

盆腔疾病 MRI 表现诊断

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前列腺 MRI 扫描方式

- 平扫：横轴面、冠状和矢状面
呼吸触发 不加脂肪抑制和采
用脂肪抑制 FSE T2WI
T1WI*（同反相位图像）
DWI b=1000 3D LAVA
- 动态增强扫描：3D LAVA

MRI 前列腺基本扫描方式

- 层厚 4~5 毫米，间隔 0.5~1 毫米
- DWI：1.5 T b = 500 ~ 800
3.0 T b = 800 ~ 1000
- 动态增强扫描（LAVA）
层厚一般 3~5 毫米

MRI 对比剂的选用

- Gd-DTPA 细胞外间隙非特异性
- MultiHance（莫迪司）双重特异性

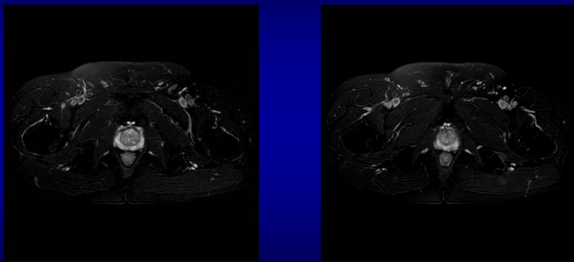
前列腺 MRI 正常表现

- 前列腺不大, 中央叶(带)信号均匀或者混杂, 动脉血供丰富, 不均匀强化
- 外周带呈长T2信号(高信号), 动脉期未见异常强化

前列腺增生 MRI 表现

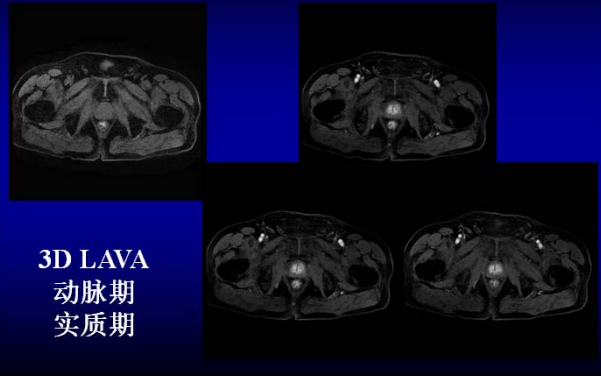
- 前列腺增大, 中央叶(带)信号混杂, 动脉血供丰富, 不均匀强化
- 外周带呈长T2信号(高信号) 动脉期未见异常强化

前列腺正常表现



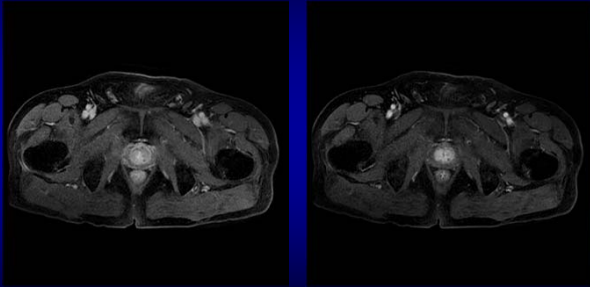
T2WI

前列腺正常表现



3D LAVA
动脉期
实质期

前列腺正常表现



延迟期

前列腺癌 MRI

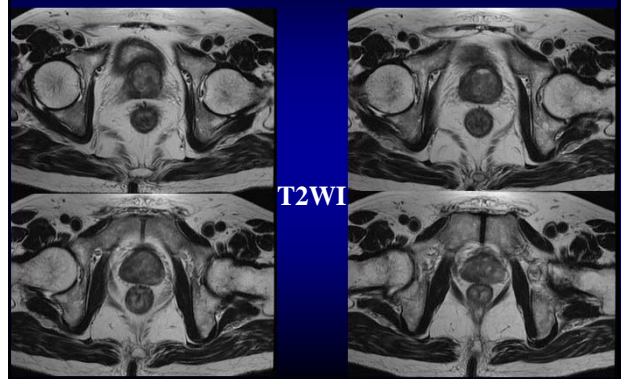
表现与诊断标准

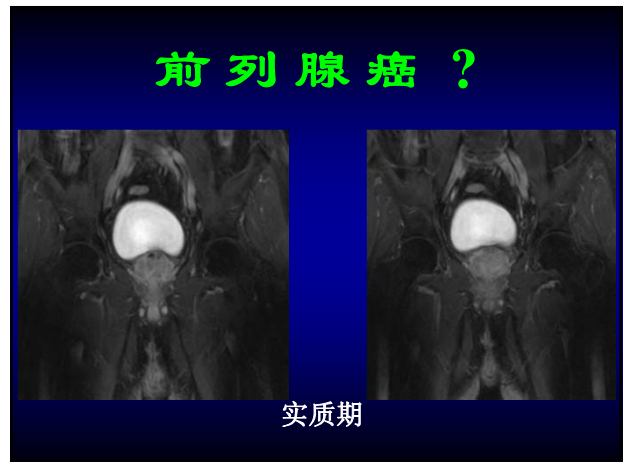
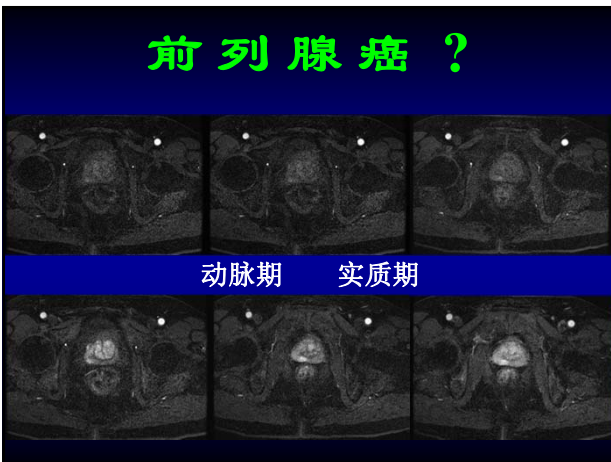
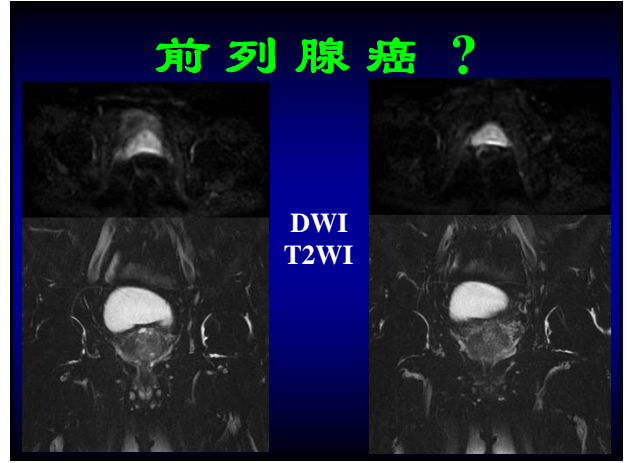
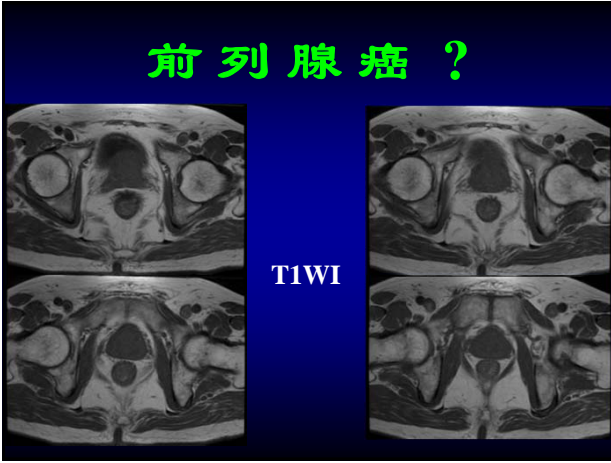
- 外周带呈短T2 异常信号 (低信号)
- DWI 病灶信号稍高
- 动脉期轻至中度异常异常强化 实质和延迟期廓清

