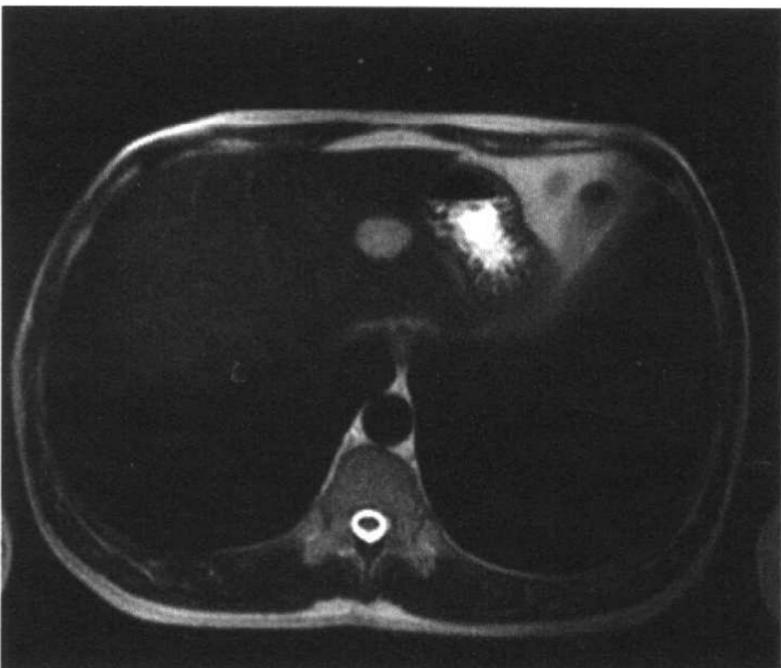


图 3 - 119  $T_2$ WI 轴位  
Fig 3 · 119  $T_2$  weighted transverse image

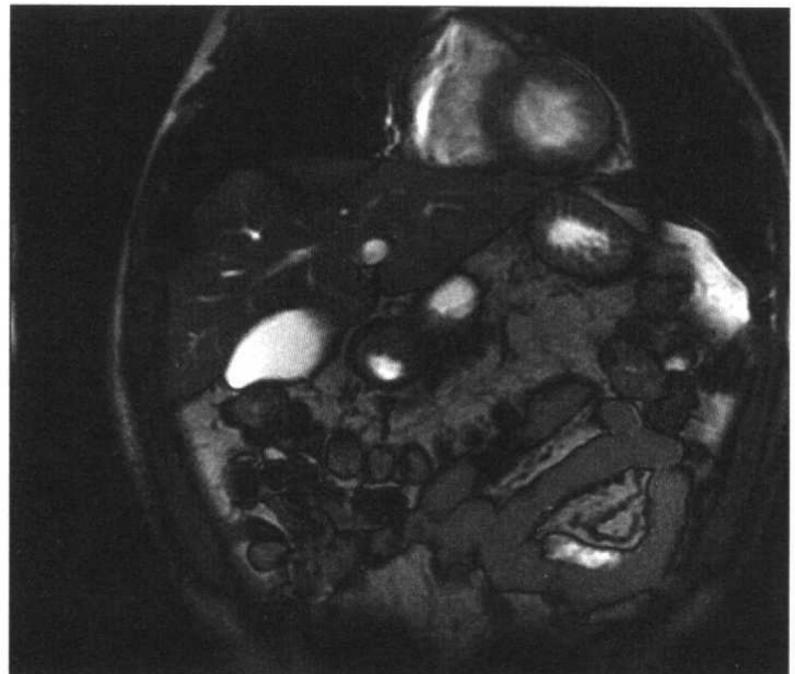


图 3 - 120  $T_2$ WI 冠状位  
Fig 3 · 120  $T_2$  weighted coronal image

**检查名称:**肝脏 MR 扫描。

**检查序列:**SE-T<sub>1</sub>WI(600/15), SE-T<sub>2</sub>WI(2000/90), FS-T<sub>2</sub>WI(4000/100), STIR(400/20/120)。

**检查方位:**轴位、冠状位。

**检查所见:**肝左叶见一 1 cm × 2 cm 大小的类圆形病灶, T<sub>1</sub>WI 呈低信号, T<sub>2</sub>WI 呈高信号, 边界清晰锐利, 余肝实质内未见明显异常信号, 肝内血管走行自然, 肝内外胆管未见扩张, 胆囊大小形态未见异常。

**诊断意见:**肝左叶海绵状血管瘤。

**Name of examination:** MR scanning of the liver.

**Sequence:** SE-T<sub>1</sub>WI(600/15), SE-T<sub>2</sub>WI(2000/90), FS-T<sub>2</sub>WI(4000/100), STIR(400/20/120).

**Orientation:** TRA, COR.

**Findings:** There is a round lesion with a size of 1 cm × 2 cm found in left lobe of liver, T<sub>1</sub>WI low signal intensity and T<sub>2</sub>WI high signal intensity with sharp defined margin. No other abnormal intensity is seen in liver parenchyma. The inter- and extra-bile ducts are in the normal limits, and cholecyst is normal.

**Dianosis:** Hemangioma in the left lobe of the liver.

2. 前列腺癌

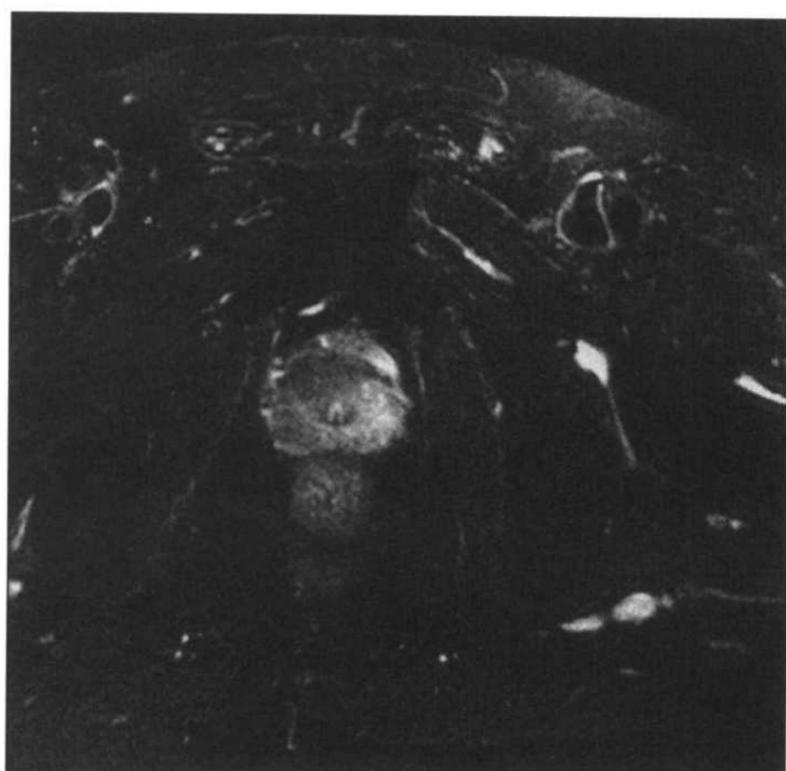


图 3 - 121  $T_2$ WI 压脂像轴位  
Fig 3 · 121 Fat-supressed  $T_2$  weighted  
transverse image

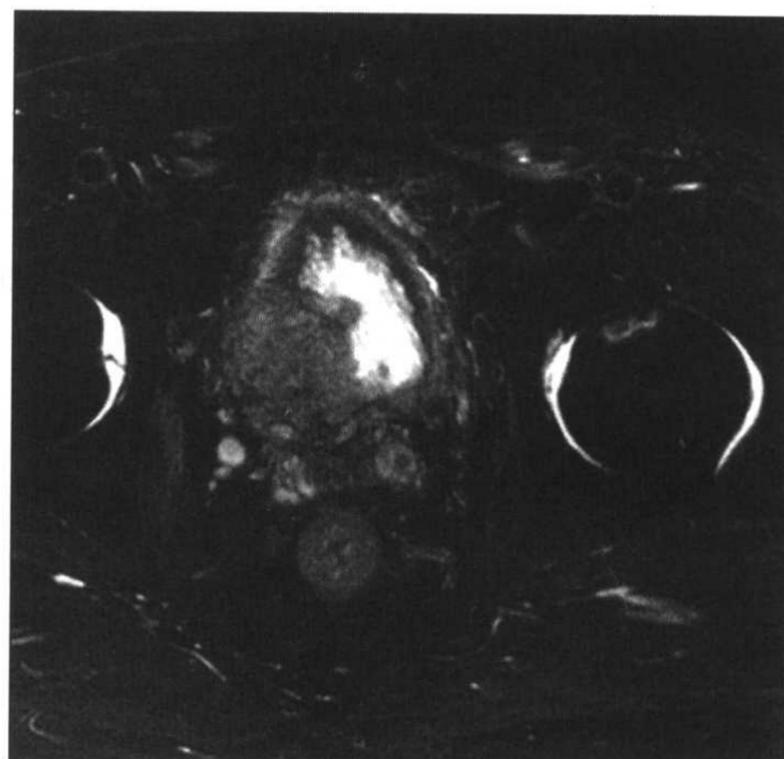


图 3 - 122  $T_2$ WI 压脂像轴位  
Fig 3 · 122 Fat-supressed  $T_2$  weighted  
transverse image



图 3 - 123  $T_1$ WI 轴位  
Fig 3 · 123  $T_1$  weighted transverse image



图 3 - 124  $T_2$ WI 矢状位  
Fig 3 · 124  $T_2$  weighted sagittal image

**检查名称:**前列腺 MR 扫描。

**检查序列:**SE-T<sub>1</sub>WI(500/10), T<sub>2</sub>WI(2000/80), STIR(4000/1000/16)。

**检查方位:**轴位、矢状位。

**检查所见:**前列腺体积明显增大,形态不规则,中央叶信号不均匀,呈混杂信号,压脂像上呈混杂信号,周围叶 T<sub>2</sub>WI 及压脂像信号减低,以右侧为著,局部轮廓向前上方突出,并与膀胱右后壁分界不清,部分突入膀胱腔内。盆腔内未见肿大淋巴结。

**诊断意见:**前列腺癌累及膀胱。

**Name of examination:** Prostate MR scanning.

**Sequence:** SE-T<sub>1</sub>WI(500/10), T<sub>2</sub>WI(2000/80), STIR(4000/1000/16).

**Orientation:** TRA, SAG.

**Findings:** The volume of prostate enlarges and the form of prostate is abnormal. The signal of central lobe of prostate is mixed with high and low signal intensity in fat-suppressed image. Circumference lobe is remarkable for low signal in T<sub>2</sub>WI and local contour protrudes to superior and forward location. The margin between prostate and the right posterior bladder wall is unclear. There is no tumefacient lymph node in the field of scanning.

**Diagnosis:** Prostate cancer involving bladder.

3. 子宫肌瘤

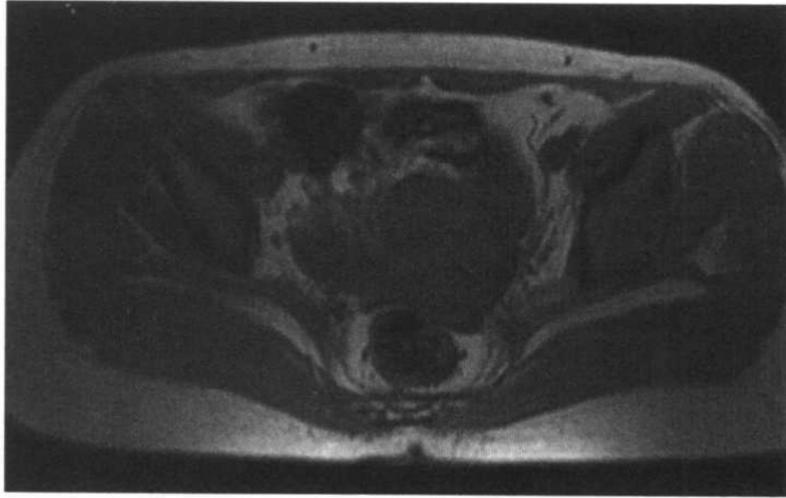


图 3 - 125  $T_1$  WI 轴位

Fig 3 · 125  $T_1$  weighted transverse image

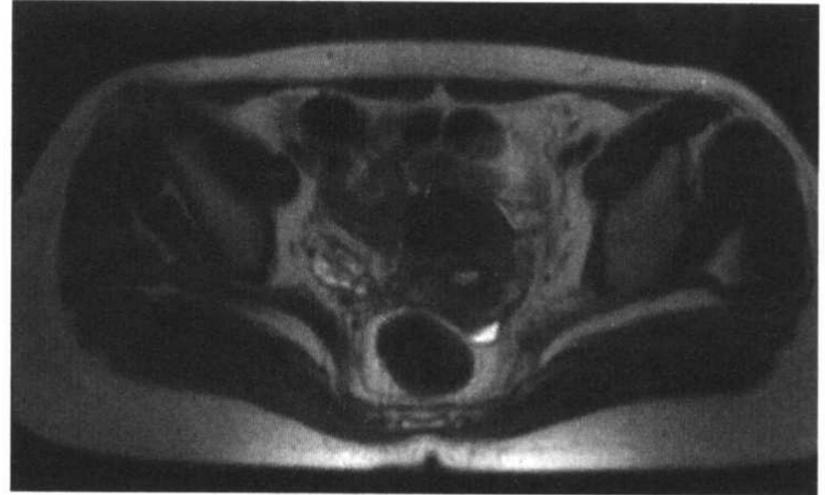


图 3 - 126  $T_2$  WI 轴位

Fig 3 · 126  $T_2$  weighted transverse image



图 3 - 127  $T_2$  WI 矢状位

Fig 3 · 127  $T_2$  weighted sagittal image

**检查名称:**盆腔 MR 扫描。

**检查序列:**TSE-T<sub>1</sub>WI(500/8),T<sub>2</sub>WI(4000/95),FLAIR(9000/107)。

**检查方位:**轴位、矢状位。

**检查所见:**子宫体积增大,呈前倾前屈位,子宫前壁内显示一2 cm × 3 cm 低信号病灶,边界清晰,子宫内膜线受压移位,内膜无增厚。双侧附件区未见明显异常信号。子宫直肠陷窝见少量液体积聚。

**诊断意见:**子宫前壁肌瘤。

**Name of examination:**MR scanning of pelvic kidney.

**Sequence:** TSE-T<sub>1</sub>WI(500/8),T<sub>2</sub>WI(4000/95),FLAIR(9000/107).

**Orientation:**TRA, SAG .

**Findings:**The MR images show that the volume of uterine body is increased, and demonstrate anteversion and anteflexion position. The anterior wall of uterine body is remarkable for 2 cm × 3 cm low signal intensity nodular with well-defined border, the mucous membrane is compressed and shifted. The width of mucous membrane is in normal size. No abnormal signal is seen in appendage region. Fluid signal is present in meta-archo lacuna.

