

## 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

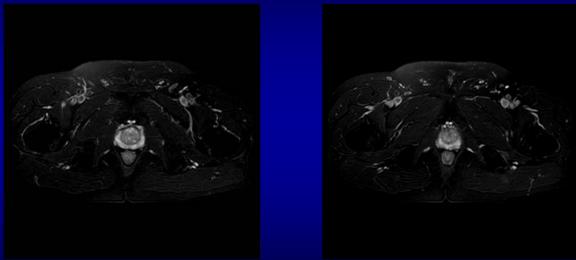
### 前列腺 MRI 正常表现

- 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

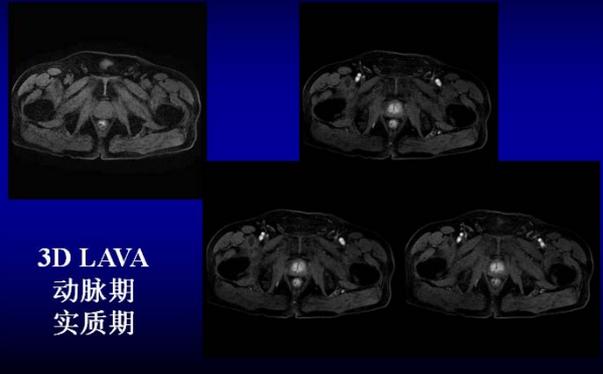
- 前列腺增大, 中央叶(带)信号混杂, 动脉血供丰富, 不均匀强化
- 外周带呈长T2信号(高信号) 动脉期未见异常强化