病例简介

- 男，72岁，尿频尿急7年
发现 PSA 升高一月余
- PSA (总) 15.1ng/ml
PSA (游离) 1.05 ng/ml

前列腺癌？





诊 断

术前：前列腺右侧外周带异常信号，考虑前列腺癌可能性大

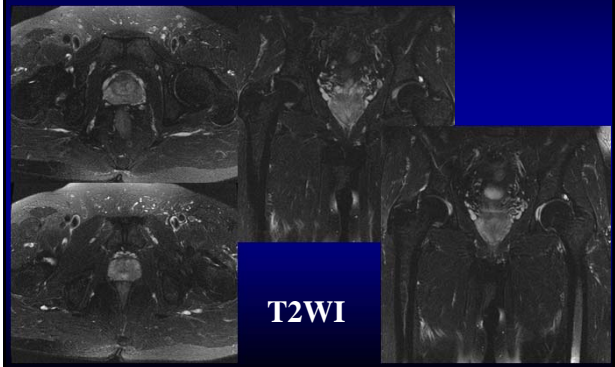
诊 断

病理：前列腺癌Gleason 评分 5+4=9分，肿瘤呈弥漫浸润生长，侵犯神经及局部被膜外组织，上切缘被膜见癌组织浸润，下切缘未见癌，双侧输精管切缘未见癌

病 例 简 介

- 男，72岁，发现PSA升高五月余
- PSA (总) 15 ng/ml
PSA (游离) 1.90 ng/ml

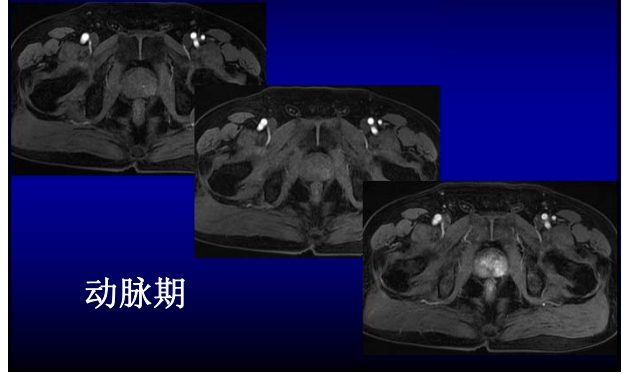
前列腺癌？



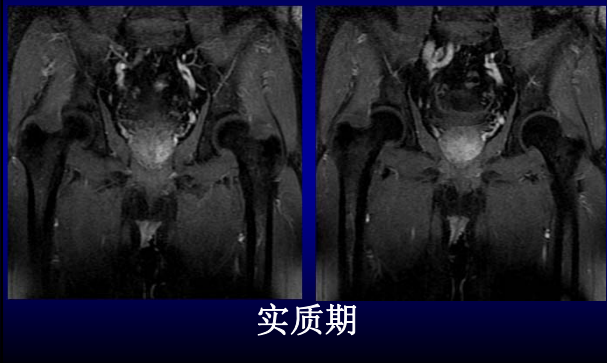
前列腺癌？



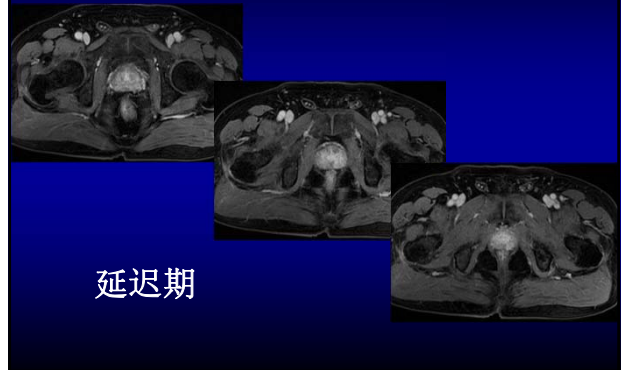
前列腺癌？



前列腺癌？



前列腺癌？



诊 断

术前：前列腺左侧外周带异常信号，考虑前列腺癌可能性大

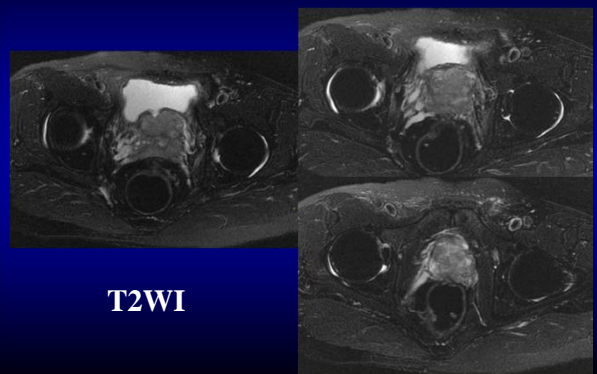
诊 断

病理：前列腺癌Gleason评分3+4=7分，双侧输精管管壁和双侧精囊腺见多量萎缩及挤压的小的腺体结构，免疫组化标记不支持癌累及；周围淋巴结未见癌（0/1）

病例简介

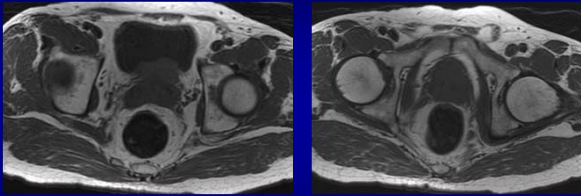
- 男，71岁，发现PSA升高一周
- PSA（总） 102 ng/ml
- PSA（游离） 16.6 ng/ml

前列腺癌？



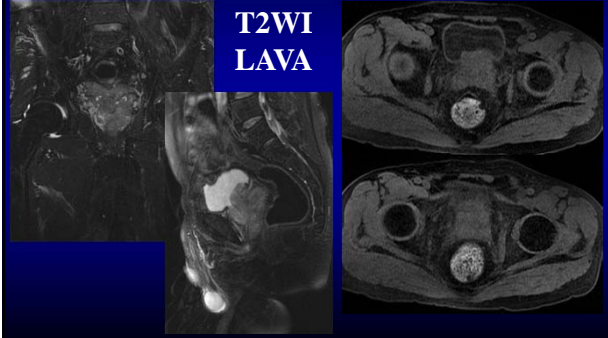
T2WI

前列腺癌？



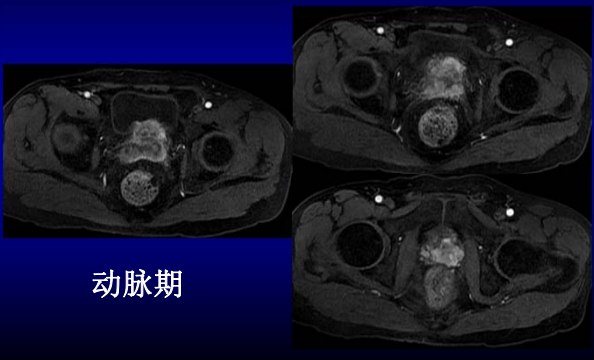
T1WI

前列腺癌？



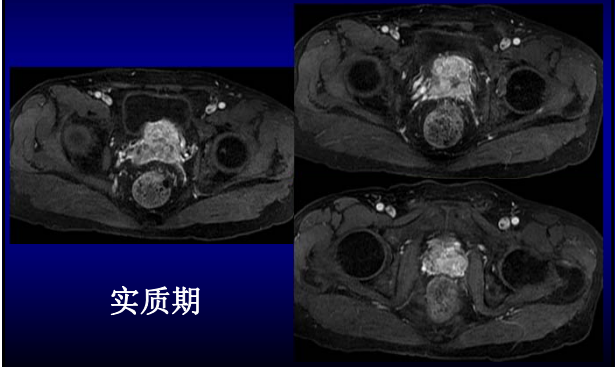
T2WI
LAVA

前列腺癌？

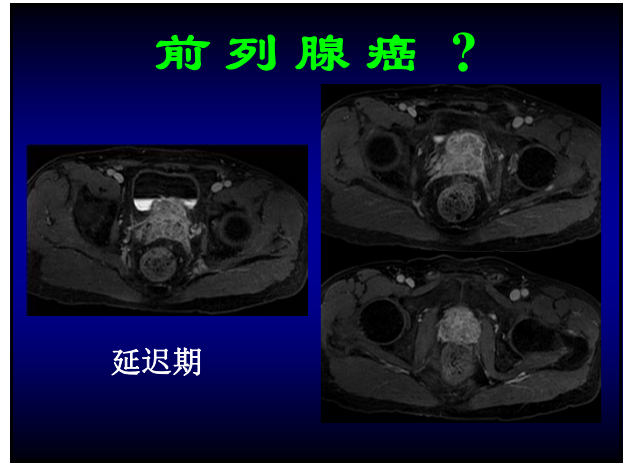
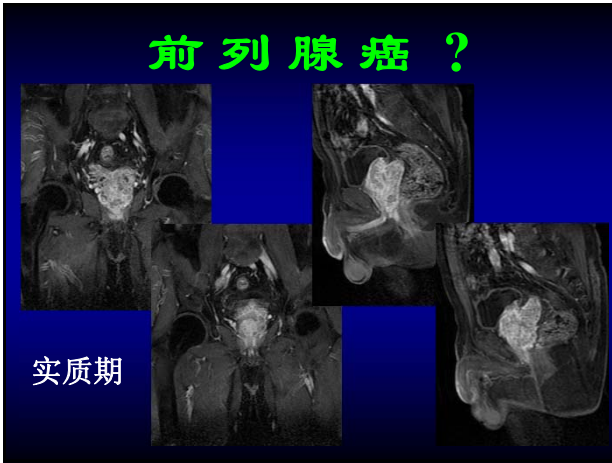


动脉期

前列腺癌？



实质期



诊断

术前：前列腺外周带弥漫异常信号，符合前列腺癌表现

This slide contains the text '诊断' (Diagnosis) in large green characters at the top. Below it, the text reads '术前：前列腺外周带弥漫异常信号，符合前列腺癌表现' (Pre-operative: Diffuse abnormal signal in the peripheral zone of the prostate, consistent with prostate cancer).

诊断

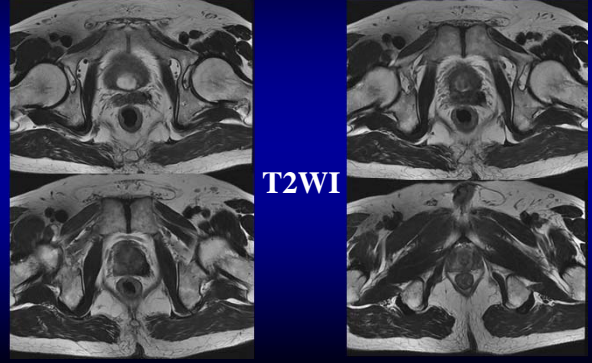
病理：(左底 左中 左尖/ 右底 右尖) 前列腺癌
Gleason 评分4+4=7分

This slide contains the text '诊断' (Diagnosis) in large green characters at the top. Below it, the text reads '病理：(左底 左中 左尖/ 右底 右尖) 前列腺癌' (Pathology: (Left base, Left middle, Left apex / Right base, Right apex) Prostate cancer) and 'Gleason 评分4+4=7分' (Gleason score 4+4=7 points).