**Diagnosis:**The frontal wall uterine myoma.

4. 双角子宫

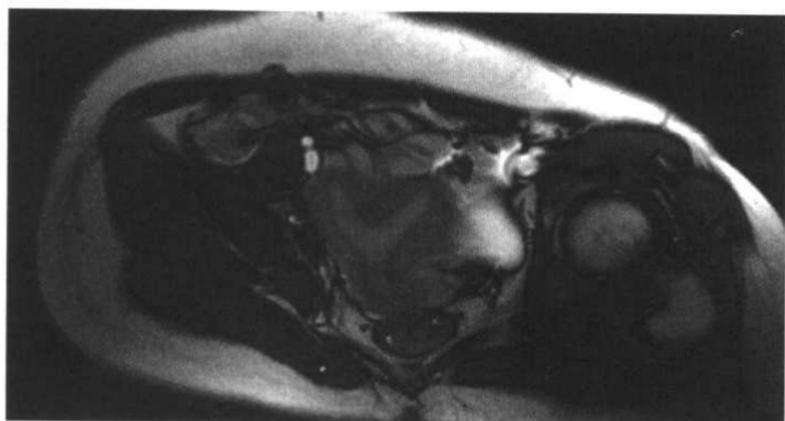


图 3 - 128 子宫体冠状位 T<sub>2</sub>WI  
Fig 3 · 128 T<sub>2</sub> weighted coronal image

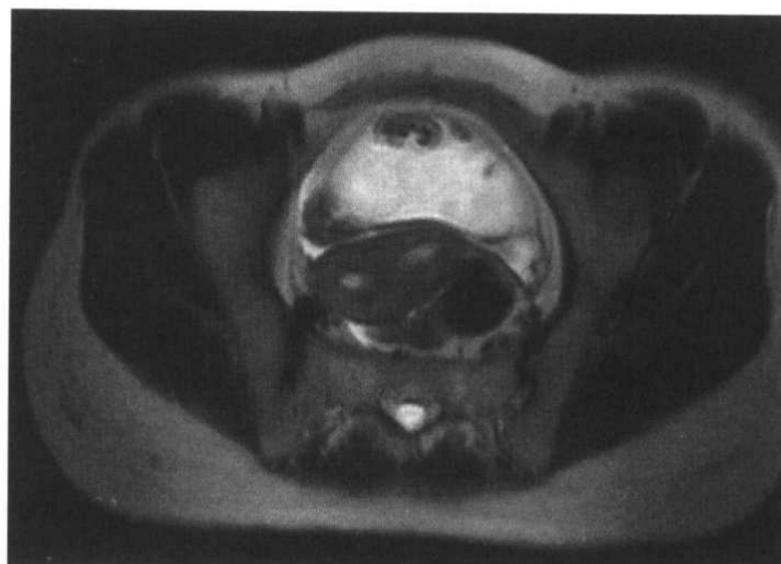


图 3 - 129 T<sub>2</sub>WI 轴位  
Fig 3 · 129 T<sub>2</sub> weighted transverse image



图 3 - 130 T<sub>2</sub>WI 矢状位  
Fig 3 · 130 T<sub>2</sub> weighted sagittal image

**检查名称:**盆腔 MR 扫描。

**检查序列:**TSE-T<sub>1</sub>WI(500/8),T<sub>2</sub>WI(4000/95),FLAIR(9000/107)。

**检查方位:**冠状位、轴位、矢状位。

**检查所见:**MR 轴位显示子宫体积略微增大,两宫角分离,宫体内见两个分离的高信号内膜线,冠状位显示子宫底部外缘明显凹陷,下陷距离为 1.3 cm,呈马鞍形,两个分离的宫腔线与宫颈水平会合,两宫角间距离为 4.5 cm,两内膜线间的间隔组织呈等信号。双侧附件区未见明显异常。

**诊断意见:**子宫发育异常——双角子宫。

**Name of examination:**MR scanning of pelvic kidney

**Sequence:**TSE-T<sub>1</sub>WI(500/8),T<sub>2</sub>WI(4000/95),FLAIR(9000/107).

**Orientation:**COR, SAG, TRA.

**Findings:**The MR axial images show that the volume of uterine body is increased lightly, the uterine corner is splitted. Note that two separated endometriums with high signal intensity lines are seen in axial and coronal images of uterine body. The uterine coronal images show that fundus of uterus transparently frame up just like saddle shape, the incisure distance is 1.3 cm. The distance between two uterine corns is 4.5 cm. The two separated endometriums with high signal intensity line meet in cervix plane. The septation tissue between the two separate endometriums demonstrates iso-signal intensity. No abnormal signal is seen in appendage region.

**Diagnosis:**Metrodysplasia-bicorbate uterus.

## 四、骨 骼

### 1. 股骨头坏死



图 3 - 131 T<sub>1</sub>WI 冠状位

Fig 3 · 131 T<sub>1</sub> weighted coronal image



图 3 - 132 T<sub>2</sub>WI 冠状位

Fig 3 · 132 T<sub>2</sub> weighted coronal image

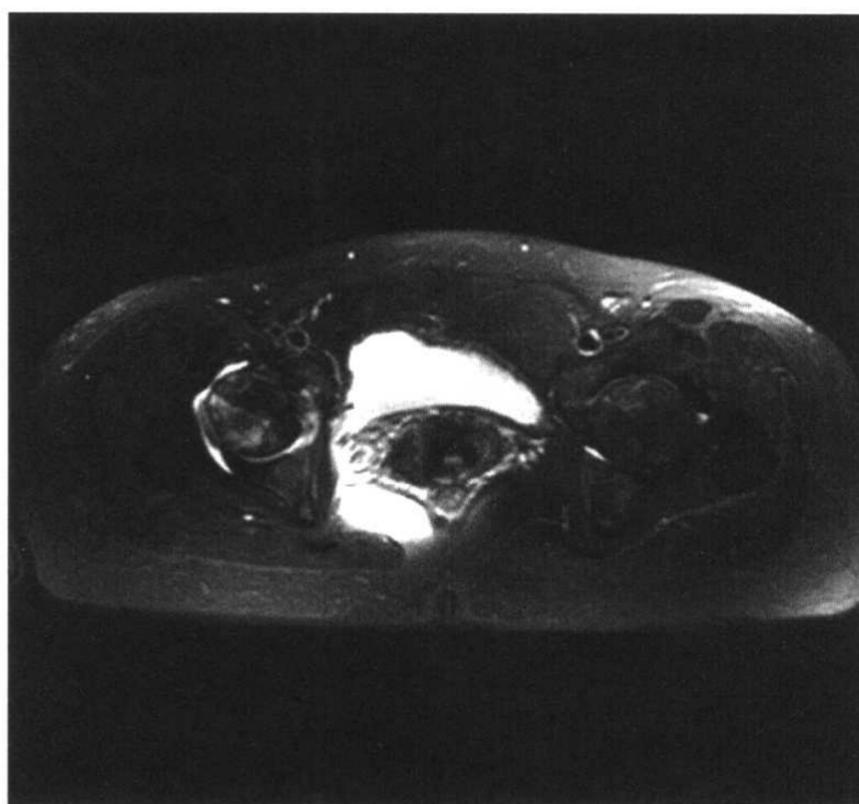


图 3 - 133 压脂 T<sub>2</sub>WI 轴位

Fig 3 · 133 Fat-supressed T<sub>2</sub> weighted transverse image

**检查名称:**双侧髋关节 MR 扫描。

**扫描序列:**SE-T<sub>1</sub>WI(515/11), T<sub>2</sub>WI(3280/102), STIR(1400/120/20)。

**检查方位:**冠状位、轴位。

**检查所见:**双侧股骨头变形,关节软骨塌陷,股骨头负重区显示片状长 T<sub>1</sub>短 T<sub>2</sub>异常信号,在压脂像上呈略高信号,病灶边界不清,关节间隙变窄,关节腔内见少量长 T<sub>2</sub>异常液体信号。

**诊断意见:**双侧股骨头无菌坏死。

**Name of examination:** Bilateral coxa MR scanning.

**Sequence:** SE-T<sub>1</sub>WI(515/11), T<sub>2</sub>WI(3280/102), STIR(1400/120/20).

**Orientation:** COR, TRA.

**Findings:** Images of the hips demonstrate that bilateral femoral heads are deformity and the cartilages are sunk. The lesions in the weight-bearing surface of the femoral heads with low T<sub>1</sub>, low T<sub>2</sub> and high FS-T<sub>2</sub> signals and vague margins. The hip joints become narrow. There is a bit liquid with high T<sub>2</sub> abnormal signals in the bilateral acetabulums.

**Diagnosis:** Bilateral femoral heads aseptic necrosis.

2. 半月板撕裂



图 3 - 134  $T_1$ WI 冠状位  
Fig 3 · 134  $T_1$  weighted coronal image



图 3 - 135 压脂  $T_2$ WI 冠状位  
Fig 3 · 135 Fat-supressed  $T_2$   
weighted coronal image



图 3 - 136  $T_2$ WI 矢状位  
Fig 3 · 136  $T_2$  weighted sagittal image

**检查名称:**膝关节 MR 扫描。

**检查序列:**SE-T<sub>1</sub>WI(515/11), T<sub>2</sub>WI(3280/107), STIR(1400/120/20)。

**检查方位:**冠状位、矢状位。

**检查所见:**膝关节外侧半月板前角显示横行条状高信号,边缘达关节面,前后交叉韧带和内外侧副韧带走行和信号未见明显异常,膝关节诸组成骨有不同程度的骨质增生征象,关节腔内见中量液性长 T<sub>2</sub>异常信号。

**诊断意见:**

- (1) 膝关节外侧半月板前角撕裂。
- (2) 关节腔积液。
- (3) 膝关节退行性变。

**Name of examination:** Knee joint MR scanning.

**Sequence:** SE-T<sub>1</sub>WI(515/11), T<sub>2</sub>WI(3280/107), STIR(1400/120/20).

**Orientation:** COR, SAG.

**Findings:** Images show lateral meniscus remarkable for horizontal meniscal tear touching inferior articular surface on fat-saturated T<sub>2</sub>WI. A large amount of joint effusion is present. The medial meniscus is intact without evidence of meniscal tear. The anterior and posterior cruciate ligaments are intact. The medial and lateral collateral ligaments appear normal. The muscles and bones of the knee joint appear unremarkable.

**Diagnosis:**

- (1) The lateral meniscus tear of the right knee.
- (2) Large joint effusion.
- (3) Knee degeneration.

3. 跟腱断裂



图 3-137 T<sub>1</sub>WI 矢状位

Fig 3 · 137 T<sub>1</sub> weighted sagittal image



图 3-138 T<sub>2</sub>WI 矢状位

Fig 3 · 138 T<sub>2</sub> weighted sagittal image

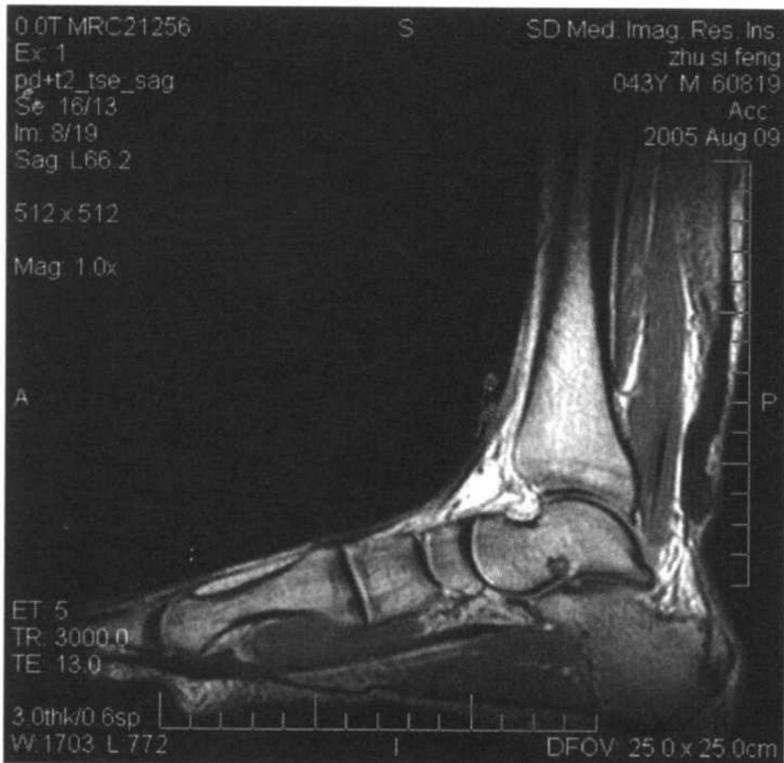


图 3-139 质子加权矢状位

Fig 3 · 139 Proton weighted sagittal image

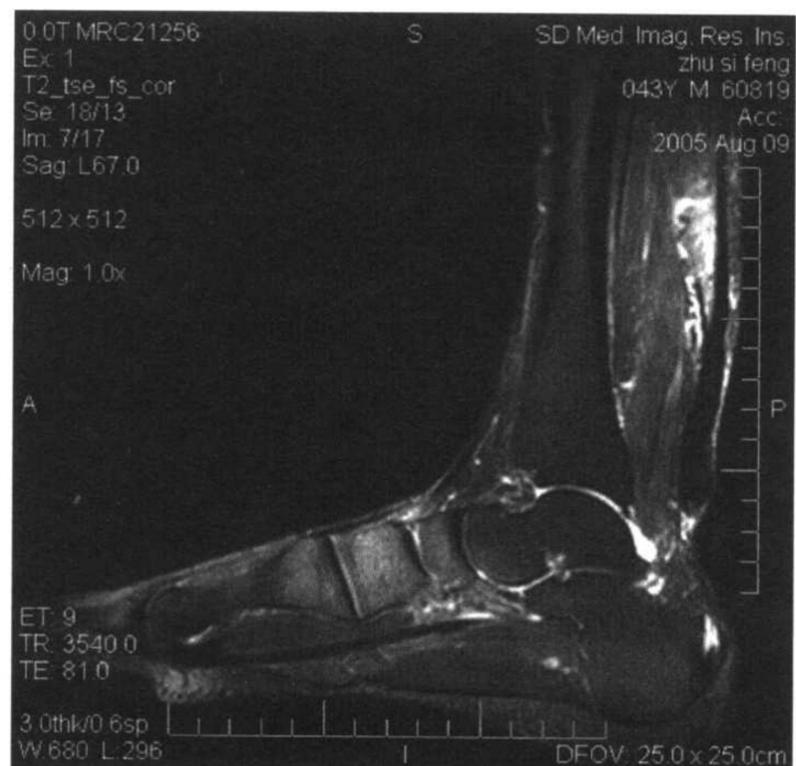


图 3-140 T<sub>2</sub>WI 压脂 矢状位

Fig 3 · 140 Fat-supressed T<sub>2</sub> weighted sagittal image

**检查名称:**踝关节 MR 扫描。

**检查序列:**SE-T<sub>1</sub>WI(515/11), T<sub>2</sub>WI(3280/107), STIR(1500/20/120)。

**检查方位:**矢状位、冠状位。

**检查所见:**跟腱信号不连续,跟腱上方迂曲,呈略长 T<sub>1</sub>、T<sub>2</sub> 异常信号,踝关节组成骨骨质连续,排列规整,关节腔内可见少量长 T<sub>1</sub> 长 T<sub>2</sub> 液体信号。

**诊断意见:**跟腱断裂。

**Name of examination:** Ankle joint MR scanning.

**Sequence:** SE-T<sub>1</sub>WI(515/11), T<sub>2</sub>WI(3280/107), STIR(1500/20/120).

**Orientation:** SAG, COR.

**Findings:** Images show the signal of the right achilles's tendon is not continuous and curved. It is remarkable for low signal in T<sub>1</sub>WI, high signal in T<sub>2</sub>WI. The bone matrix of ankle joint has no abnormal appearance in array and signal intensity. There are a few of fluid signals in ankle joint cavity.