### 前列腺正常表现



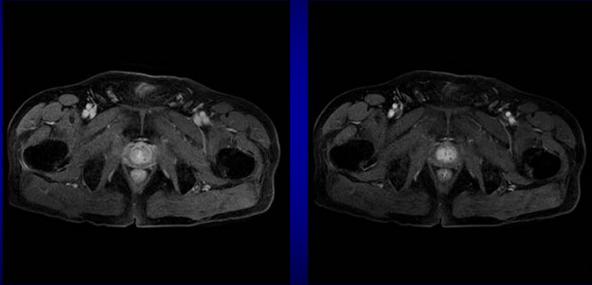
T2WI

### 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

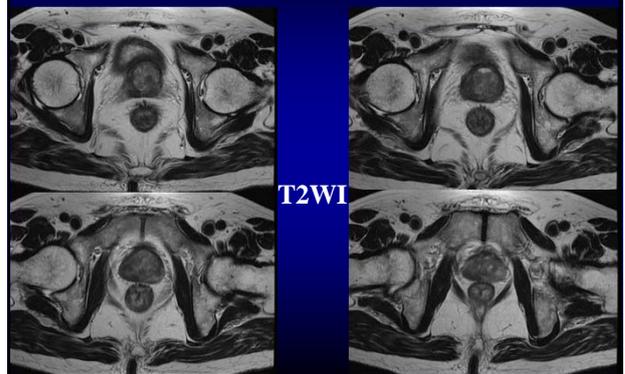
#### 表现与诊断标准

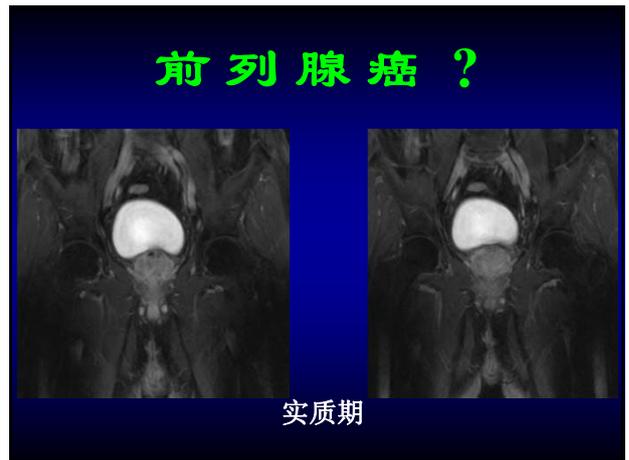
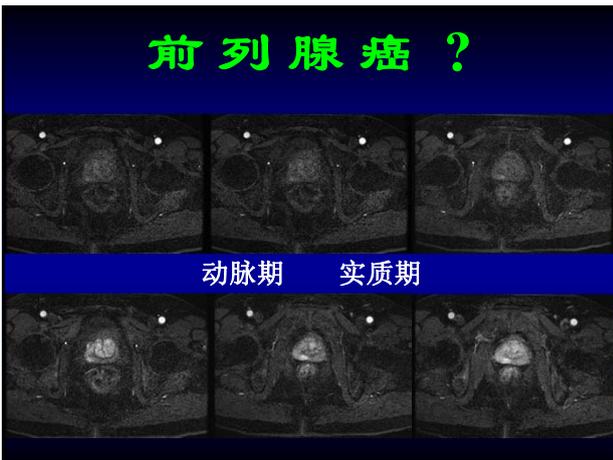
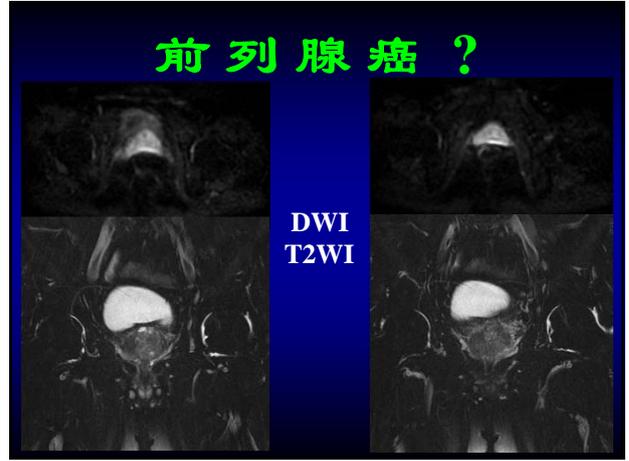
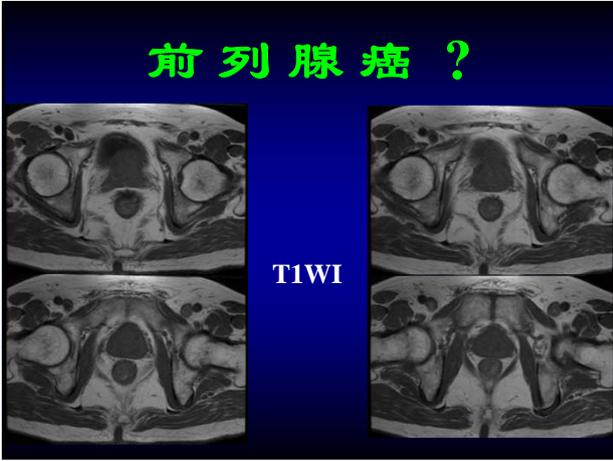
- 外周带呈短T2 异常信号 (低信号)
- DWI 病灶信号稍高
- 动脉期轻至中度异常异常强化 实质和延迟期廓清