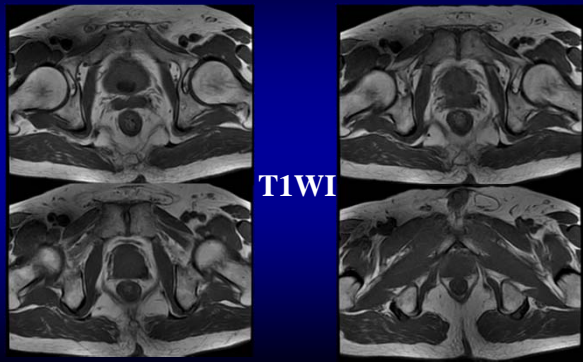
病例简介

- 男，66岁，排尿不畅4年余，外院经尿道前列腺切除后病理发现前列腺癌

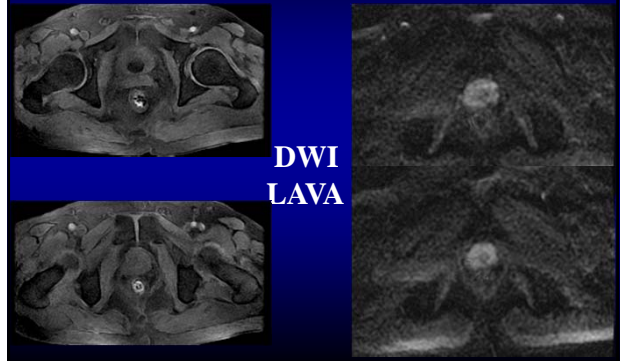
前列腺癌？



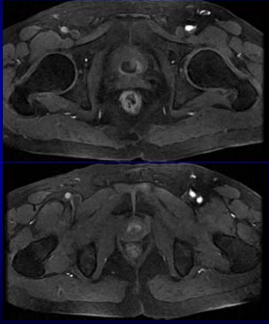
前列腺癌？



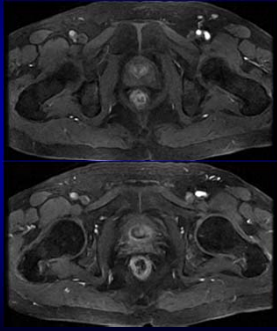
前列腺癌？



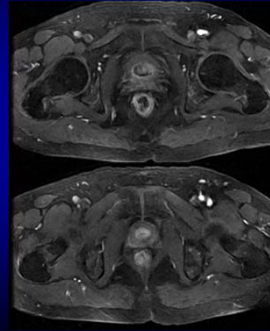
前列腺癌？



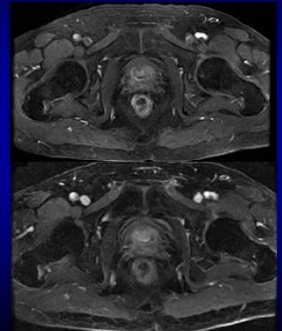
动脉期



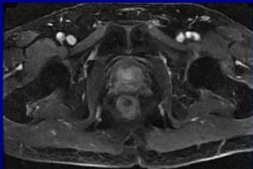
前列腺癌？



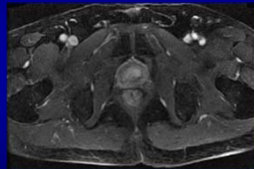
动脉期



前列腺癌？



实质期



诊断

术前：前列腺外周带弥漫异常信号，符合前列腺癌表现

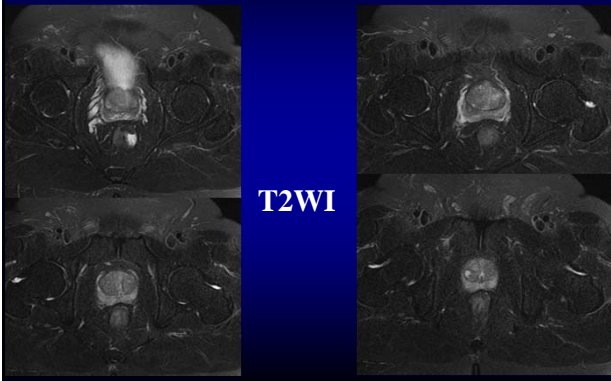
诊 断

病理：前列腺癌Gleason 评分3 + 5 = 8分，肿瘤细胞在前列腺内弥漫生长，细胞退变显著，局部见肉芽肿形成伴坏死及多核巨细胞反应；上切缘 下切缘 尿道断端和双侧精囊腺未见癌

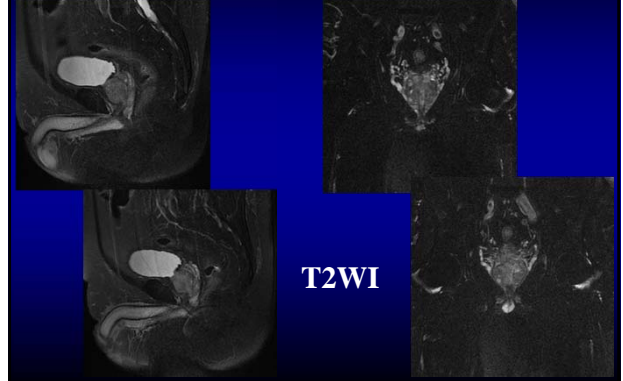
病例简介

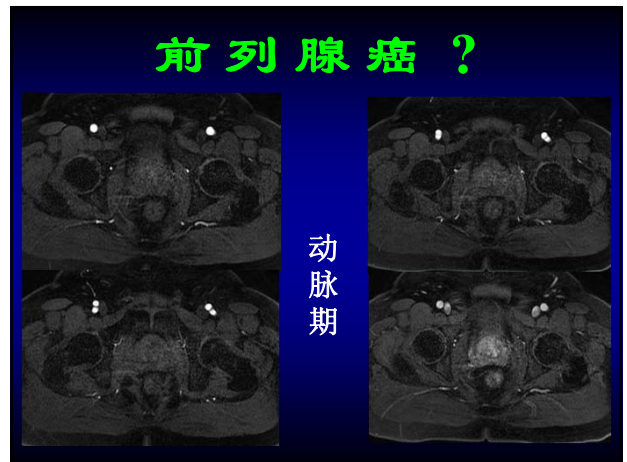
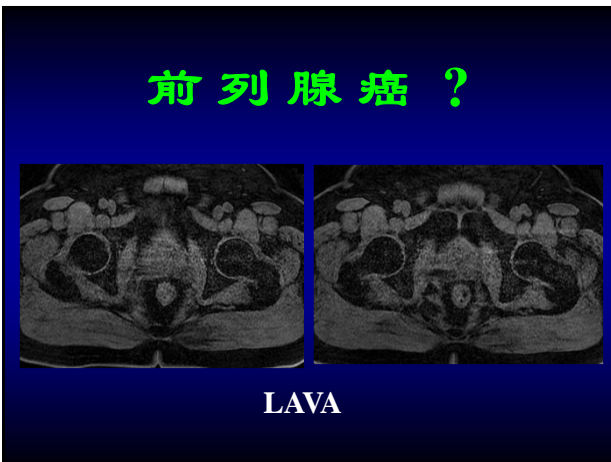
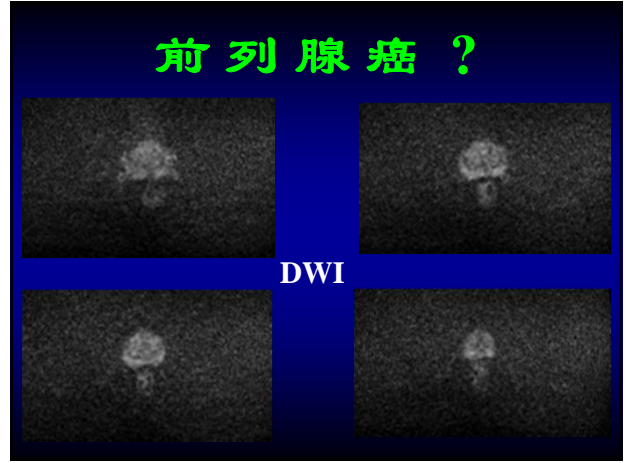
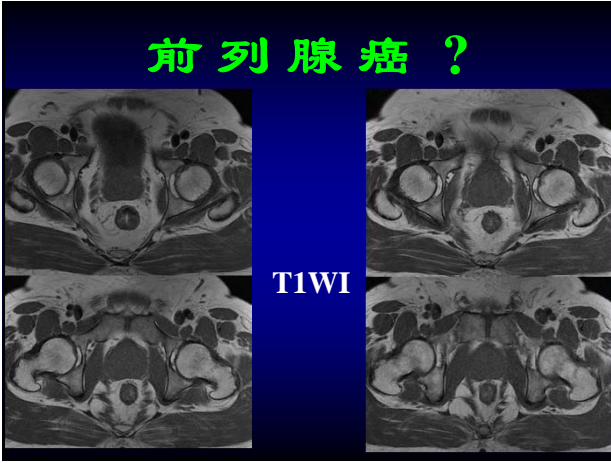
- 男，59岁，尿不尽一年
- 发现PSA高3月余 PSA 总 6.34 ng/ml PSA 游离 0.62 ng/ml