**Diagnosis:** Rupture of Achilles's tendon.

## 五、乳 腺

### 1. 正常乳腺



图 3 - 141 压脂 T<sub>2</sub>WI 轴位

Fig 3 · 141 Fat-supressed T<sub>2</sub> weighted transverse image



图 3 - 142 T<sub>1</sub>WI 轴位

Fig 3 · 142 T<sub>1</sub> weighted transverse image

检查名称:乳腺 MR 检查。

检查序列:FS-T<sub>1</sub>WI( 600/15/12) , FS-T<sub>2</sub>WI(3500/80/120)。

检查方位:轴位。

检查所见:双侧乳腺大小形态正常,乳头无下陷,乳腺腺体内未见明显异常信号,邻近胸壁肌肉信号均匀,腋窝未见肿大淋巴结。

诊断意见:双侧乳腺 MR 扫描未见明显异常。

**Name of examination:** Breast MR scanning.

**Sequence:** FS-T<sub>1</sub>WI( 600/15/12) , FS-T<sub>2</sub>WI(3500/80/120).

**Orientation:** TRA.

**Findings:** The shape and size of bilateral breasts are normal, the signal of mammary gland and neighbor thoracic wall are unremarkable. No abnormal lymphaden can be found in axilla.

**Diagnosis:** Bilateral breasts are normal.

## 2. 乳腺癌

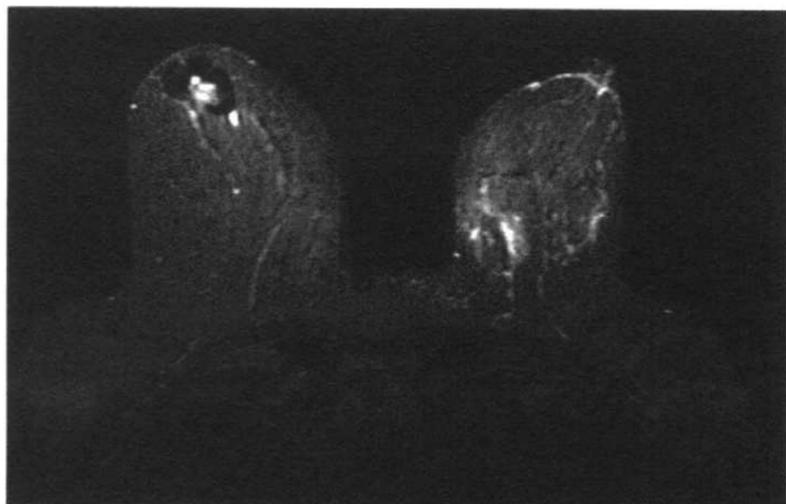


图 3 - 143 T<sub>2</sub>WI 压脂像轴位  
Fig 3 · 14 Fat-supressed T<sub>2</sub> weighted  
transverse image

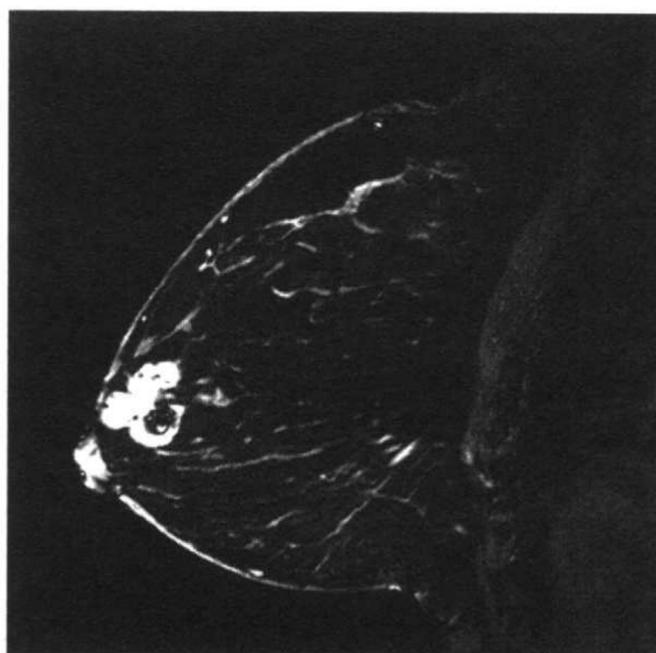


图 3 - 144 T<sub>2</sub>WI 压脂像矢状位(强化后)  
Fig 3 · 144 Post-contrast fat-supressed T<sub>2</sub>  
weighted sagittal image

**检查名称:**乳腺 MR 检查。

**检查序列:**FS-T<sub>1</sub>WI( 600/15/12), FS-T<sub>2</sub>WI(3500/80/120)。

**检查方位:**轴位、矢状位。

**检查所见:**右侧乳腺外上象限见一形态不规则肿块,大小约 1 cm × 2 cm, T<sub>1</sub>WI 呈等低信号, T<sub>2</sub>WI 呈等信号, 较 T<sub>1</sub>WI 信号高, 内部信号不均匀, 边缘不规整, 有分叶, 与周围组织分界不清, 呈星芒状, 可见放射状毛刺, 腋窝未见肿大淋巴结。增强扫描后, 病灶不均匀显强化, 内可见坏死囊变的不增强区域。

**诊断意见:**符合右侧乳腺癌 MR 检查所见。

**Name of examination:** Breast MR scanning.

**Sequence:** FS-T<sub>1</sub>WI( 600/15/12), FS-T<sub>2</sub>WI(3500/80/120).

**Orientation:** TRA, SAG.

**Findings:** Plain scan images show a size of 1 cm × 2 cm, T<sub>1</sub>WI iso-intensity and T<sub>2</sub>WI iso-intensity mass in extra-superior quadrant of right breast. The margin of the mass is unclear, and the radio-hair sign or crab-feet sign can be seen in the border of the mass. No abnormal lymphaden can be found in axilla. On post contrast images, the lesion is enhanced nonhomogeneously and there is a cystic and necrotic area with no enhancement in the center of it.

**Diagnosis:** Right breast cancer is suggested.

## 六、磁共振血管造影

### 1. 正常颅脑 MRA

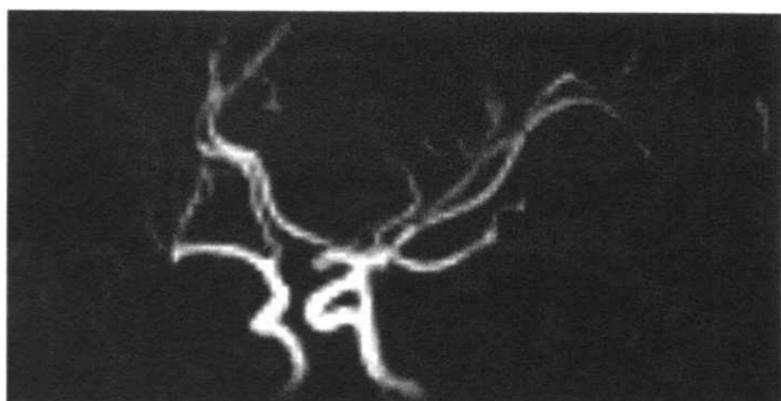


图 3 - 145 MRA (时间飞跃法) 侧面观  
Fig 3 · 145 MRA (TOF) lateral image

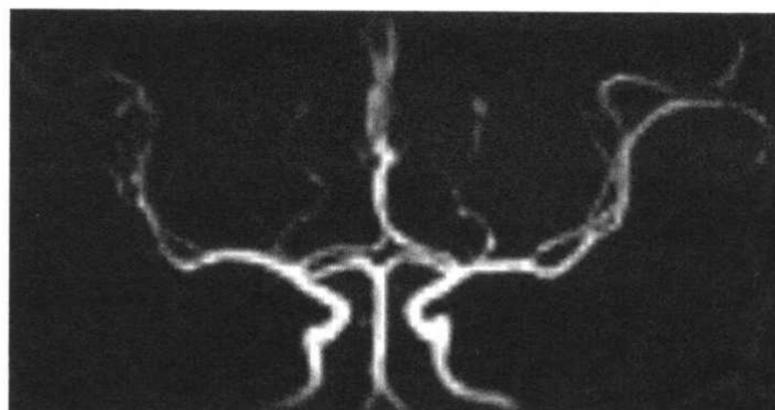


图 3 - 146 MRA 前后面观  
Fig 3 · 146 MRA coronal image

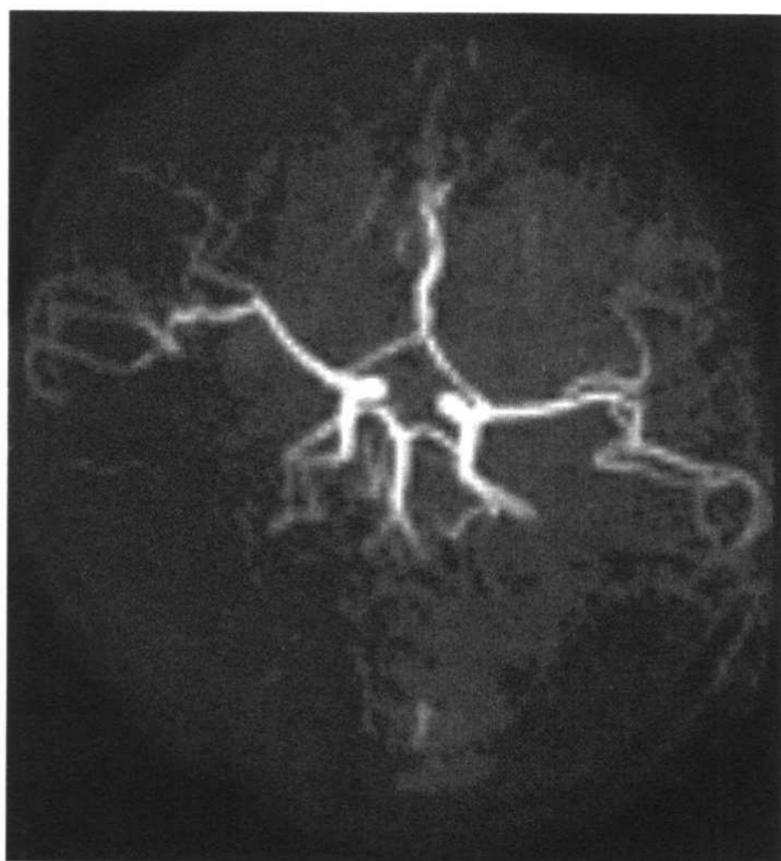


图 3 - 147 MRA (时间飞跃法) 上面观  
Fig 3 · 147 MRA (TOF) transverse image

**检查名称:** 颅脑 MRA 检查。

**检查序列:** TOF-2d-MRA。

**检查所见:** 双侧颈内动脉、大脑前动脉、大脑中动脉、大脑后动脉和前后交通动脉、基底动脉及其主要分支显示清晰, 走行自然, 未见明显狭窄和扩张, 血管及其分支走行区未见异常血流信号。

**诊断意见:** 脑 MRA 未见异常。

**Name of examination:** Brain MRA scanning.

**Sequence:** 2D-TOF.

**Findings:** Bilateral internal carotids , anterior cerebral artery , middle cerebral artery , posterior cerebral artery , basilar artery and their major branches all display clearly. There is no constriction or dilatation , no abnormal blood stream signal can be seen in the spread area.

**Diagnosis:** Brain MRA is normal.

## 2. 脑动脉瘤

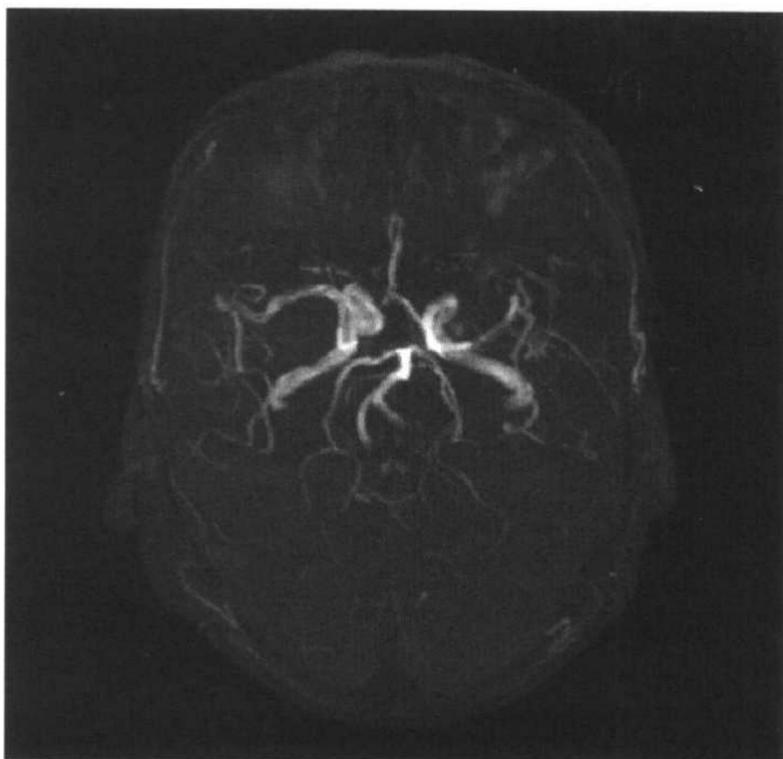


图 3 - 148 MRA(时间飞跃法)上面观  
Fig 3 · 148 MRA (TOF) transverse image



图 3 - 149 MRA 左右斜面观  
Fig 3 · 149 MRA oblique-lateral image

**检查名称:** 颅脑 MRA 检查。

**检查序列:** TOF-2d-MRA。

**检查所见:** 右侧大脑中动脉起始段和右侧颈内动脉虹吸段明显扩张,周围未见异常吻合血管团。左侧颈内动脉、大脑前动脉、大脑中动脉、大脑后动脉和前后交通动脉、基底动脉及其主要分支显示清晰,走行自然,未见明显狭窄和扩张。

**诊断意见:** 右侧大脑中动脉起始段和右侧颈内动脉虹吸段动脉瘤。

**Name of examination:** Brain MRA scanning.

**Sequence:** TOF-2d-MRA.

**Findings:** The initiation of right middle cerebral artery and siphon segment of right internal carotid artery are obviously dilated. No abnormal blood vessel anastomosis can be seen around them. The left internal carotid, bilateral anterior cerebral artery, left middle cerebral artery, bilateral posterior cerebral artery, basilar artery and their major branches all display clearly and have no stenosis and dilatation.