### 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

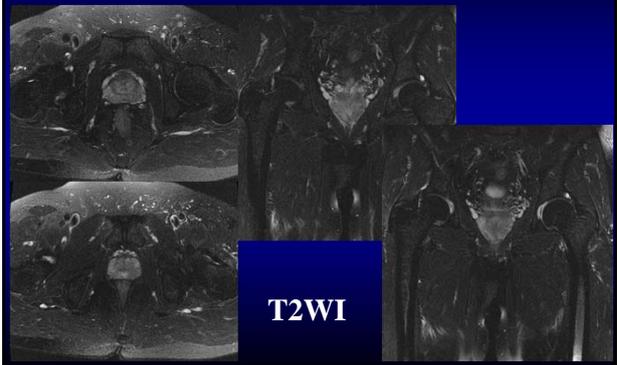
## 诊 断

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

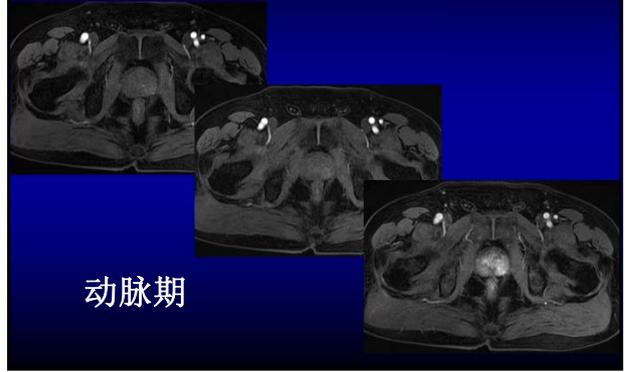
## 前列腺癌？



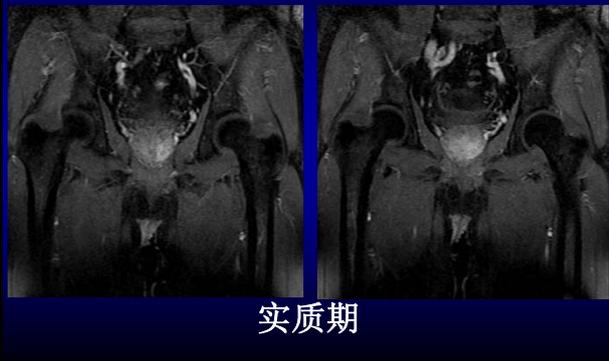
### 前列腺癌？



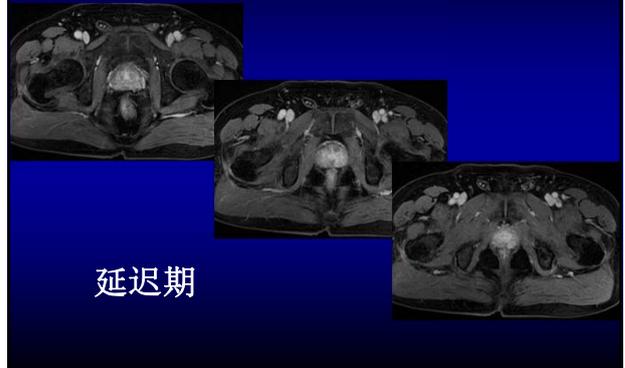
### 前列腺癌？



### 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

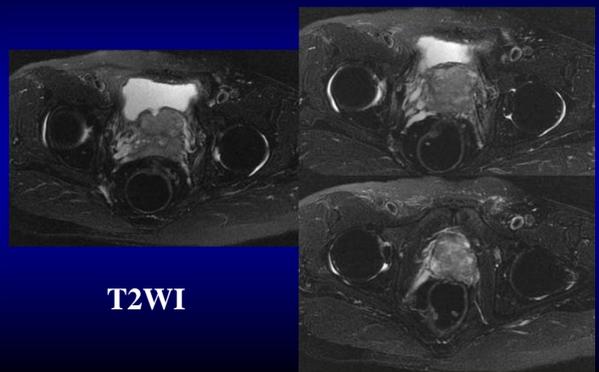
## 诊 断

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）

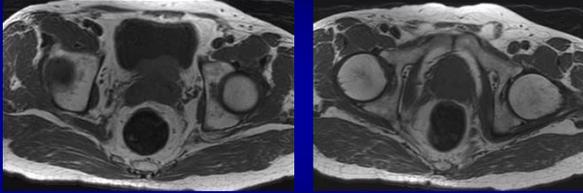
## 病例简介

- 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？

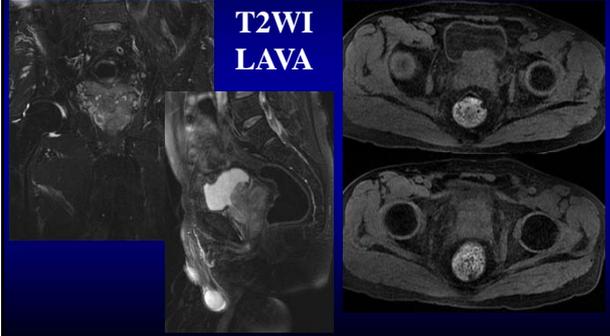


### 前列腺癌？



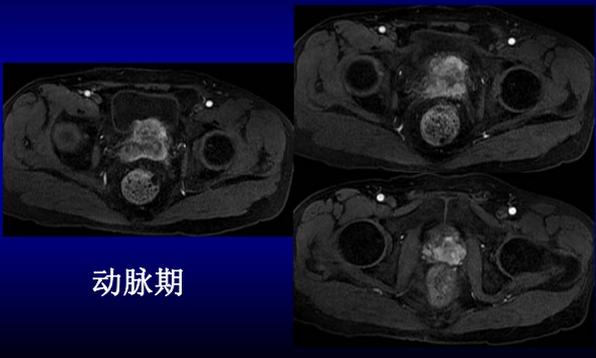
T1WI

### 前列腺癌？



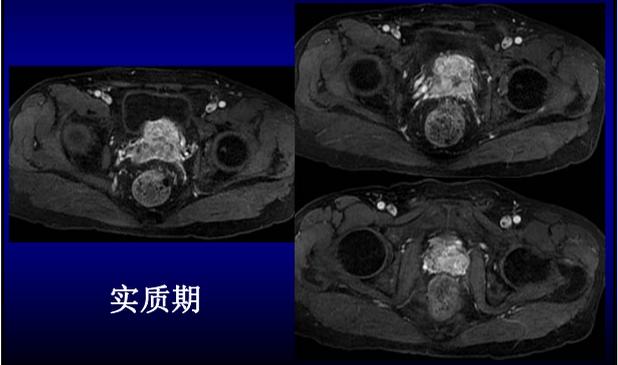
T2WI  
LAVA