前列腺癌？

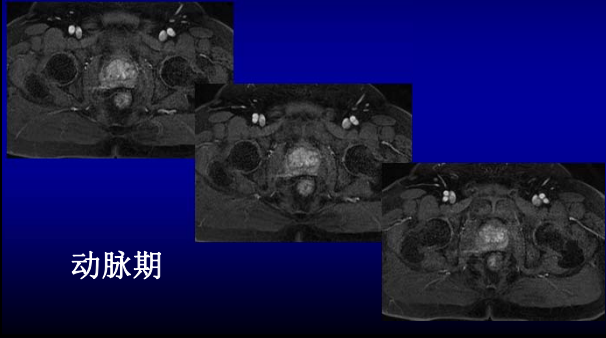


前列腺癌？

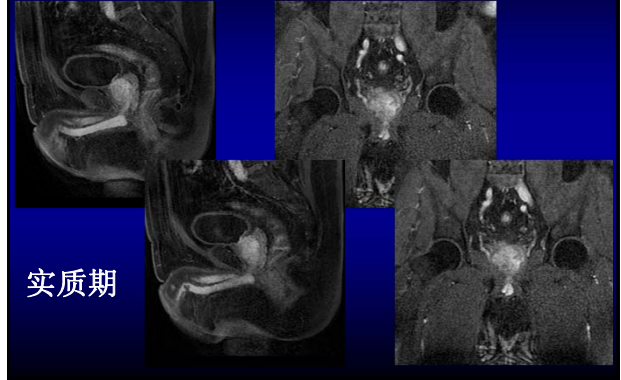




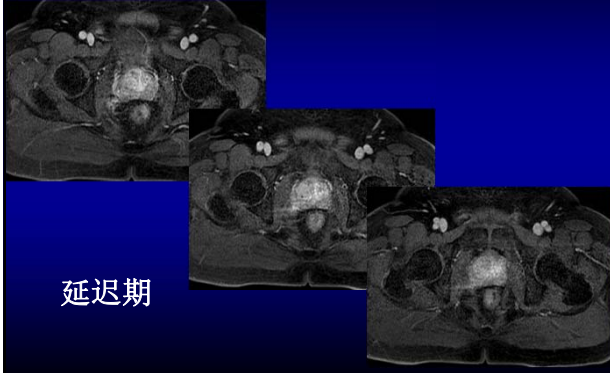
前列腺癌？



前列腺癌？



前列腺癌？



诊断

术前：前列腺右侧外周带
异常信号，前列腺癌可
能性大，建议：B超引
导下活检进一步确认

术前：前列腺增生

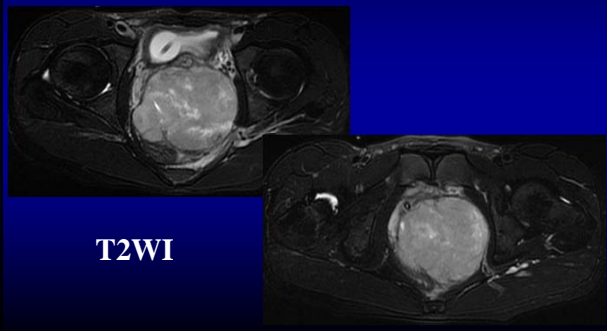
诊 断

活检后病理：右底含病灶
右中右尖，左底左
中左尖前列腺增生症

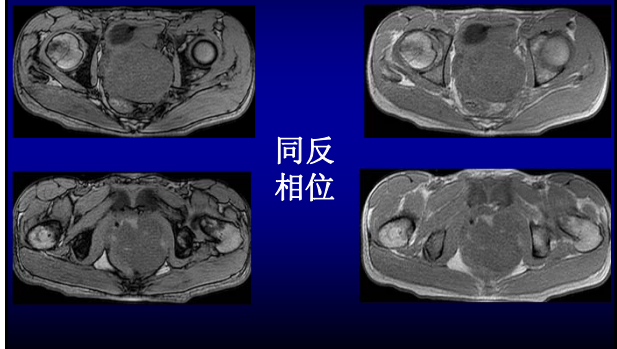
病例简介

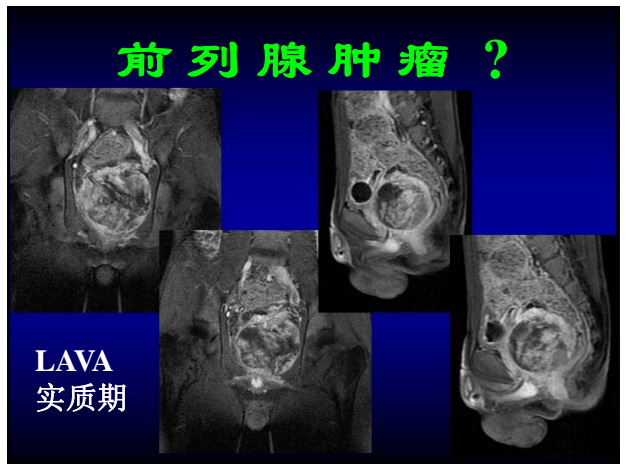
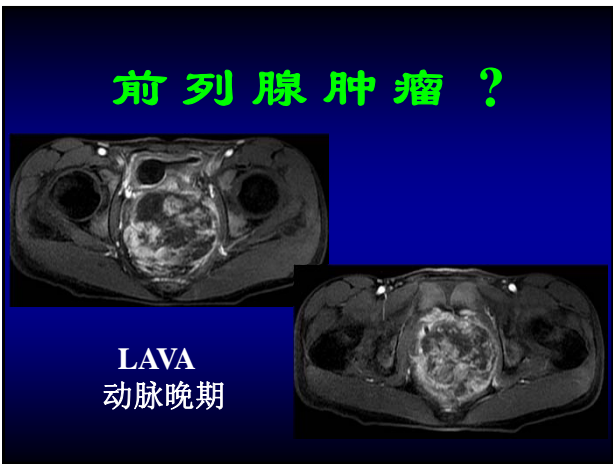
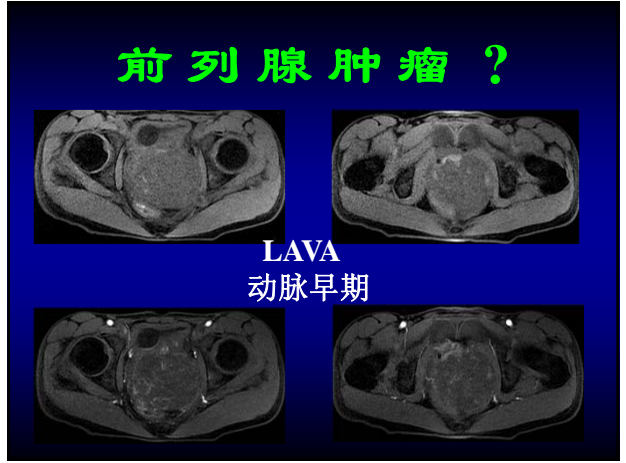
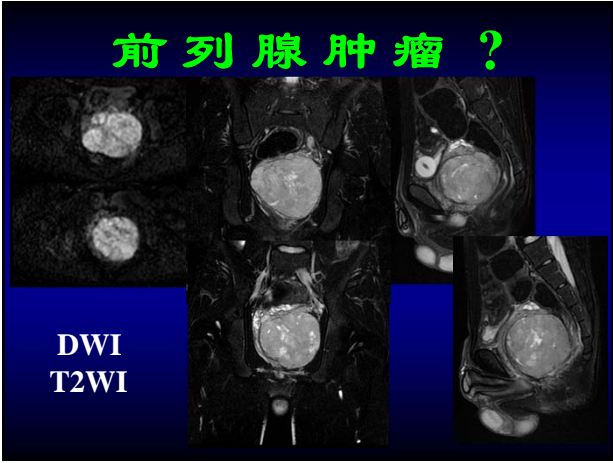
•男，18岁，肛门坠胀
感六月，排尿困难一月

前列腺肿瘤？

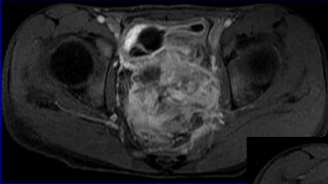


前列腺肿瘤？

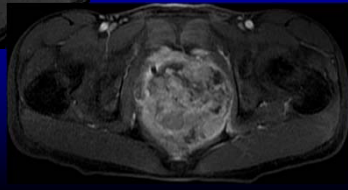




前列腺肿瘤？



LAVA
延迟期



诊断

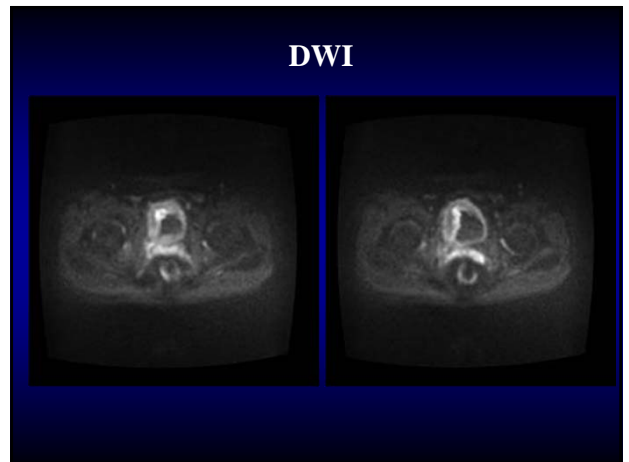
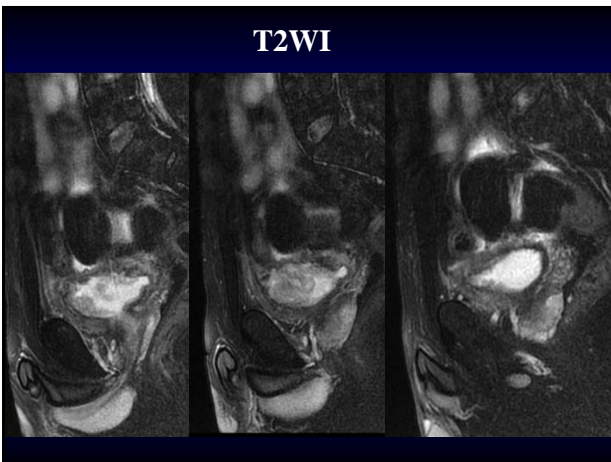
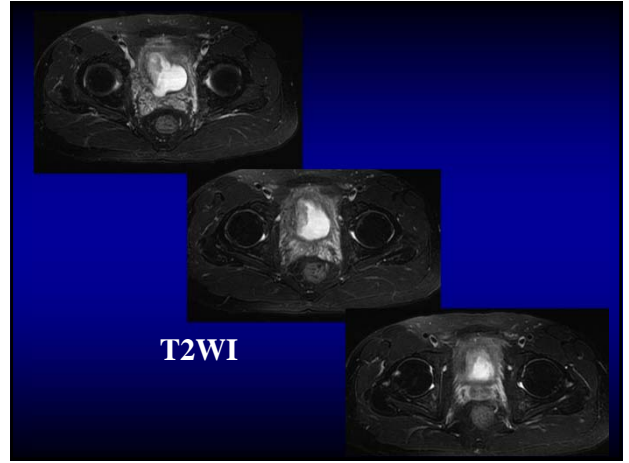
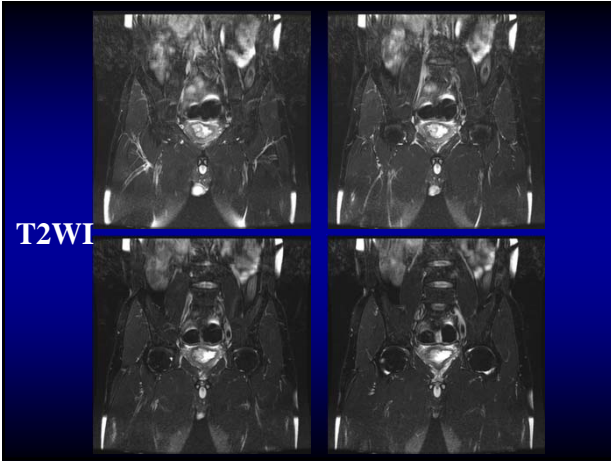
术前：盆腔巨大多血供肿瘤伴坏死出血，考虑：恶性肿瘤，以肉瘤可能性大