**Diagnosis:** Aneurysm of the initiation of right middle cerebral artery and siphon segment of right internal carotid artery.

3. 脑基底异常血管网症(烟雾病)

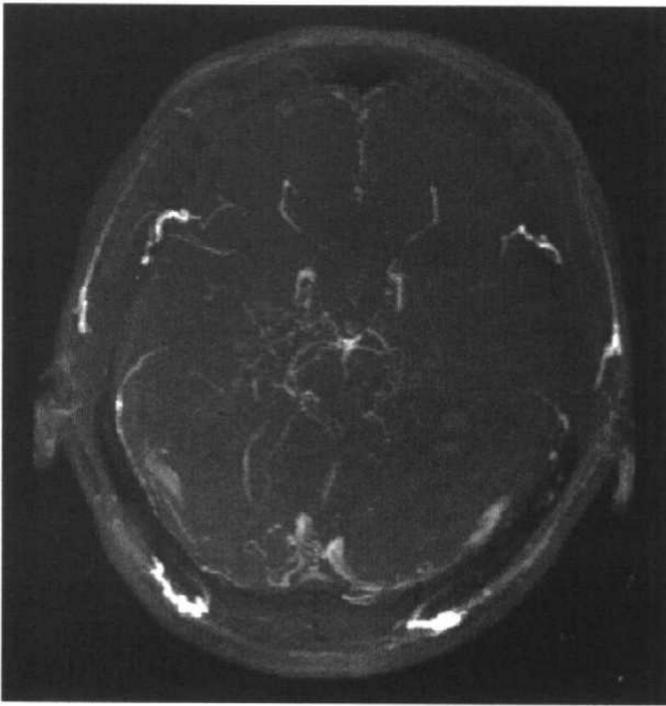


图 3 - 150 MRA(时间飞跃法)  
Fig 3 · 150 MRA(TOF) image

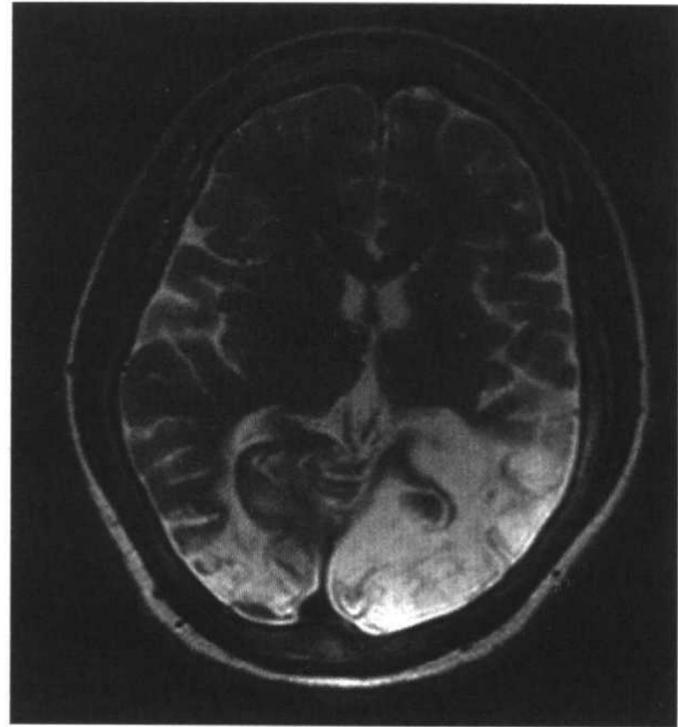


图 3 - 151 T<sub>2</sub>WI 轴位  
Fig 3 · 151 T<sub>2</sub> weighted transverse image

检查名称: 颅脑 MRA 扫描。

检查序列: T<sub>2</sub>WI(4000/95), MRA。

检查方位: 轴位。

检查所见: MRA 显示双侧颈内动脉海绵窦段、大脑前、中动脉变细, 流空效应减弱, 邻近出现较多纤细不规则的异常血管似烟雾。大脑后动脉和基底动脉走行尚自然, 无明显的狭窄与中断。T<sub>2</sub>W 轴位图像显示左侧大脑半球见多发片状长 T<sub>2</sub> 异常信号, 多位于左侧大脑中动脉供血区脑实质。

诊断意见: 脑基底异常血管网症。

**Name of examination:** MR scanning of the head MRA.

**Sequence:** T<sub>2</sub>WI(4000/95), MRA .

**Orientation:** TRA.

**Findings:** MRA images show that stenoses can be seen in bilateral cavernous sinus segment of internal carotid arteries, anterior and middle cerebral arteries. The flowing void effect of vessel is weak. Around them, many fine irregular abnormal vessels also can be seen like frog. No abnormality is found in the bilateral posterior cerebral arteries and basal artery. T<sub>2</sub>WI axial images demonstrate multiple abnormal high-signal lesions in the region of left middle cerebral artery.

**Diagnosis:** Moyamoya disease.

## 第四章 DSA

### 1. 正常脑血管造影

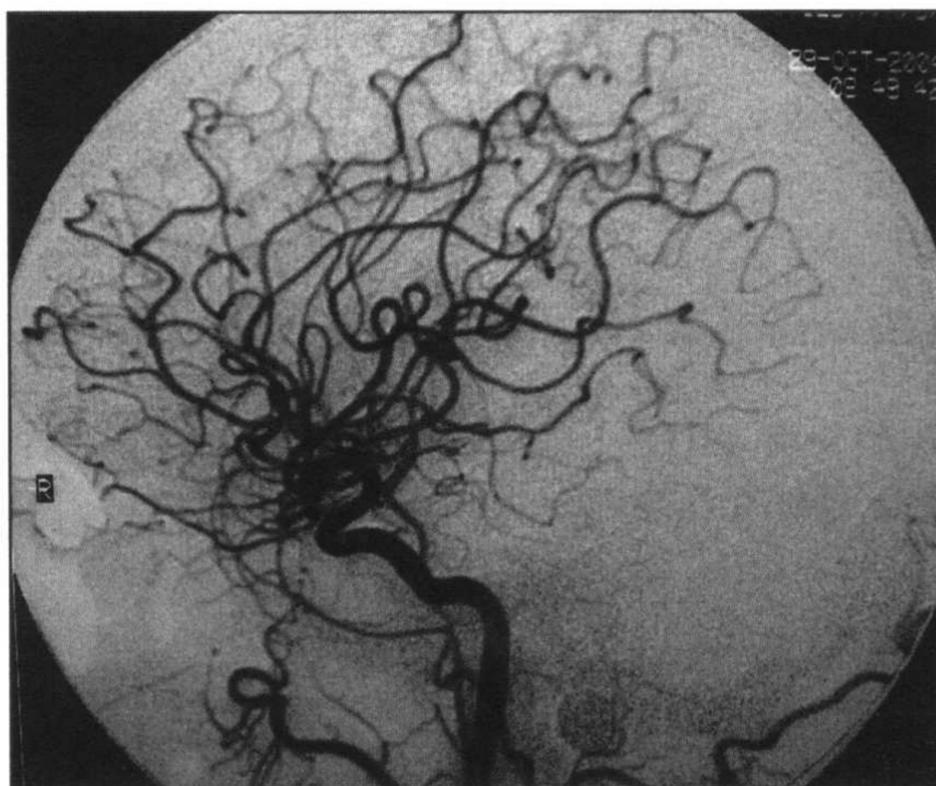


图 4-1 颈内动脉侧位像

Fig 4 · 1 The lateral internal carotid artery angiogram



图 4-2 颈内动脉正位像

Fig 4 · 2 The frontal internal carotid artery angiogram

**检查名称:**全脑血管造影术。

**检查方法:**常规准备,局麻下,以 Seldinger 技术行右股动脉插管,分别选插左、右侧颈总动脉及左、右椎动脉行 DSA 检查,术中顺利,病人各项重要生命体征无异常变化,术毕拔管加压包扎止血,病人安返病房。

**检查所见:**在正位和侧位片上,颈内、外动脉、椎基底动脉各血管及其分支走行正常,无移位,无异常拉直,未见明显管腔狭窄及扩张征象。上矢状窦、乙状窦、下矢状窦、大脑大静脉、大脑内静脉、上行静脉(Trolard 静脉)、颞枕静脉(Labbe 静脉)、基底静脉、大脑中静脉及它们的属支也显示良好和正常。在所有两侧颈总动脉造影动脉、微血管和静脉的三期图像中,均未见异常血管。

**诊断意见:**全脑血管造影未见异常。

**Name of examination:** Cerebral angiography.

**Technique:** After routine skin preparation and local anesthesia, the femoral catheterization with Seldinger's technique was performed. The tip of the catheter was introduced selectively into the right, left carotid arteries and the right, left vertebral arteries, and then DSA examination was performed. The operation is successful and patient had no abnormal physical signs. After decannulation, hemostasis by compression was performed at the point of puncture. At last, the patient returned to ward safely.

**Findings:** In both of the lateral and frontal views, the course of the internal carotid arteries, external carotid arteries, vertebrobasilar arteries and their branches are normal without any displacement, abnormal straightening, stenosis and dilatation. The superior sagittal sinus, the sigmoid sinus, the inferior sagittal sinus, the great vein of Galen, the internal cerebral veins, the ascending veins (Trolard's vein), the temporooccipital veins (vein of Labbe), the basilar vein, the middle cerebral veins and their tributaries are shown well and normal without any displacement. In all three phases of both left and right selective common carotid angiograms, no abnormal vessel is revealed.

**Diagnosis:** Normal cerebral angiography.

2. 烟雾病



图 4-3 颈内动脉侧位像

Fig 4 · 3 The lateral internal carotid artery angiogram

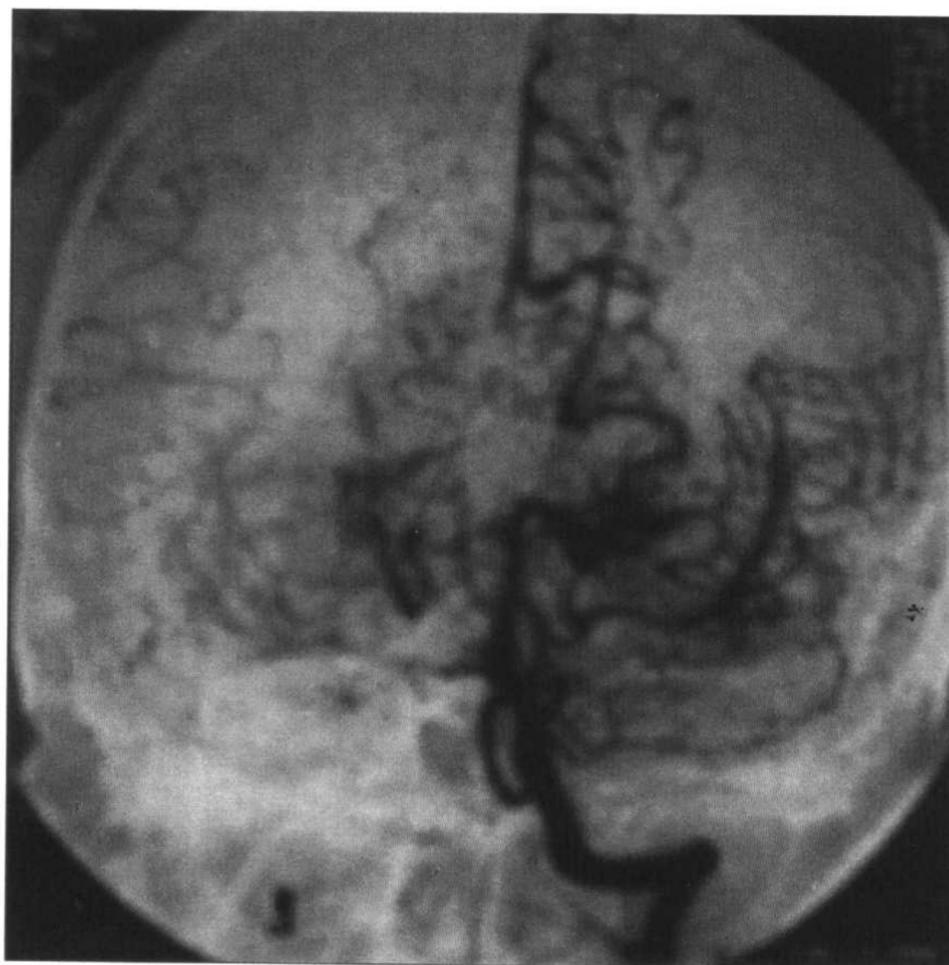


图 4-4 颈内动脉正位像

Fig 4 · 4 The frontal internal carotid artery angiogram

**检查名称:**脑血管数字减影血管造影。

**检查方法:**以 Seldinger 技术行右股动脉插管,并选择性地将导管分别插入左、右颈总动脉以 5 ml/s 的速度注入碘海醇(300 mg I/ml)10 ml 行 DSA 检查;将导管插入椎动脉以 3 ml/s 的速度注入碘海醇(300 mg I/ml)6 ml 行 DSA 检查。

**检查所见:**脑血管造影可见颈内动脉、大脑前动脉及大脑中动脉起始处明显狭窄,动脉血管呈现狭窄后扩张,表现为粗细不均的串珠样改变,狭窄的动脉壁边缘毛糙而不规则。基底节区可见大量异常增生、扭曲扩张的血管网,呈扇形密集,犹如烟雾状。大脑前动脉、大脑中动脉远端分支经侧支循环由大脑后动脉分支、眼动脉分支、硬膜支等血管供血。

**诊断意见:**烟雾病。

**Name of examination:** Cerebrovascular DSA.

**Technique:** The femoral catheterization with Seldinger's technique was performed. The tip of the catheter was introduced selectively into the left, right common carotid artery. 10 ml of 300 mgI/ml Iohexol were injected with a speed of 5 ml/s, and then DSA examination was performed. The tip of the catheter was again introduced selectively into the left vertebral artery about 2 cm from its orifice, 6 ml of 300 mgI/ml Iohexol were injected with a speed of 3 ml/s for DSA examination.