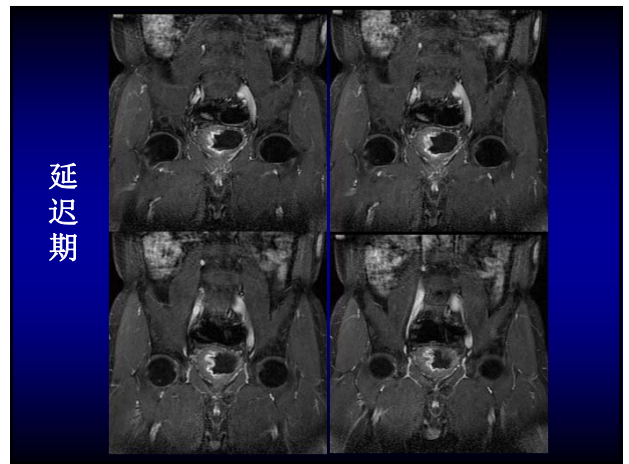
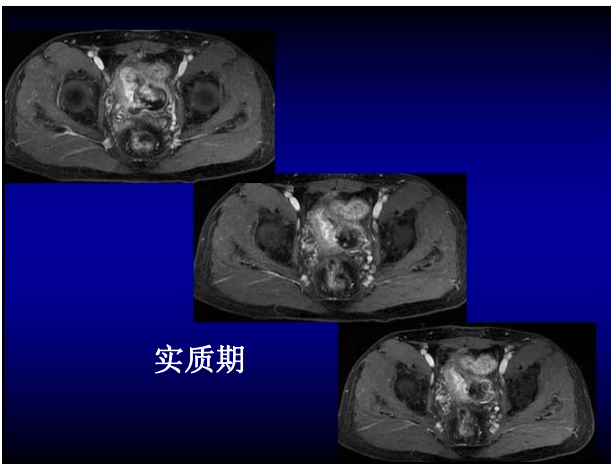
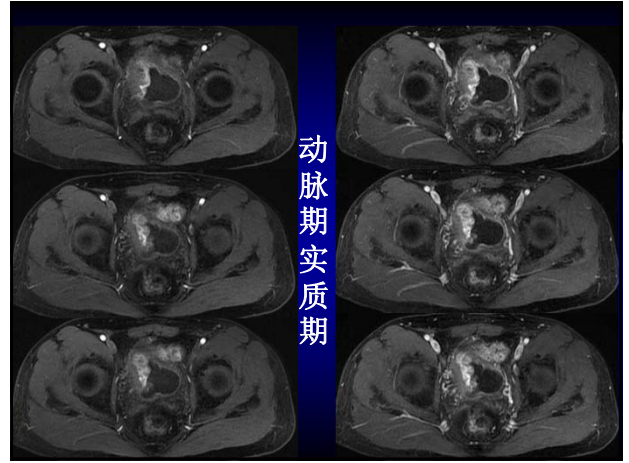
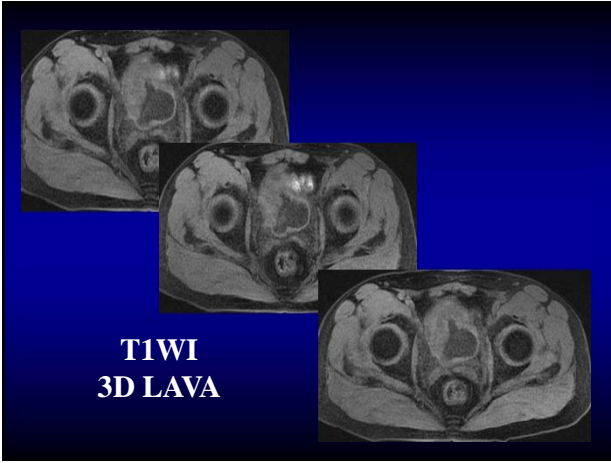
诊断

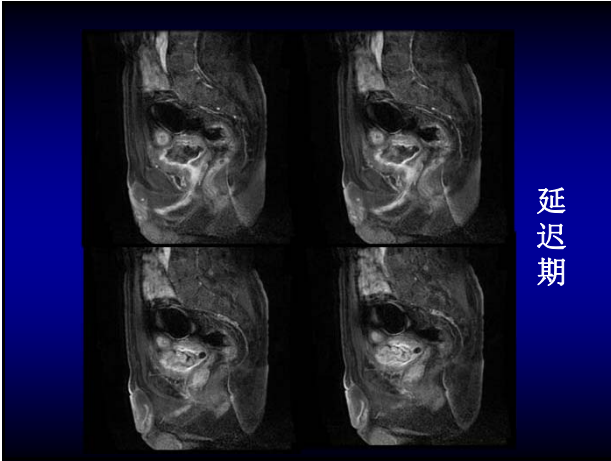
病理：前列腺肌源性恶性肿瘤，结合免疫组化考虑为胚胎性横纹肌肉瘤

病例简介

- M/50Y 主因间断血尿 8 个月入院，为终末血尿
- 无血块，无尿频尿急，无排尿困难







延迟期

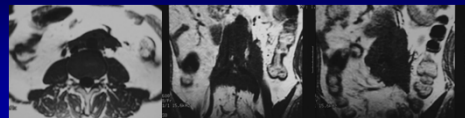
诊断

- 术前影像诊断：膀胱右侧壁富血供病变，考虑：恶性肿瘤，累及邻近结构
- 病理诊断：膀胱浸润性高级别尿路上癌，未累及肌层

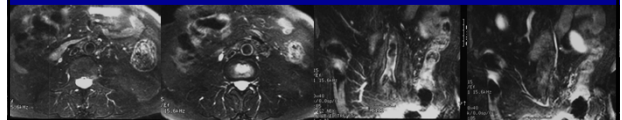
病例简介

- 56岁女性，高血压病史近2年
- 2年前行“腹膜后囊肿”手术切除

腹膜后肿瘤？



T1WI



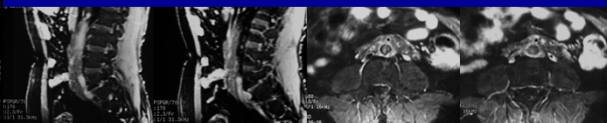
T2WI

腹膜后肿瘤 ?



毛细血管期或动脉期

门脉期或实质期



门脉期或实质期

延迟期

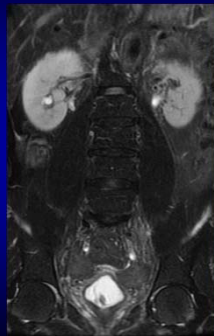
诊断

- 影像诊断：腹膜后纤维化

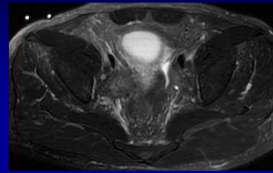
双输尿管下段病变 ?



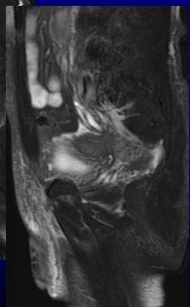
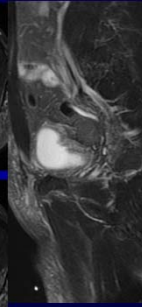
T2WI

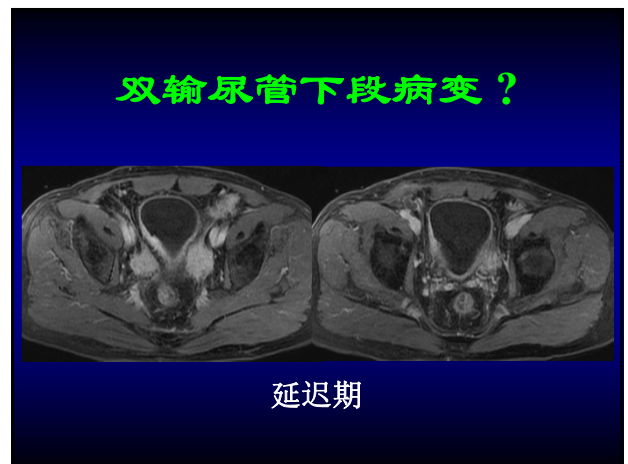
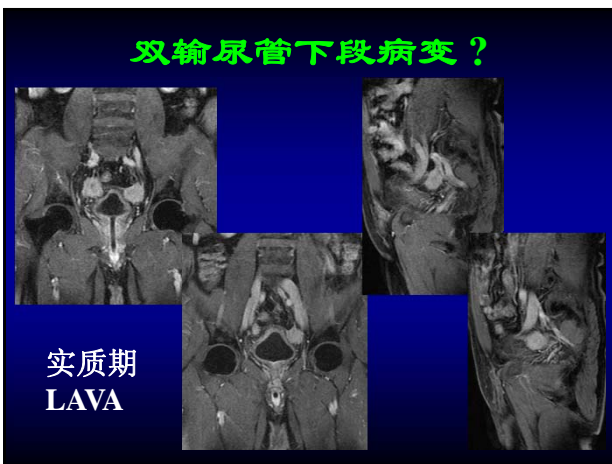
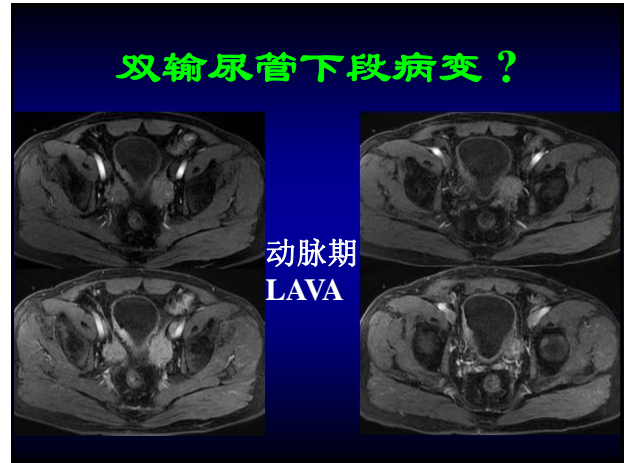
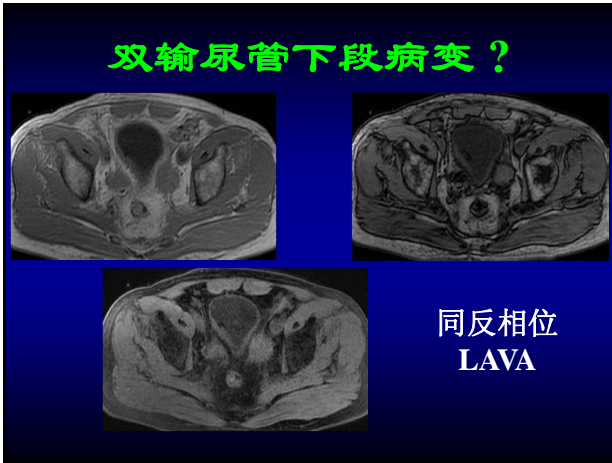


双输尿管下段病变 ?