**Findings:** The apparent stenosis is found respectively at the beginning part of the internal carotid artery, the anterior cerebral artery and the middle cerebral artery. The abnormal dilatation behind stenosis position makes blood-vessels appear signs of string beads. The artery walls are coarse and irregular. The tortuosity, dilatation and abnormal hyperplasia of arteries are found rich, misty at the area of basal nuclei. The distant branches of the anterior cerebral artery and the middle cerebral artery communicate with the branches of meningeal branch, ophthalmic artery, posterior cerebral artery by collateral circulation.

**Diagnosis:** Moyamoya disease.

3. 动脉瘤

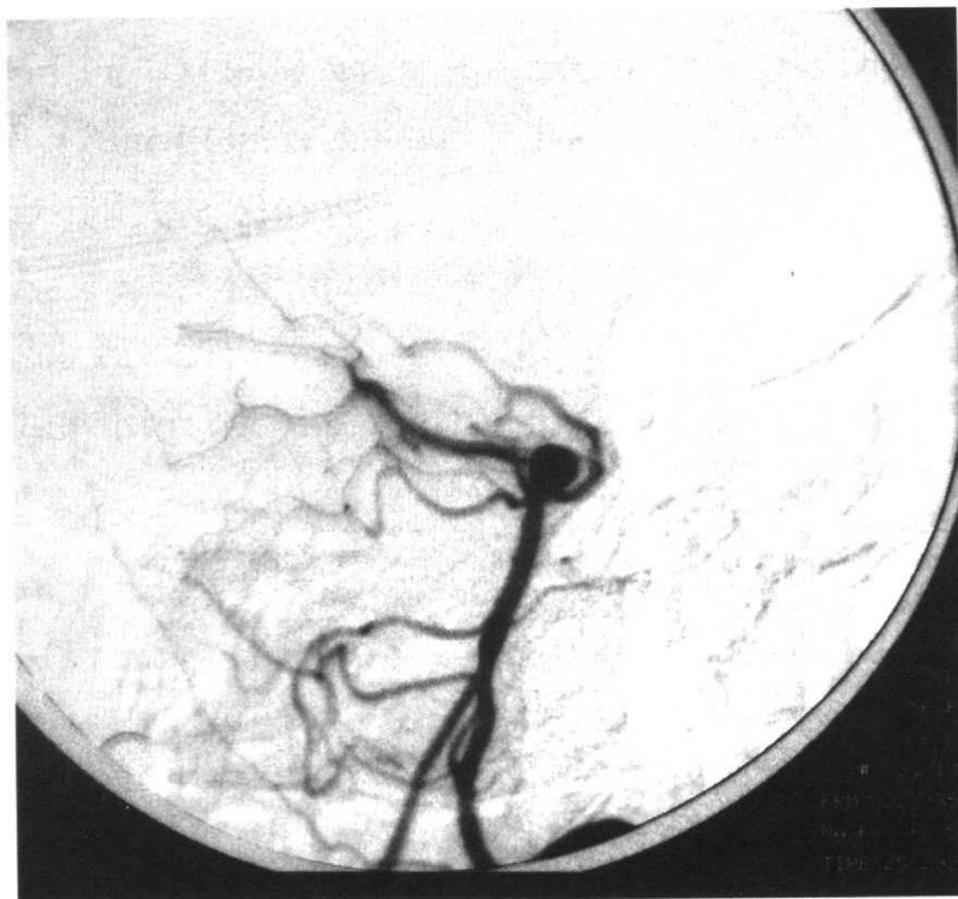


图 4-5 椎动脉斜位像

Fig 4 · 5 The oblique vertebral artery angiogram

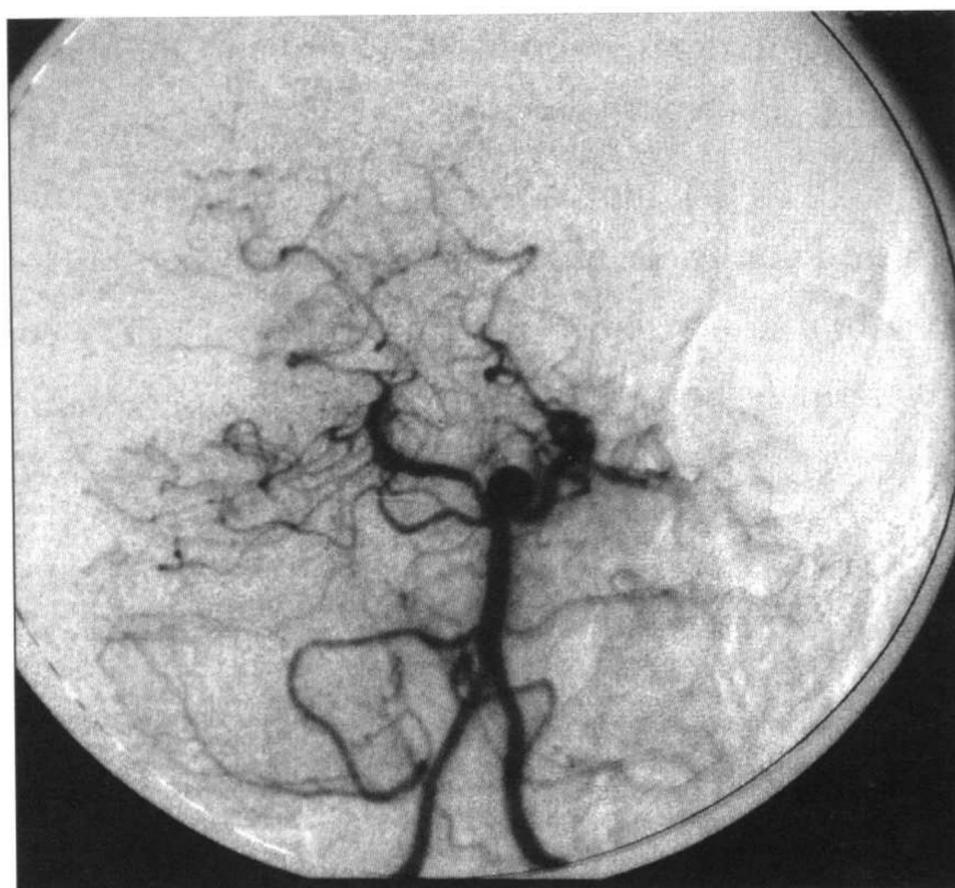


图 4-6 椎动脉正位像

Fig 4 · 6 The anteroposterior vertebral artery angiogram

**检查名称:**椎动脉数字减影血管造影。

**检查方法:**以 Seldinger 技术行股动脉插管,并选择性地将导管插入左椎动脉至距其起始部 2 cm 处,分别以 3 ml/s 的速度注入碘海醇(300 mg I/ml)6 ml,然后行 DSA 检查。

**检查所见:**前后位及斜位动脉期均显示一不透 X 线边缘清楚锐利的囊状阴影,并以一狭颈与基底动脉末端分出大脑后动脉处相连接,此囊状影直径为 6 mm,其内未见充盈缺损及密度不均表现。未见动脉痉挛及血管移位,除上述提示为动脉瘤的囊形阴影外,未见其他异常。

**诊断意见:**动脉瘤,其颈部起源于基底动脉末端两侧大脑后动脉起始点之间。

**Name of examination:** DSA of vertebral artery.

**Technique:** The femoral catheterization with Seldinger's technique was performed. The tip of the catheter was introduced selectively into the left vertebral artery about 2 cm from its orifice. 6 ml of Iohexol 300 mgI/ml were injected intra-arterially at a rate of 3 ml per second for the lateral and frontal view of DSA separately.

**Findings:** In the arterial phase, on the anteroposterior view and the lateral view, an opaque saccular shadow with sharp margin connected to the end of the basilar artery with a narrow neck is revealed. The diameter of the opaque saccular shadow is 6 cm, no other signs of filling defect, spiculated process and nonhomogeneous density can be found. No arterial spasm or displacement of the vessels can be demonstrated. Beside the aforementioned opaque saccular shadow which means an aneurysm, no other abnormalities can be found.

**Diagnosis:** Aneurysm with a neck deriving from the end of the basilar artery.

#### 4. 肺癌介入治疗术

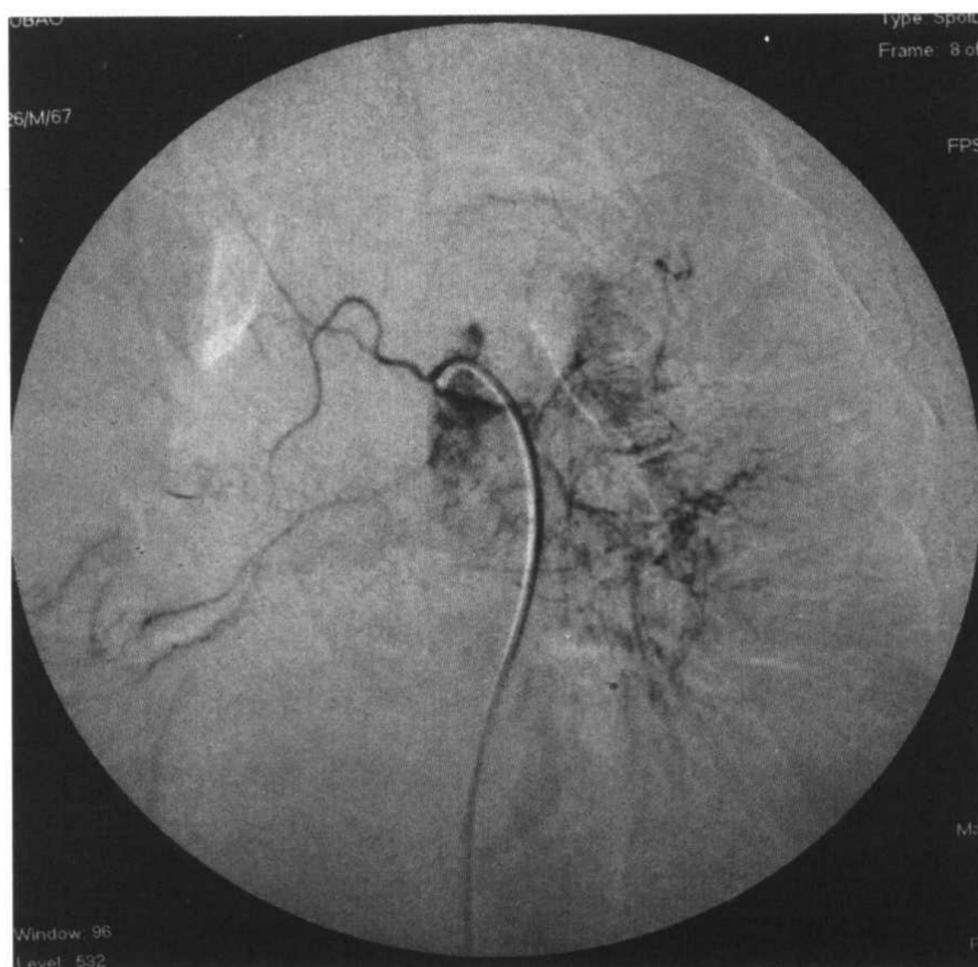


图 4-7 正位支气管动脉晚期造影片

Fig 4·7 The anteroposterior late arteriae bronchial phase angiogram

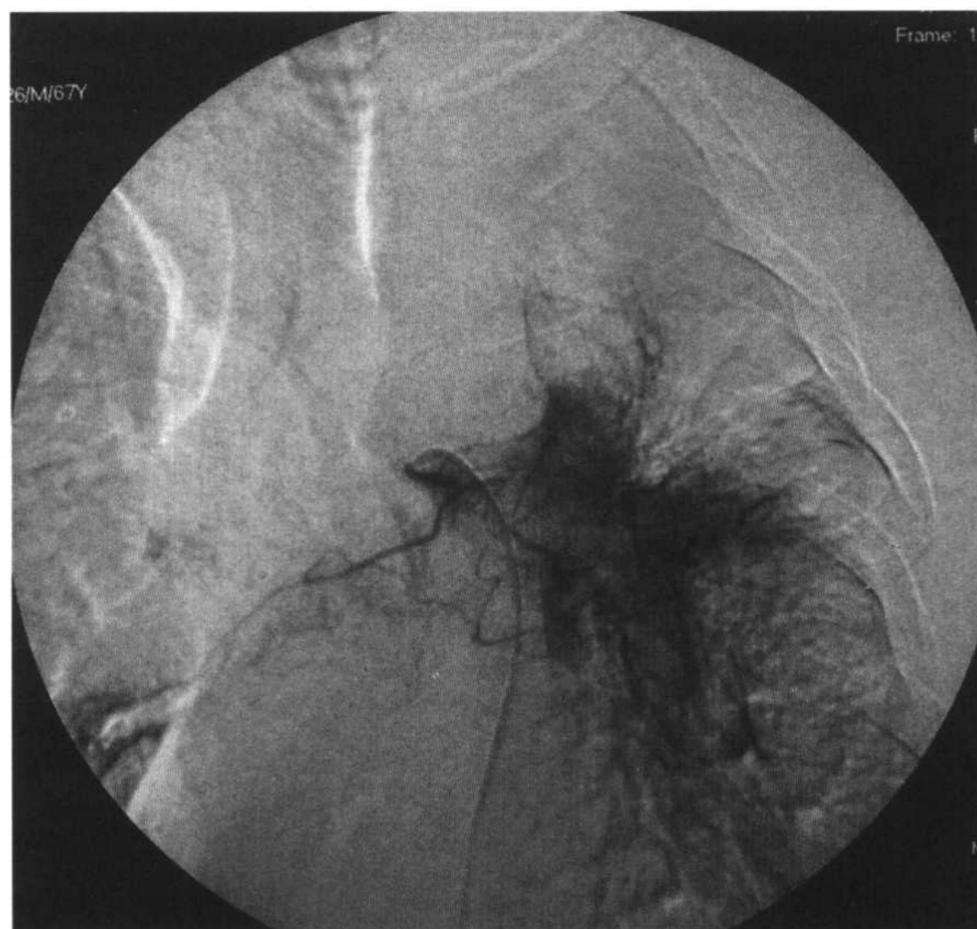


图 4-8 正位支气管动脉微血管期造影片

Fig 4·8 The anteroposterior arteriae bronchial capillary phase angiogram

**检查名称:**肺癌介入治疗术。

**检查方法:**常规准备,局麻下,以 Seldinger 技术行右股动脉插管,并选择性地将导管插入支气管动脉,手推减影证实后,灌注方克 800 mg,卡铂 300 mg,丝裂酶素 10 mg。术中顺利,病人无不适,术前静注欧贝 8 mg,地塞米松 5 mg。术毕拔管加压包扎,送回病房观察。

**检查所见:**左右支气管动脉共干,左侧支气管动脉干相对增粗迂曲,病变周边见支气管动脉分支增多,病灶周边部可见细小扭曲不规则小血管呈网状,符合肿瘤血管。支气管动脉分支血管因受压和侵蚀而发生移位,可显示僵直、不规则狭窄或包绕征。动脉晚期和微血管期见到病灶造影剂染色(即肿瘤染色),静脉期未见异常引流静脉。多支肺动脉分支也显影,提示并发支气管动脉-肺动脉瘘。

**诊断意见:**左侧肺癌介入治疗术后所见。

**Name of examination:** Interventional treatment operation of lung cancer.

**Technique:** The right femoral catheterization with Seldinger's technique was performed. The tip of the catheter was introduced selectively into the left arteriae bronchiales. 800 mg Regafur, 300 mg Carboplatin and 10 mg Mitomycin were injected after bronchial identification of hand-pushed DSA. The operation is successful and patient had no signs of malaise. 8 mg of Ondansetron Hydrochloride, 5 mg of Dexamethasone were given through intravenation before operation. After decannulation, hemostasis by compression was performed at the point of puncture. At last, the patient returned to ward safely.

**Findings:** The images show that the left, right bronchial arteries originated from the thoracic aorta with one trunk. The left bronchial artery is enlarged and tortuous. Some increased branches of the bronchial artery are seen in the left lung surrounding a mass lesion. A few twisted, reticular small irregular vessels compatible with the tumor vessels are revealed in the peripheral zone inside the mass lesion. The branches of bronchial artery are pressed, corroded with the features of inflexibility, irregular stenosis, encirclement and displacement. In the late arterial phase and capillary phase contrast medium stain of the mass lesion, i. e. the tumor stain, can clearly be observed. In the venous phase no abnormal draining vein is visible. The appearance of a few branches of pulmonary artery suggests complicated fistulas between the pulmonary artery and the bronchial artery.

**Diagnosis:** Status of post interventional treatment operation of lung cancer.

5. 肝海绵状血管瘤

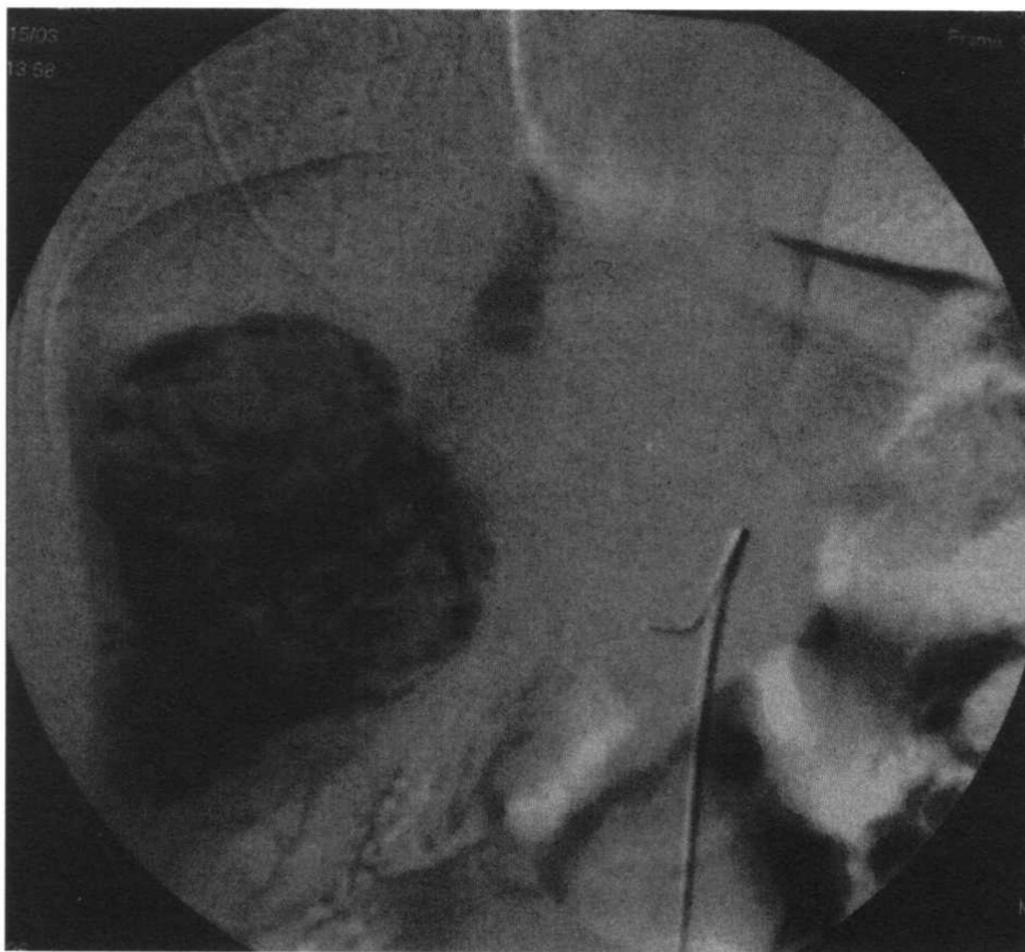


图 4-9 正位肝动脉晚期造影片

Fig 4 · 9 The anteroposterior late hepatic artery phase angiogram

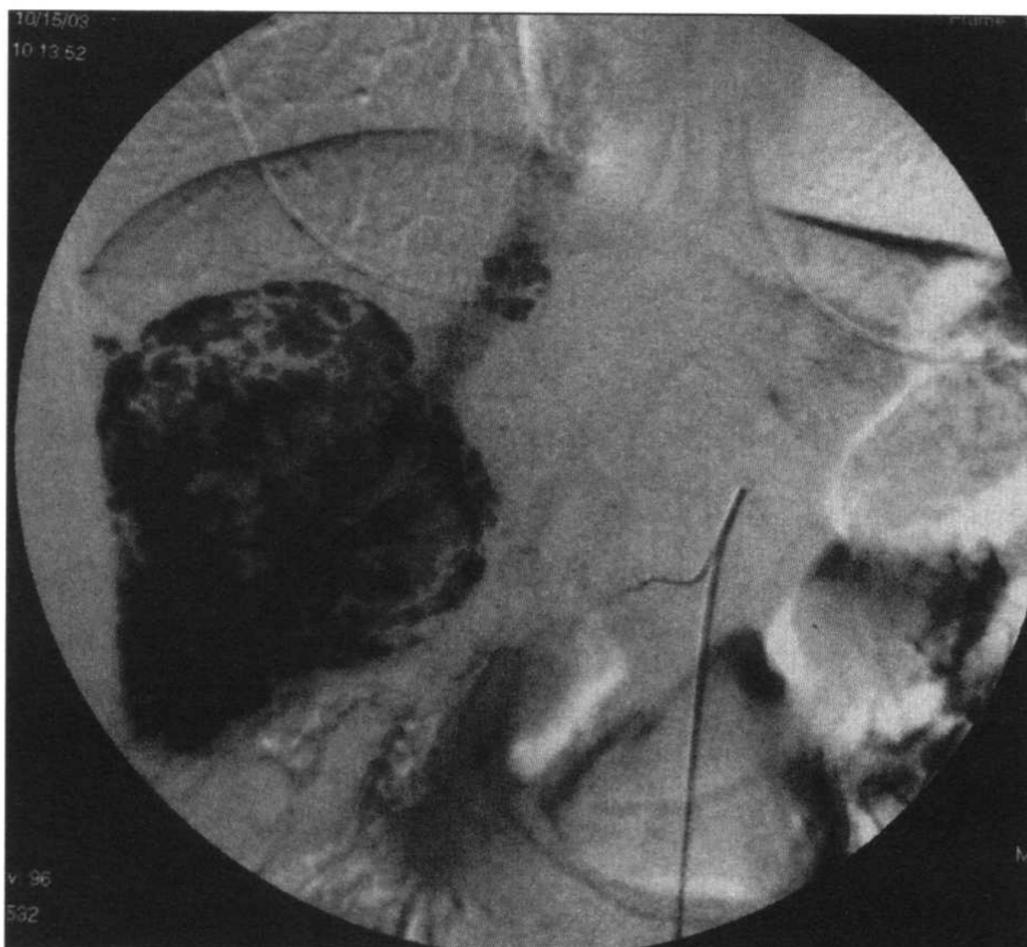


图 4-10 正位肝动脉造影延迟期片

Fig 4 · 10 The anteroposterior delayed hepatic artery phase angiogram

**检查名称:**肝动脉数字减影血管造影。

**检查方法:**以 Seldinger 技术,经右股动脉插入 F6.5 导管,并选择性地将导管插入肝固有动脉,在距其起始部 2 cm 处,以 4 ml/s 的速度注入碘海醇(300 mg I/ml) 20 ml。

**检查所见:**动脉期可见肝右动脉分支血管增粗迂曲,其末端可见散在点片状异常染色,呈爆米花征。延迟显影可见异常染色加深并融合成团,对比剂排空延迟,其左上方可见一相同特征的小病灶。血管湖在整个造影过程呈现早出晚归的现象。瘤周可见门静脉分流支。

**诊断意见:**肝右叶海绵状血管瘤。

**Name of examination:** DSA of the hepatic artery.

**Technique:** A F6.5 catheter was introduced into the right femoral artery with Seldinger's technique. Selective catheterization of the proper hepatic artery was performed as far as 2 cm from its orifice. 20 ml of contrast medium (Iohexol 300 mgI/ml) were injected intraarterially at a rate of 4 ml per second.

**Findings:** In the arterial phase, the branches of the right hepatic artery are relatively enlarged and tortuous. Punctual, pathy contrast medium stain of the mass lesion with signs of pop-corn ball are clearly observed. In the delayed phase, the abnormal stain is deepened because of the confluence of contrast medium, evacuationon of contrast medium is delayed. A small nidus with the same distinguishing features at the upper left of liver. The signs of early filling and delayed evacuationon of contrast medium stain are found on the whole process of DSA. Draining branches of PV is visible at the rim of the hemangioma.

**Diagnosis:** Cavernous hemangioma of the right lobe of the liver.

6. 肾动脉发育不良



图 4-11 正位肾动脉期造影片

Fig4 · 11 The anteroposterior renal artery phase angiogram



图 4-12 正位肾动脉实质期造影片

Fig 4 · 12 The anteroposterior parenchymal renal artery phase angiogram

**检查名称:**肾动脉造影术。

**检查方法:**常规准备,以 Seldinger 技术行右股动脉插管,将导管送入腹腔动脉,然后,超选择将导管插入右肾动脉,注入对比剂行 DSA 检查,术中病人无不适,术毕拔管,穿刺点压迫止血,加压包扎后安返病房。

**检查所见:**动脉期前后位片上,右肾动脉主干及分支显示纤细,边缘光滑,清晰显示弓形动脉和小叶间动脉,无过度迂曲现象,未见明显局限性狭窄段。实质期整个肾脏弥漫均匀显影,轮廓变小,形态不规则,肾皮质厚度小于 3 mm。

**诊断意见:**右肾动脉发育不良。

**Name of examination:** Renal arteriography.

**Technique:** The femoral catheterization with Seldinger's technique was performed. The tip of the catheter was introduced super-selectively into the right renal artery, and then contrast medium were injected for DSA examination. The operation is successful and patient had no abnormal physical signs. After decannulation, hemostasis by compression was performed at the point of puncture. At last, the patient returned to ward safely.

**Findings:** In the arterial phase, on the anteroposterior view the right renal artery and its branches are tenuous, smooth. Interlobular arteries and arcuate arteries are clearly revealed, no signs of the apparent stenosis and over-tortuous are found. In the parenchymal phase, contrast medium is well distributed over the whole renal. The contour of renal is shrunken with an irregular shape, the thickness of cortex of kidney is smaller than 3 mm.