T2WI





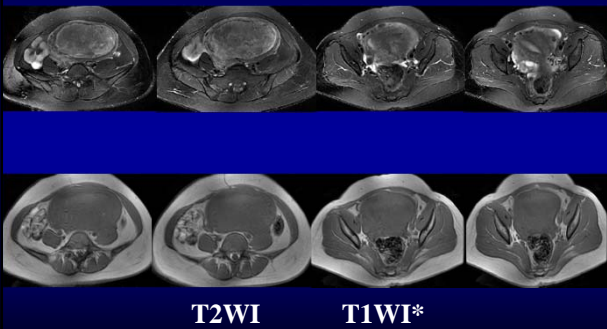
诊 断

- 术前影像诊断：双输尿管下段多血供病变累及性大双输尿管下段及膀胱，考虑：恶性肿瘤可能性大
- 术后病理诊断：肌纤维母细胞瘤，起自输尿管外膜和外肌层

病例简介

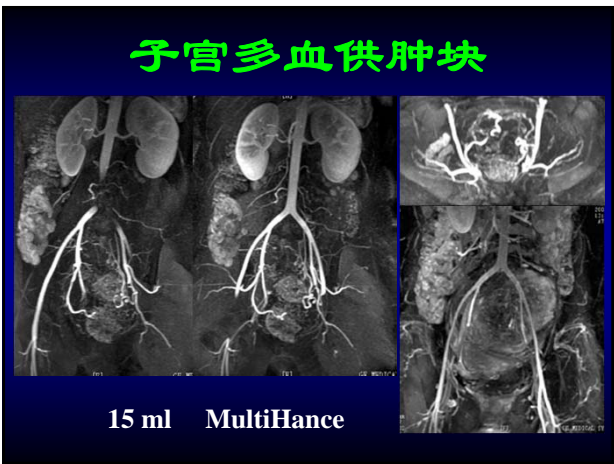
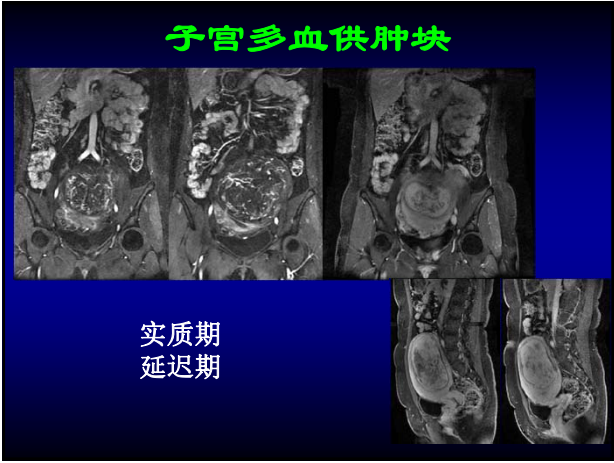
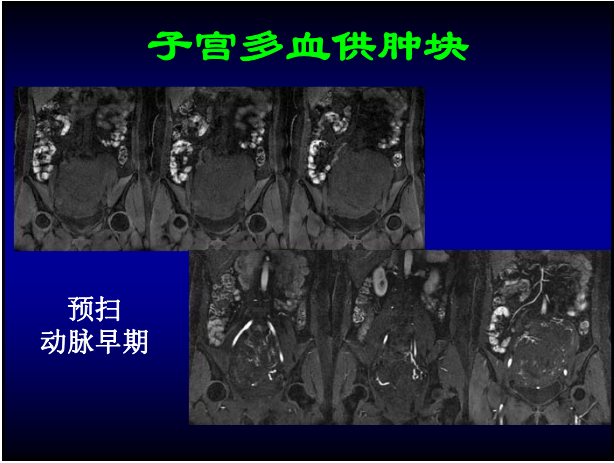
- 女，36岁，发现子宫占位十年余

子宫多血供肿块



子宫多血供肿块





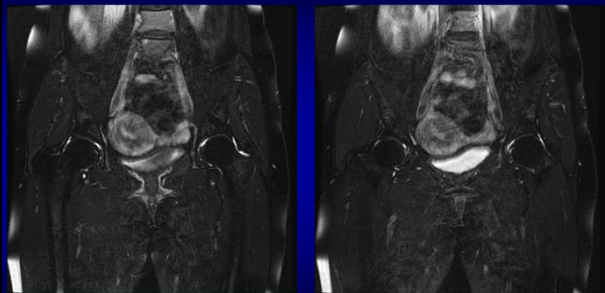
影像诊断

- 子宫多血供巨大肌瘤
- 建议：治疗后复查

病例简介

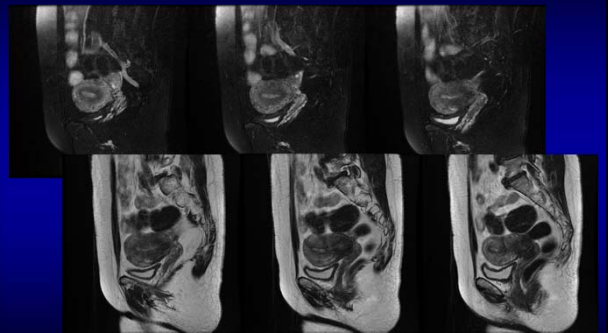
- 女，46岁，阴道不规则流血21天

子宫内膜病变？

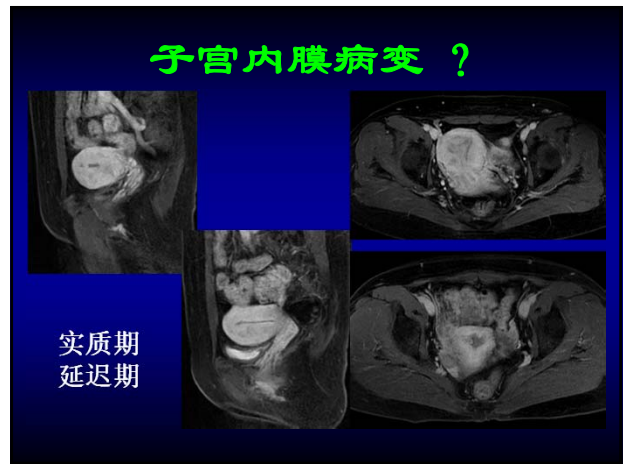
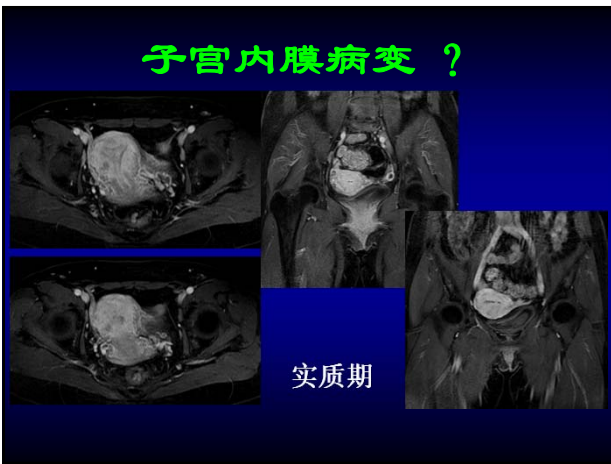
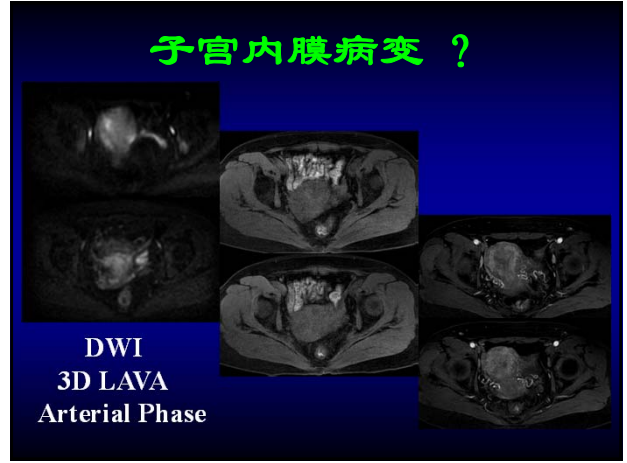
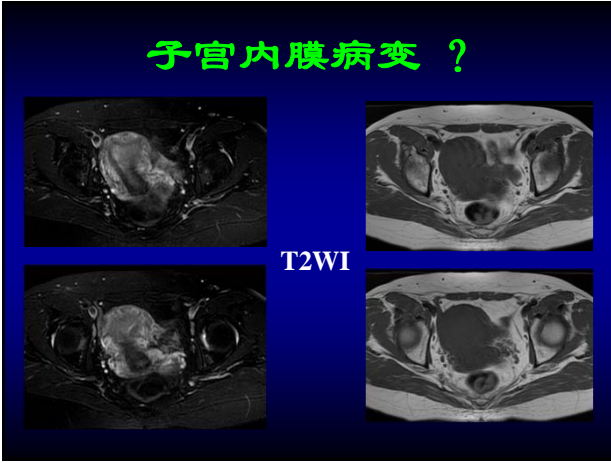


T2WI

子宫内膜病变？



T2WI



诊 断

- 术前：子宫内膜异常信号
- 病理：子宫内膜高分化内膜样癌，主要位于内膜层，局部浸润子宫浅壁肌层

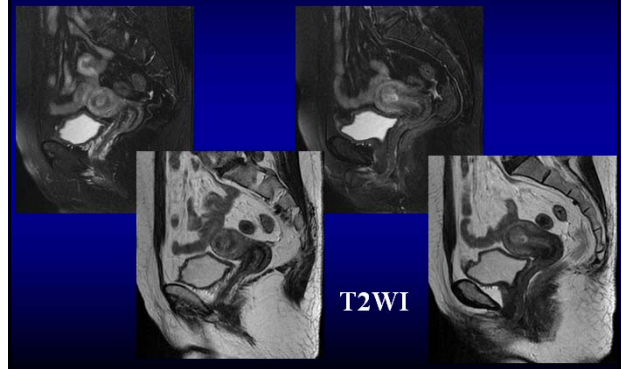
病例简介

- 女，58岁，阴道不规则出血1年，发现宫腔病变5天

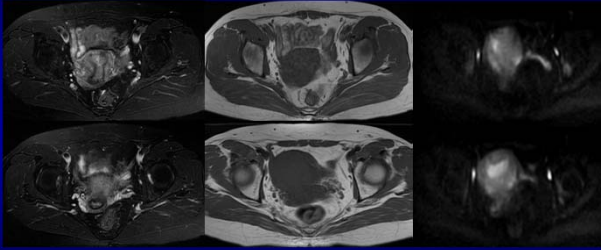
子宫内膜病变？



子宫内膜病变？

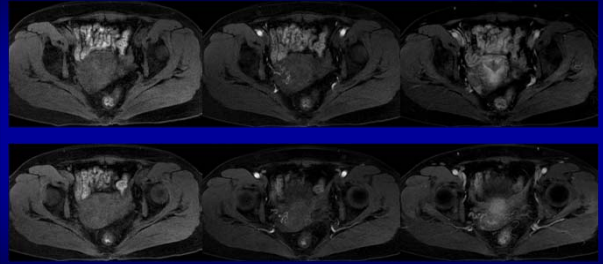


子宫内膜病变 ?