**Diagnosis:** Hypoplasia of the right renal artery.

7. 肝癌介入治疗术

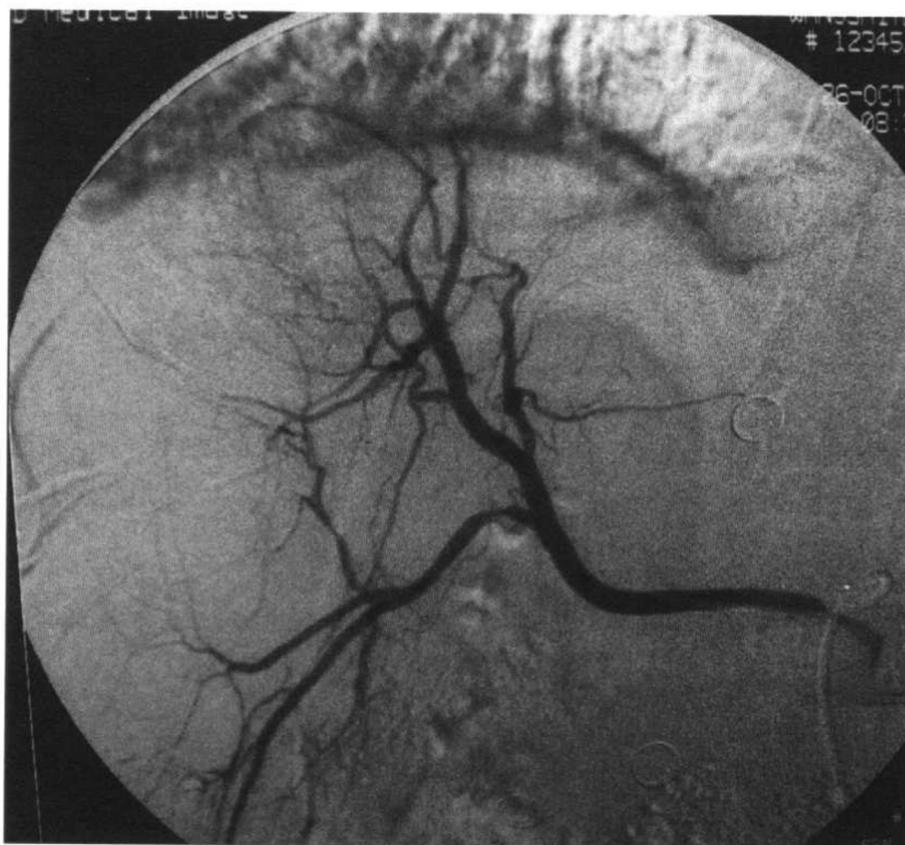


图 4 - 13 正位肝动脉期造影片

Fig 4 · 13 The anteroposterior hepatic artery phase angiogram

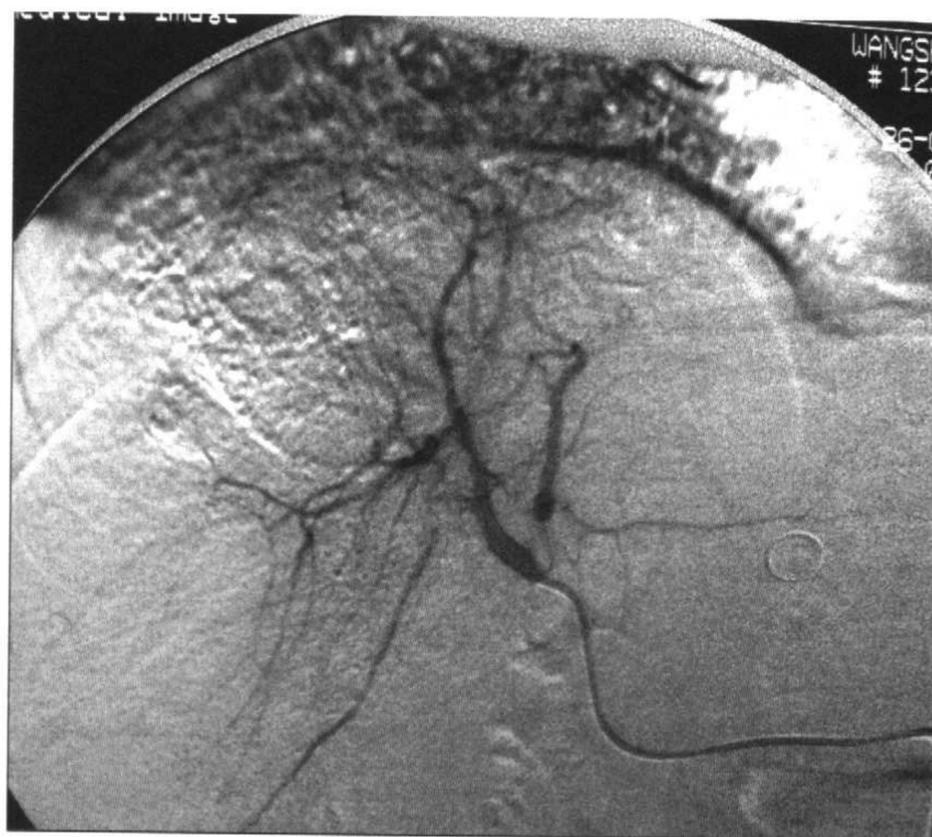


图 4 - 14 正位肝动脉延迟期造影片

Fig 4 · 14 The anteroposterior delayed hepatic artery phase angiogram

**检查名称:**肝癌介入治疗术。

**检查方法:**常规准备,局麻下,采用 Seldinger 技术穿刺右股动脉,选择性将导管端插至腹腔干动脉,然后超选择肝总动脉行 DSA 检查,未发现肝右动脉,再选插肠系膜上动脉,经造影证实肝右动脉起自肠系膜上动脉后,超选择肝右后动脉,注入乙碘油 10 ml + 卡铂 200 mg 混悬液,再行 DSA 检查后,将导管撤至肝右动脉内,注入方克 1200 mg,卡铂 300 mg,丝裂霉素 10 mg。术中患者无不适,术前给予地塞米松 5 mg,静脉推注,术毕拔管,穿刺点加压包扎,安返病房。

**检查所见:**肝总动脉造影,肝右动脉未显示,肝右动脉起自肠系膜上动脉,肝左、肝右动脉均增粗,肝右动脉后支末端发出较多纤细、迂曲、紊乱的肿瘤血管,实质期可见多个大小不等、类圆形染色灶,边缘规则。栓塞后,肿瘤血管大部消失,碘油沉积良好。

**诊断意见:**肝癌介入治疗术后所见。

**Name of examination:** Interventional treatment operation of hepatocarcinoma

**Technique:** After routine skin preparation and local anesthesia, the femoral catheterization with Seldinger's technique was performed. The tip of the catheter was introduced selectively into the common hepatic artery and then DSA examination was performed, the right hepatic artery was not found. The tip of the catheter was introduced selectively into the superior mesenteric artery again, DSA examination identified that the right hepatic artery stem from the superior mesenteric artery. The posterior branch of the right hepatic artery was super-selected and the mixed liquor of 10 ml Iodinated oil and 200 ml Carboplatin for injection were injected, sequentially. The tip of the catheter was withdrawn into the right hepatic artery after DSA examination. 10 mg of Mitomycin, 1200 mg of Regafur injection and 300mg of carboplatin for injection were injected. The operation is successful and patient had no signs of malaise. 5 mg of Dexamethasone were given through intravenous before operation. Hemostasis by compression was performed at the point of puncture after decannulation. At last, the patient returned to ward safely.

**Findings:** The right hepatic artery is not found during the common hepatic artery angiography. The right hepatic artery stems from the superior mesenteric artery. The right, left hepatic arteries are enlarged. DSA examination shows that many tenuous, winding, disorderly blood-vessels of tumor are originated from the ending of posterior branch of the right hepatic artery. Many round lesions with regular defined margin are found in the capillary phase. The most of blood-vessels of tumor disappear after hepatic artery embolization, Iohexol deposits well.

**Diagnosis:** Status of the post interventional treatment operation of hepatocarcinoma.

8. 双下肢静脉顺行造影术



图 4-15 正位股静脉造影片

Fig 4 · 15 The anteroposterior femoral veins angiogram



图 4-16 正位小腿静脉造影片

Fig 4 · 16 The anteroposterior tibial veins angiogram

**检查名称:**双下肢静脉顺行造影术。

**检查方法:**常规皮肤准备,于左足背静脉穿刺成功后,于左踝上及左膝关节上方处各捆绑一止血带,注入76%泛影葡胺60 ml的稀释液,自下而上依次观察深静脉的充盈情况,并结合体位改变和Valsalva实验观察血流状态,最后解除止血带观察浅静脉充盈情况,透视摄片留取资料。重复上述操作行右下肢静脉造影,术中顺利,患者无明显不适。

**检查所见:**双下肢小腿静脉、腓静脉、股静脉、髂静脉依次充盈,瓣膜数目减少,结构不良,可见明显造影剂返流现象,双小腿交通支静脉逆行灌注充盈,管径粗细不一,浅静脉迂曲扩张,以左侧为著。

**诊断意见:**双下肢深静脉及交通支静脉瓣膜功能不全。

**Name of examination:** Angiography of deep veins of lower limbs.

**Technique:** After routine skin preparation, acupuncture of dorsal veins of left foot was finished and then the left upper ankle and knee were bound by stop bleeding bands. Sequentially the diluted liquid of 60 ml of 76% Meglumine Diatrizoate were injected, the filling situation of the deep veins were observed from bottom to top, furthermore, the state of flowing blood were watched through the changes of body position and Valsalva test. At last, stop bleeding bands were relieved and the filling situation of the superficial veins were observed. The whole of process were taken a photograph for retaining data. Angiography of the right veins of lower limbs were performed with the same procedures. The operation is successful and patient had no signs of malaise.

**Findings:** Tibial veins, popliteal veins, femoral veins and iliac veins of both lower limbs are filled successively. The number of veins valves decreases and the the valve structure is not normal. In the process, the apparent signs of reflux of contrast media are found. Communicating veins in both tibial parts are filled against the current. Diameter of communicating veins are not same. The superficial veins are varicose and left lower limb appears more serious .

**Diagnosis:** The valves of the deep veins and communicating veins in both lower limbs dysfunction.

## 附录 常用影像词汇中英文对照

(以汉字首字母顺序排列)

阿米巴性肝脓肿	amoebic abscess of liver
艾滋病	acquired immunodeficiency syndrome, AIDS
靶征	target sign
斑点状	mottling
半月板撕裂	meniscal tears
半月征	meniscus sign
包裹性胸腔积液	encapsulated effusion
包膜	capsule
爆裂骨折	blow fracture
爆米花状钙化	pop-corn ball calcification
背段	dorsal segment
贲门痉挛	cardiospasm
贲门失弛缓症	achalasia
鼻咽癌	nasopharyngeal carcinoma
壁的	mural
闭和性骨折	closed fracture
闭塞	occlusion, obliteration
边缘	border, margin, rim
边缘增强	rim enhancement
便秘	constipation
表皮样囊肿(胆脂瘤)	epidermoid cyst(cholesteatoma)
髌骨软化	chondromalacia patellae
病侧	affected side
病理性的	pathological
病灶	nidus
布加综合征	Budd-Chiari Syndrome
不对称	asymmetry
不规则形	irregular shape

不透光	opacity, opaque
部位	location
侧副韧带	collateral circulation
侧裂池	cistern of sylvius
侧支循环	collateral circulation
侧锥筋膜	lateroconal fascia
肠穿孔	enterobrosis, intestinal perforation
肠梗阻	intestinal obstruction
肠套叠	intussusception
肠源性囊肿	enterogenic cyst
尘肺	pneumocomosis
成骨肉瘤	osteogenic sarcoma
成骨性	osteoblastic
痴呆	dementia
充盈缺损	filling defect
充盈延迟	delayed filling
重复肾	duplication of kidney
重建算法	algorithm of reconstruction
粗糙	coarse
垂体瘤	pituitary adenoma
错构瘤	hamartoma
大脑大静脉畸形	malformation of Galen vein
大脑前动脉	anterior cerebral artery
大小	size
大叶性肺炎	lober pneumonia
代偿性肺气肿	compensatory emphysema
单侧	unilateral
单发	single
胆固醇沉积病	cholesterinosis
胆管癌	cholangiocarcinoma
胆管细胞癌	cholangiocellular carcinoma
胆结石症	cholelithiasis
胆囊管	cystic duct
胆囊腺肌增生症	adenomyomatosis of gallbladder

胆囊炎	cholecystitis
胆影葡胺	biligrafin
胆脂瘤	cholesteatoma
蛋壳样钙化	eggshell calcification
等密度	isodense
等信号	isointensity
低密度	hypodense
低信号	hypointensity
癫痫	epilepsy
点状	punctual , punctate
蝶鞍扩大	enlargement of the sellar turcica
动静脉血管畸形	arteriovenous malformation
动静脉瘘	arteriovenous fistula
动脉瘤样骨囊肿	aneurysmal bone cyst
动态增强扫描	dynamic contrast-enhanced imaging
对称	symmetry
对称的	symmetrical
多发	multiple
多发性硬化	multiple sclerosis , MS
二尖瓣狭窄	mitral stenosis
耳海绵症	otospongiosis
耳硬化症	otosclerosis
法洛四联症	tetralogy of Fallot
反流性食管炎	reflux esophagitis
范围	extent
房间隔缺损	atrial septal defect , ASD
放射线所致纤维化	radiation-induced fibrosis
肥厚性心肌病	hypertrophic cardiomyopathy
肥皂泡样表现	soap-bubble appearance
肺不张	atelectasis
肺充血	pulmonary congestion
肺挫伤	contusion of lung
肺大泡	bulla , bleb
肺动静脉畸形	pulmonary arterio-venous malformation

肺动静脉瘘	pulmonary arterio-venous fistula
肺动脉高压	pulmonary arterial hypertension
肺静脉高压	pulmonary venous hypertension
肺门舞蹈	hilar dance
肺门增大	pulmonary hilar enlargement
肺泡蛋白沉积症	pulmonary alveolar proteinosis
肺泡微石症	pulmonary alveolar microlithiasis
肺泡型肺癌	alveolar cell carcinoma
肺气肿	emphysema
肺少血	pulmonary oligoemia
肺-肾综合症	Goodpasture syndrome
肺水肿	pulmonary edema
肺淤血	pulmonary venous stasis
肺源性心脏病	cor pulmonale
分叶状	lobulated
分布	distribution
粉碎性骨折	comminuted fracture
风湿性心脏病	rheumatic heart disease
腐蚀性食管炎	corrosive esophagitis
腹部平片	abdominal plain film
腹部结核	abdominal tuberculosis
腹膜后肿瘤	tumor of retroperitoneal space
腹膜腔	peritoneal cavity
腹膜炎	peritonitis
腹主动脉	abdominal aorta
腹主动脉夹层	abdominal aortic dissection
腹主动脉瘤	abdominal aortic aneurysm
副半奇静脉	accessory hemiazygos vein
副神经	accessary nerve
附睾	epididymis
复合骨折	compound fracture
钙化	calcification
钙化的	calcified
肝豆状核变性	hepatocellular carcinoma

肝海绵状血管瘤	cavernous hemangioma of liver
肝脓肿	abscess of liver
肝硬化	cirrhosis of liver
橄榄脑桥小脑萎缩	olivopontocerebellar atrophy
干骺端	metaphysis
肛门	anus
高密度	hyperdense
高信号	hyperintensity
膈膨升	diaphragmatic eventration
膈疝	diaphragmatic hernia
根端囊肿	radicular cyst
梗阻	obstruction
宫颈癌	cervical carcinoma
供血动脉	feeding artery
佝偻病	rickets
孤立	solitary
骨岛	bone island
骨梗死	bone infarction
骨化	ossification
骨化性肌炎	myositis ossificans
骨化性纤维瘤	ossifying fibroma
骨棘形成	bone spur formation
骨骺板	epiphyseal plate
骨骺线	epiphyseal line
骨瘤	osteoma
骨膜和骨内膜	periosteum and internal periosteum
骨膜反应	sub-periosteal reaction
骨膜三角	codman triangle
骨肉瘤	osteosarcoma
骨软骨瘤	osteochondroma
骨软骨炎	osteochondrosis
骨髓瘤	myeloma
骨纤维异常增殖症	albright syndrome
骨小梁	trabecula

骨性关节炎	osteoarthritis
骨样骨瘤	ostemoid osteoma
骨质坏死	osteonecrosis
骨质软化	osteomalacia
骨质疏松	osteoporosis
骨质硬化	osteosclerosis
骨赘	osteophyte
关节积液	joint effusion
关节强直	ankylosis
关节退行性病变	degeneration of joint
关节脱位	dislocation
灌肠	enema
冠状动脉栓塞	coronary embolization
冠状动脉狭窄	coronary artery stenosis
冠状动脉造影	coronary arteriography
光滑	smooth
过敏性肺炎	allergic pneumonia
海绵状血管瘤	cavernous angioma
含铁黄素沉着症	hemosiderosis
后床突截断	amputation of the posterior clinoid process
蝴蝶形	butterfly-shaped
弧线形	curvilinear
化脓性鼻窦炎	suppurative sinusitis
化脓性骨髓炎	purulent osteomyelitis
化脓性关节炎	pyogenic arthritis
环状胰	annular pancreas
环状增强	circular enhancement
缓慢	sluggish
坏死	necrosis
回波时间	echo time
喙突	coracoid process
混合密度	heterogeneous density
霍奇金淋巴瘤	Hodgkin lymphoma
激惹	irritation