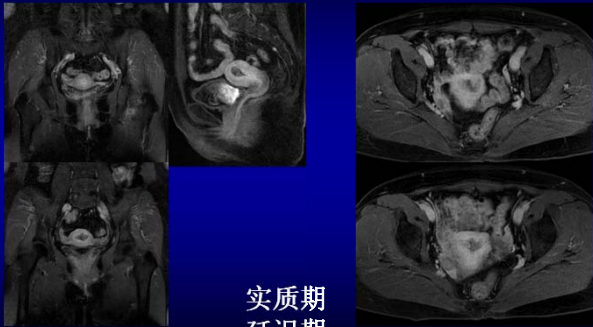
T2WI T1WI DWI

子宫内膜病变 ?



3D LAVA预扫 动脉期

子宫内膜病变 ?



实质期
延迟期

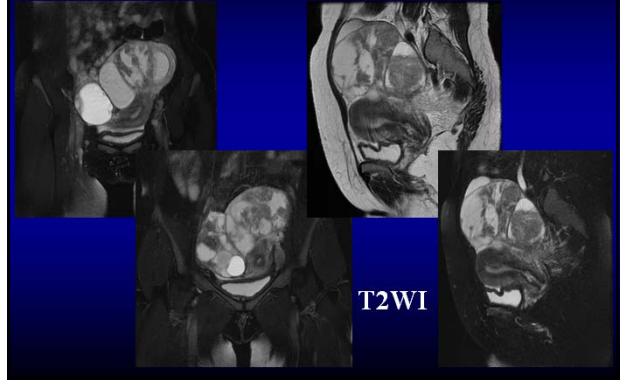
诊 断

- 术前：恶性肿瘤，子宫内膜癌可能性大
- 病理：子宫内膜高分化内膜样癌，浸润浅肌层

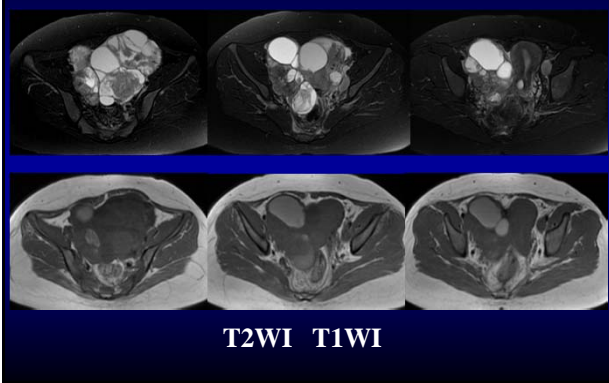
病例简介

•女，39岁，乳腺癌术后复查发现盆腔肿块1个月

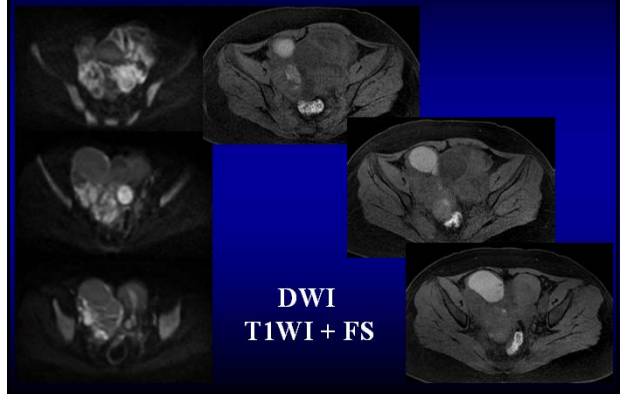
卵巢病变？

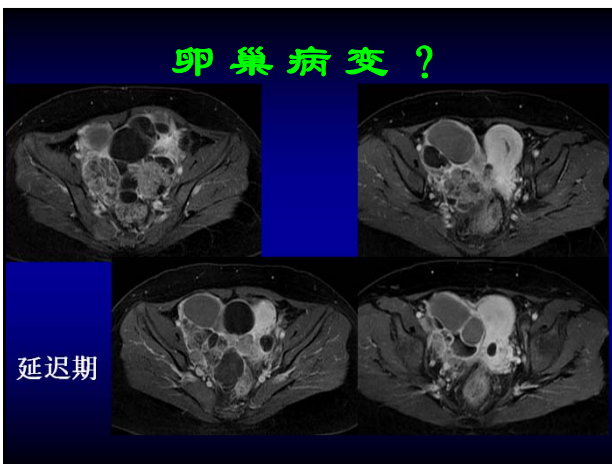
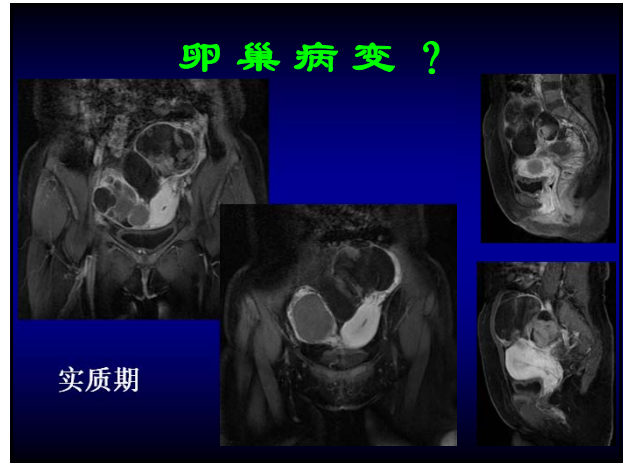
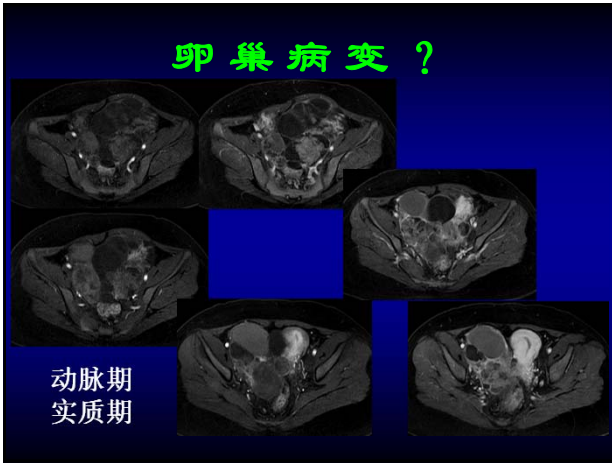


卵巢病变？



卵巢病变？





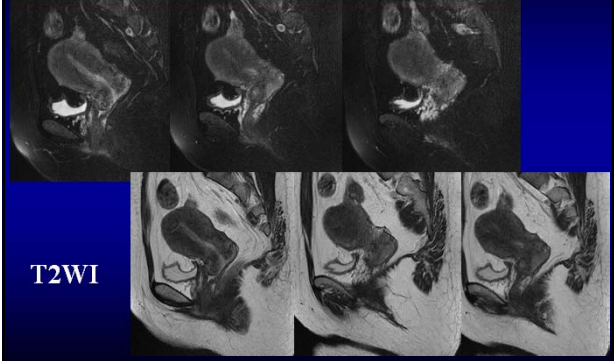
诊 断

- 术前：双侧附件区富血供囊实性病变伴出血，恶性肿瘤，卵巢癌（囊腺癌）可能性大
- 病理：双侧卵巢中低分化浆液性乳头状癌

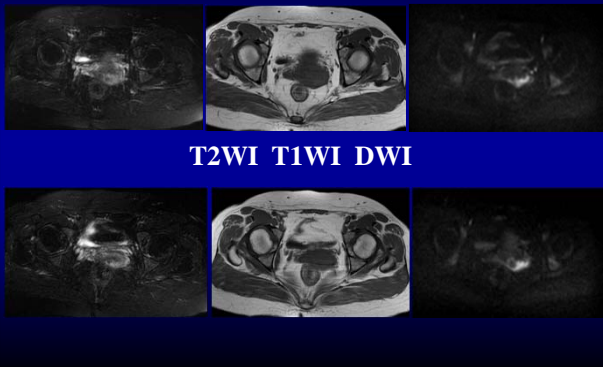
病例简介

•女，46岁，查体发现宫颈病变半个月

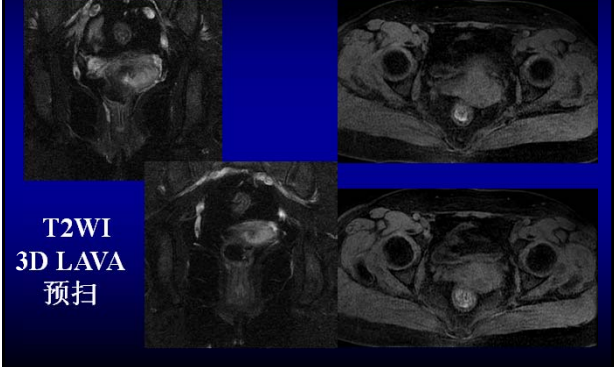
宫颈病变？

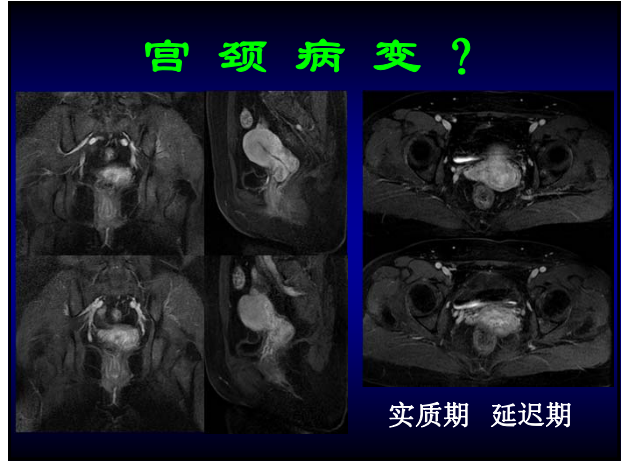
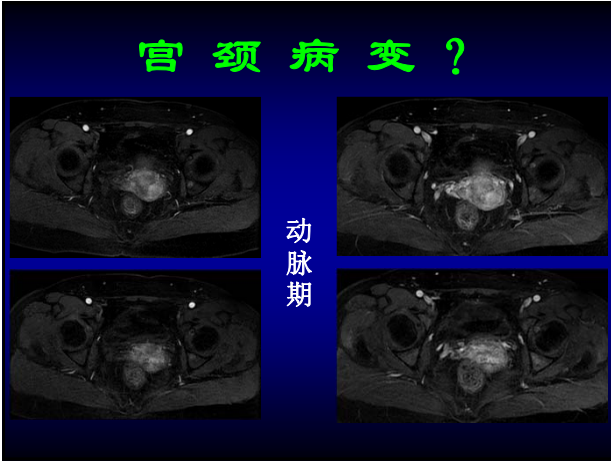


宫颈病变？



宫颈病变？



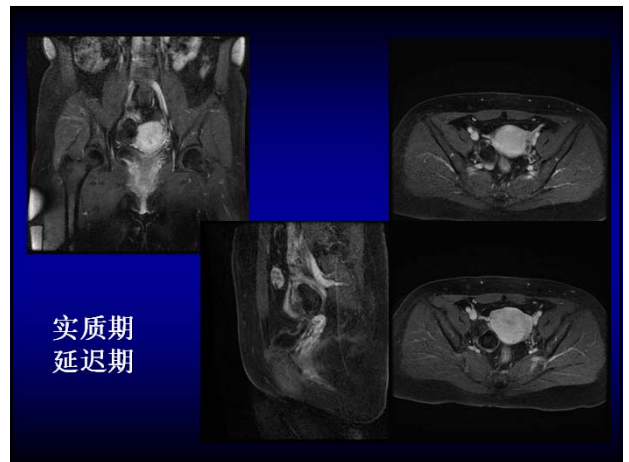
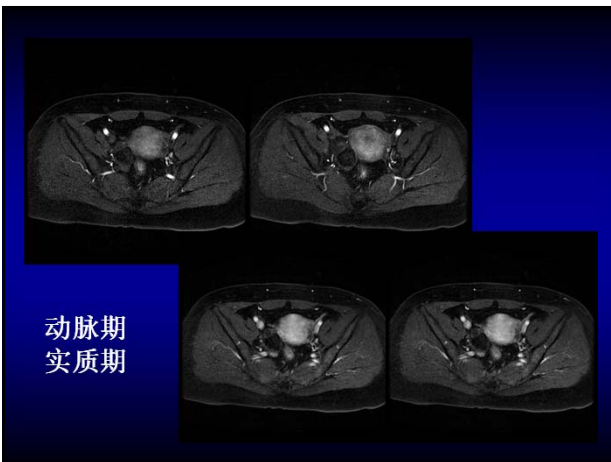
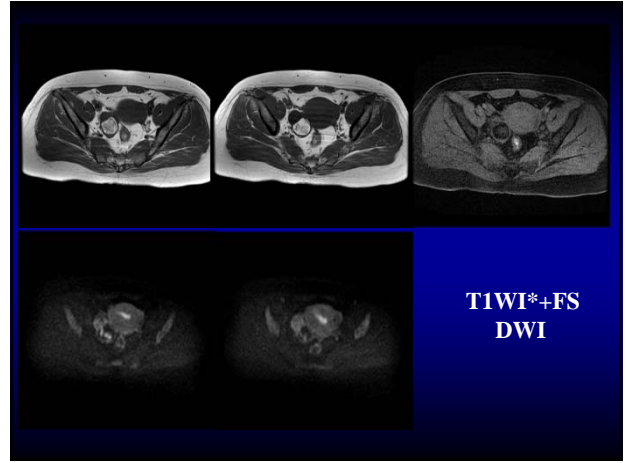
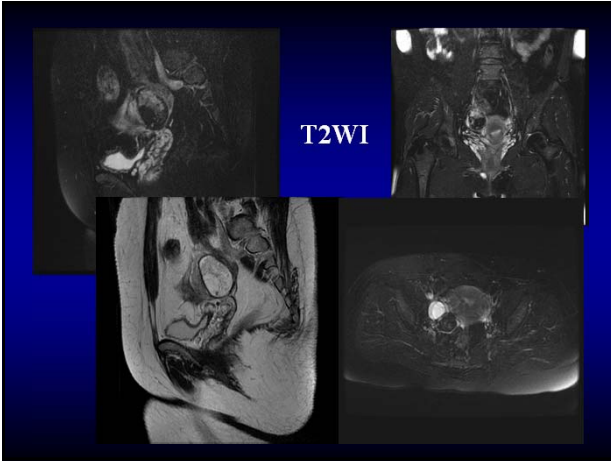


诊 断

- 术前：子宫颈部左后壁局限性富血供病变，恶性肿瘤，符合宫颈癌表现
- 病理：宫颈3-7点中低分化鳞状细胞癌

病例简介

- 47 岁女性，因阴道大流血发现宫颈癌



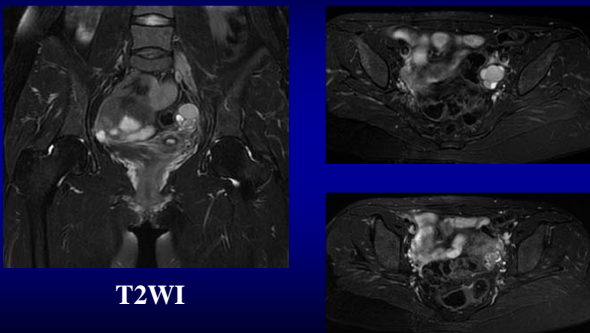
诊 断

- 术前诊断：右卵巢区含丰富脂肪病变，考虑良性，符合畸胎瘤表现
- 病理：畸胎瘤

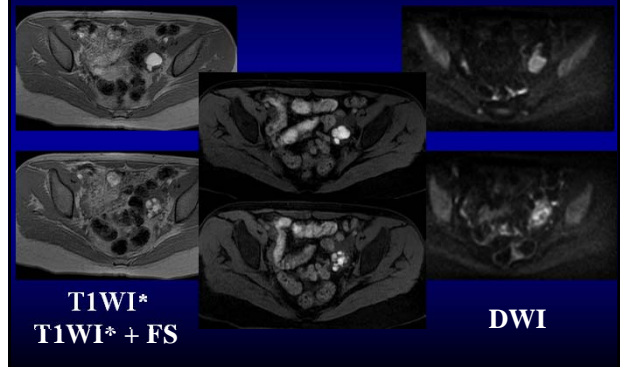
病例简介

- 女，29岁，腰痛1年，痛经进行性加重6个月

卵巢病变？



卵巢病变？



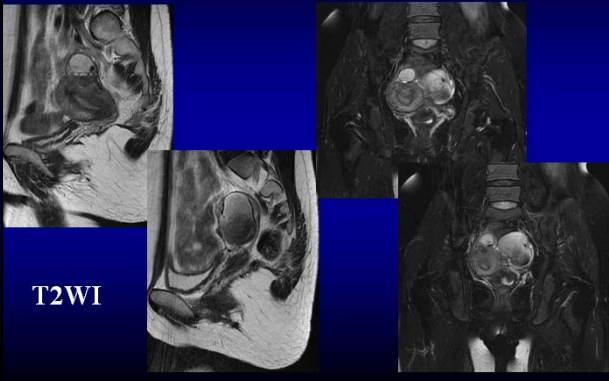
诊 断

- 术前：左卵巢囊肿并出血
(巧克力囊肿)
- 病理：左卵巢子宫内膜异位囊肿

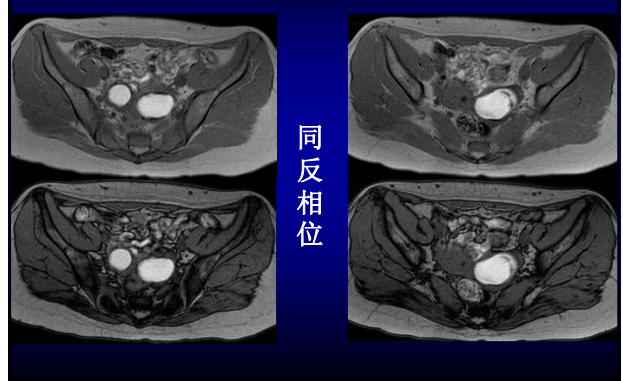
病例简介

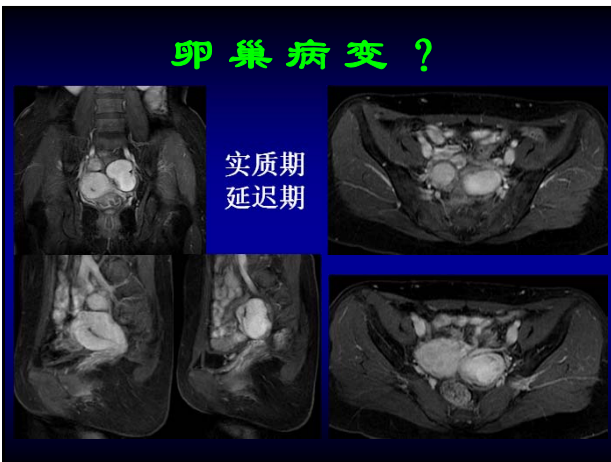
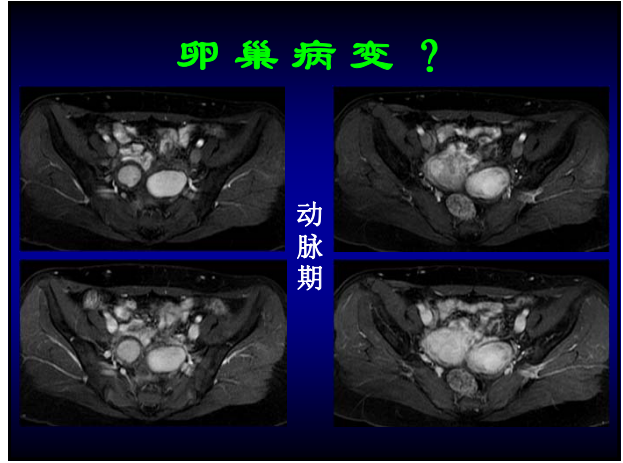
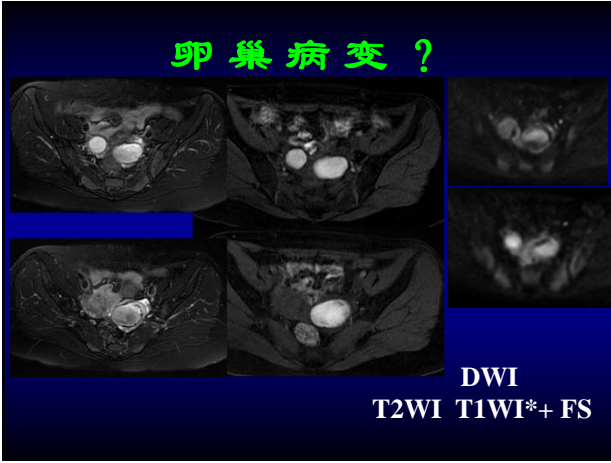
- 女，35岁，结婚12年
未避孕不孕，发现双
侧卵巢囊肿4个月

卵巢病变？



卵巢病变？





诊 断

- 术前：双侧卵巢囊肿并出血（巧克力囊肿）
- 病理：左右卵巢子宫内膜异位囊肿



谢谢！