畸形性骨炎	osteitis deformans
急腹症	acute abdomen
急性胆囊炎	acute cholecystitis
急性机械性小肠梗阻	acute mechanical intestinal obstruction
急性粟粒性肺结核	acute miliary tuberculosis
急性胃炎	acute gastritis
急性胰腺炎	acute pancreatitis
脊髓空洞症	syringomyelia
脊髓压迫	compression of spinal cord
脊髓圆锥	conus medullaris
脊索瘤	chordoma
继发性肺结核	secondary pulmonary tuberculosis
假关节形成	pseudoarthrosis
肩胛骨	scapula
间质性肺炎	interstitial pneumonia
健侧	intact side
剑突	xiphoid process
浆液性囊腺瘤	serous cystadenoma
僵硬	stiffness, rigidity
交叉韧带	cruciate ligament
角切迹	angular incisure
胶样囊肿	colloid cyst
胶质瘤	glioma
结肠间位	colon interposition
结肠截断征	colon-cut-off sign
结核性脑膜炎	tuberculous meningitis
结节病	sarcoidosis
结节状	nodular
结节状硬化	tuberous sclerosis
结节状增强	nodular enhancement
浸润	infiltration
近侧	proximal side
进展性胃癌	advanced gastric carcinoma
胫骨粗隆	tibia tuberosity

经颈动脉穿刺血管造影	direct carotid puncture angiography
经皮肝穿刺胆管造影	percutaneous transhepatic cholangiography
精原细胞瘤	seminoma
颈静脉球瘤	glomus jugulare tumor
静脉畸形	venous malformation
静脉性血管瘤	venous angioma
静脉早现	early filling of the vein
纠集	converging
局部	localized, regional
局灶性结节增生	focal nodular hyperplasia, FNH
巨人症	giantism
均匀密度	homogeneous density
卡罗里病	Caroli disease
龕影(壁龕)	niche
髁间隆起	intercondyloid eminence
空蝶鞍	empty sella
空洞	cavity
空气支气管征	air bronchogram
库欣病	cushing disease
髌臼	acetabulum
溃疡	ulcer
溃疡性结肠炎	ulcerative colitis
扩大	enlargement
扩张	dilatation
扩张动脉	dilated artery
阑尾结石	appendicoliths
阑尾类癌	carcinoid of the appendix
类风湿性关节炎	rheumatoid arthritis, RA
肋骨	costal bone
肋软骨	costal cartilage
肋间隙	intercostal space
泪腺混合瘤	mixed tumor of lacrimal gland
泪腺肿瘤	tumor of lacrimal gland
淋巴管瘤	lymphangioma

淋巴结肿大	lymph node enlargement
淋巴瘤	lymphoma
流空现象	flow empty phenomena
隆起	prominence, eminence
颅内血肿	intracranial hematoma
颅内压增高	increased intracranial pressure
颅前窝	anterior cranial fossa
颅咽管瘤	craniopharyngioma
卵石征	cobble-stone sign
轮廓、外形	outline, contour
麻痹性肠梗阻	paralytic ileus
马蹄肾	horseshoe kidney
马尾粘连	adhesion of cauda equina
脉络丛前动脉	anterior choroidal artery
脉络膜丛钙化	calcification of choroid plexus
毛刺状、针状	speculated
毛细血管扩张症	capillary telangiectasia
弥漫性肝病	diffuse lesions of liver
弥散	diffuse
模糊	hazy
囊性	cystic
囊性畸胎瘤	cystic teratoma
脑包虫病	cerebral hydatidosis
脑挫裂伤	contusion and laceration of brain
脑挫伤	contusion of brain
脑底异常血管网症 (烟雾病)	abnormal hypervascularity of vascular net of cerebral basilar area(moyamoya disease)
脑梗死	cerebral infarction
脑灰质移位	cerebral heterotopic gray matter
脑棘球蚴病(脑包虫病)	echinococcosis of brain(hydatid disease of brain)
脑脊液鼻漏	cerebro-spinal rhinorrhea
脑裂畸形	schizencephaly
脑裂伤	laceration of brain
脑膜瘤	meningioma

脑膜脑膨出	meningoencephalocele
脑膜膨出	meningocele
脑囊虫病	cerebral cysticercosis
脑内血肿	intracerebral hematoma
脑脓肿	brain abscess
脑软化	encephalomalacia
脑水肿	edema of the brain
脑萎缩	brain atrophy
脑血管畸形	cerebral vascular malformation
脑颜面血管瘤病	encephalotrigeminal angiomatosis
内囊前肢	anterior limb of internal capsule
内生性软骨瘤	enchondroma
黏液囊肿	mucocele
颞骨骨折	fracture of temporal bone
扭转	volvulus
浓缩	concentration
帕金森病	Parkinson disease
排空	evacuation
膀胱尖	apex of bladder
膀胱炎	cystitis
膀胱造影	cystography
膀胱肿瘤	tumor of urinary bladder
胚胎性肿瘤	embryonal tumor
膨胀	distention
皮革状胃(硬变性胃炎)	linitis plastica
疲劳骨折	fatigue fracture
脾破裂	rupture spleen
皮样囊肿	dermoid cyst
皮质骨	bone cortex
皮质旁软骨瘤	ecchondroma
偏心性	eccentric
胼胝体发育不全	agenesis of corpus callosum
片状	patchy
贫血	anemia

平滑肌瘤	leiomyoma
屏状核	claustrum
破骨性	osteoclastic
破坏	destruction
气钡双对比灌肠	air-barium double - contrast enema
气腹	pneumoperitoneum
气球征	ballooning sign
气栓	air embolism
气胸	pneumothorax
憩室炎	diverticulitis
浅表隆起型	elevated type
前床突	anterior clinoid process
前底段	anterior basal segment
前弓	anterior arch
前角(额角)	anterior( frontal ) horn
前交通动脉	anterior communicating artery
前列腺癌	prostate cancer
前列腺增生	prostatic hyperplasia
前纵韧带	anterior longitudinal ligament
嵌入骨折	impacted fracture
腔隙性梗死	lacunar infarction
强直性脊柱炎	ankylosing spondylitis, AS
青枝性骨折	greenstick fracture
缺损	defect
缺血坏死	avascular necrosis
日光状	sunburst
溶骨性	osteolytic
柔软	soft, doughy
蠕动	peristalsis
乳腺癌	breast cancer
乳腺导管扩张症	mammary duct ectasia
乳腺结构不良	mammary dysplasia
软骨肉瘤	chondrosarcoma
软组织肿块	soft tissue mass

锐利	sharp
腮腺混合瘤	mixed tumor
三角肌	deltoid
散在	scattered
桑葚样钙化	mulberry-like calcification
上颌骨骨折	fracture of maxilla
上丘脑	epithalamus
骰骨	cuboid bone
少突胶质细胞瘤	oligodendroglioma
神经鞘瘤	neurinoma
神经纤维瘤	neurofibroma
神经纤维瘤病	neurofibromatosis
渗出	exudation
肾结石	renal calculus
肾脓肿	abscess of kidney
肾旁前间隙	anterior pararenal space
肾缺如	renal agenesis
肾上腺结核	adrenal tuberculosis
肾上腺脑白质营养不良	adrenoleukodystrophy
肾上腺脓肿	adrenal abscess
肾上腺皮质	cortex of adrenal gland
肾上腺皮质癌	adrenocortical carcinoma
肾上腺嗜铬细胞瘤	adrenal pheochromocytoma
肾上腺髓脂瘤	adrenal myelolipoma
肾上腺萎缩	adrenal atrophy
肾上腺增生	adrenal hyperplasia
肾外伤	renal injuries
肾性骨病	renal osteopathy
肾性骨营养不良	renal osteodystrophy
肾盂癌	renal pelvic carcinoma
肾盂肾炎	pyelonephritis
肾周间隙	perirenal space
生理性钙化	physiologic calcification
生殖细胞瘤	germinoma

实变	consolidation
十二指肠良性肿瘤	benign tumors of the small intestine
十二指肠平滑肌肉瘤	duodenal leiomyosarcoma
十二指肠憩室	duodenal diverticula
石骨症	osteopetrosis
石棉肺	asbestosis
室管膜瘤	ependymoma
室管膜炎	ependymitis
室间隔缺损	ventricular septal defect, VSD
嗜酸细胞肉芽肿	eosinophilic granuloma
室网膜母细胞瘤	retinoblastoma
实质	solid
食管 X 线摄影	esophagography
食管痉挛	esophagism
食管静脉曲张	esophageal varix
食管溃疡	esophageal ulcer
食管裂孔疝	esophageal hiatus hernia
食管平滑肌瘤	esophageal leiomyoma
食管憩室	esophageal diverticulum
食管肉瘤	esophageal sarcoma
食管息肉	esophageal polyp
食管消化性溃疡	Barrett esophagus
食管炎	esophagitis
食管硬皮病	esophageal scleroderma
输尿管囊肿	cyst of ureter
竖脊肌	erector spinae
数字减影血管造影	digital subtraction angiography (DSA)
双侧	bilateral
双轨征	double linear sign
水样密度	watery density
顺行尿路造影	antegrade urography
死骨	sequestrum
松果体钙化	pineal calcification
松果体瘤	pinealoma

髓母细胞瘤	medulloblastoma
缩小	shrink
锁骨	clavicle
体素	voxel
条索	stripe
听神经瘤	acoustic neuroma
同侧	ipsilateral
桶状胸	barrel chest
痛风	gout
透光	transparent
透亮	lucency
透明隔发育畸形	deformity of pellucid septum
退行性骨关节病	degenerative osteoarthritis
脱髓鞘及变性病变	degenerative and demyelinating disease
椭圆形	oblong
网状的	reticular
韦格肉芽肿	Wegner granuloma
尾骨	coccyx
尾椎	coccygeal vertebrae
胃癌	gastric carcinoma
胃窦炎	antral gastritis
胃泌素瘤	gastrinoma
胃石	gastric bezoar
胃炎	gastritis
纹状体	corpus striatum, striate body
无尿	anuria
矽肺	silicosis
息肉	polyp
吸收	resorption
系统性红斑狼疮	systemic lupus erythomatosus, SLE
狭窄	stenosis, narrowing
先天性肥厚性幽门狭	congenital hypertrophic pyloric stenosis
先天性肛门直肠畸形	congenital anorectal anomalies
先天性脑积水	congenital hydrocephalus

先天性食管闭锁	congenital esophageal atresia
先天性心脏病	congenital heart disease
纤维化	fibrosis
纤维腺瘤	fibroadenoma
纤维性病变	fibrotic lesion
腺肌瘤病	adenomyomatosis
腺瘤	adenoma
线状	linear
项圈征	collar sign
小脑扁桃体疝	tonsillar herniation
小脑下前动脉	anterior inferior cerebellar artery
楔骨	cuneiform bone
斜坡	clivus
心包渗出	pericardial effusions
心包增厚和钙化	pericardial thickening and calcification
心电门控	electrocardiographic gating
心肌病	cardiomyopathy
心绞痛	angina pectoris
新生儿缺氧缺血性脑病	neonatal hypoxic-ischemic encephalopathy
信号强度减弱	decreased signal intensity
星形细胞瘤	astrocytoma
星状	stellate
形态	shape
杏仁体	amygdaloid body
胸壁	chest wall
胸骨	sternum
胸骨柄	manubrium sterni
胸廓	thoracic cage
胸膜凹陷	pleural indentation
胸膜增厚、粘连及钙化	pleural thickening, adhesion and calcification
胸内甲状腺肿	intrathoracic goiter
胸腔积液	hydrothorax, pleural effusion
胸腺瘤	thymoma
血管痉挛	vasospasm

血管瘤	angioma
血管平滑肌脂肪瘤	angioliomyolipoma
血管造影	angiography
血色素沉着症	hemochromatosis
血行播散型肺结核	hematogenous pulmonary tuberculosis
压迫性肺不张	compressive atelectasis
压迫性骨折	compression fracture
牙龈癌	gingival cancer
牙源性囊肿	odontogenic cyst
哑铃形	dumb-bell
咽旁脓肿	parapharyngeal abscess
炎性假瘤	inflammatory pseudotumor
炎性肉芽肿	inflammatory granuloma
延迟充盈	delayed filling
眼部异物	ocular foreign body
眼眶蜂窝织炎	orbital phlegmonous cellulites
眼眶骨折	orbital fractures
眼眶横纹肌肉瘤	orbital rhabdomyosarcoma
仰卧前后位胸片	antero-posterior supine chest film radiography
叶间积液	interlobar effusion
液气胸	hydropneumothorax
胰岛素瘤	insulinoma
遗尿	enuresis
异位妊娠	ectopic pregnancy
异位肾	ectopic kidney
异位嗜铬细胞瘤	ectopic pheochromocytoma
引流静脉	draining vein
硬化	sclerosis
硬膜外脓肿	epidural abscess
硬膜外隙	epidural abscess
硬膜外血肿	epidural hematoma
硬膜下积液	subdural fluid accumulation
硬膜下血肿	subdural hematoma
尤文肉瘤	Ewing sarcoma

原发综合征	primary complex
远侧	distal side
晕征	halo sign
造影肌不良反应(副反应)	adverse reaction(effect)
枕大池	cisterna magna
增强	enhancement
增生	proliferation, hyperplasia
增殖	hyperplasia
谵妄	delirium
展神经	abducent nerve
占位效应	mass effect
掌骨	metacarpal bones
正铁血红蛋白	methemoglobin
支气管肺隔离症	bronch-pulmonary sequestration
支气管肺炎	bronchopneumonia
支气管扩张	bronchiectasis
支气管囊肿	bronchogenic cyst
支气管气像	air bronchogram
肢端肥大症	acromegaly
直肠壶腹	ampulla of rectum
脂肪肝	fatty liver
脂肪瘤	lipoma
脂肪肉瘤	liposarcoma
跖骨	metatarsal bones
趾骨	phalanges of toes
指骨	phalanges of fingers
致密	dense
终板	end plate
中耳癌	carcinoma of middle ear
肿瘤染色	tumor stain
肿瘤血管	tumor vessel
肿胀	swelling
蛛网膜囊肿	arachnoid cyst
主动脉瓣关闭不全	aortic insufficiency

主动脉瓣狭窄	aortic stenosis
主动脉炎	aortitis
主动脉瘤	aneurysm of the aorte
主肺动脉窗层面	aortopulmonary window level
柱状	pillar
柱状支气管扩张	cylindroid bronchiectasis
椎骨	vertebrae
椎间孔	intervertebral foramen
椎间盘	intervertebral disc
椎间隙	intervertebral space
子宫内膜癌	endometrial adenocarcinoma
子宫平滑肌瘤	uterine leiomyoma
紫绀	cyanosis
阻塞性肺不张	obstructive atelectasis
左心房增大	left atrial enlargement
左心室增大	left ventricular enlargement

[ G e n e r a l I n f o r m a t i o n ]

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