### 前列腺癌？

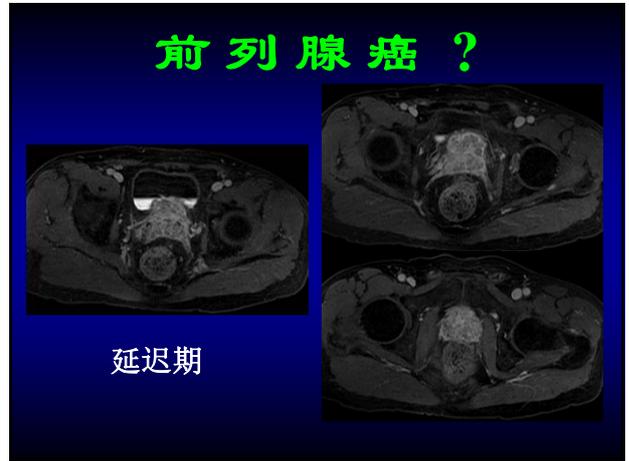
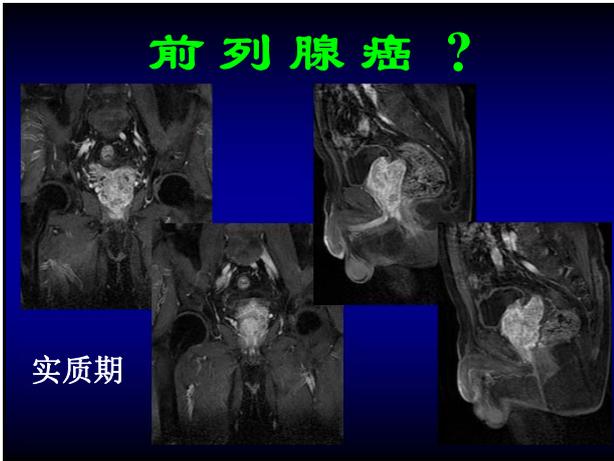


动脉期

### 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 pre-operative diagnosis. The text states: '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**

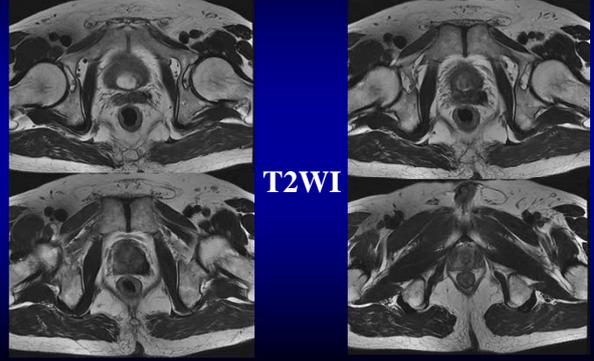
病理：(左底 左中 左尖/ 右底 右尖) 前列腺癌  
Gleason 评分4+4=7分

This slide contains the pathological diagnosis. The text states: '病理：(左底 左中 左尖/ 右底 右尖) 前列腺癌 Gleason 评分4+4=7分' (Pathology: (Left base, Left middle, Left apex / Right base, Right apex) Prostate cancer Gleason score 4+4=7).

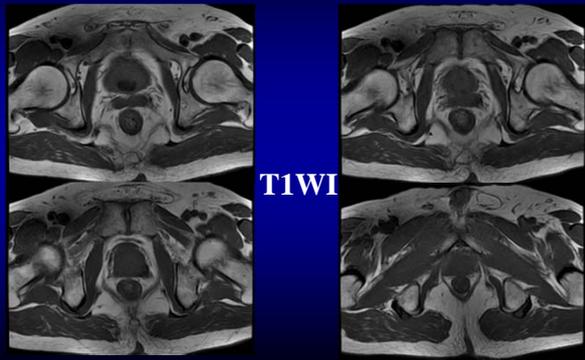
## 病例简介

- 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

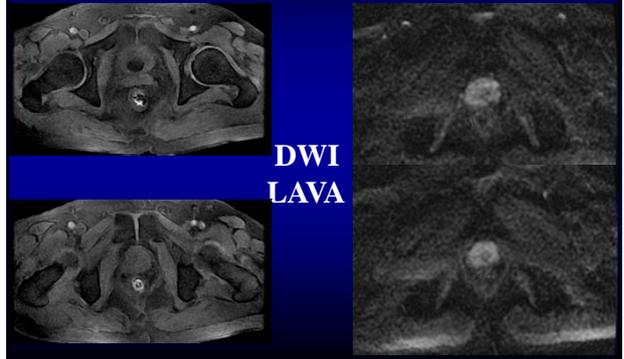
## 前列腺癌？



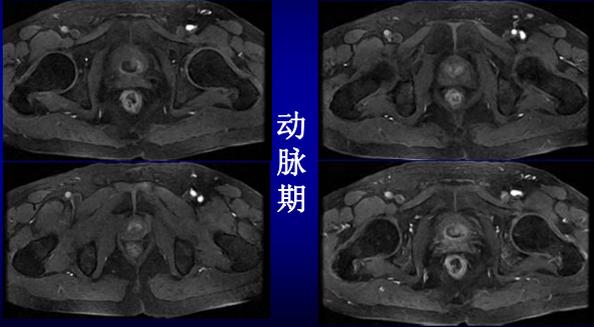
## 前列腺癌？



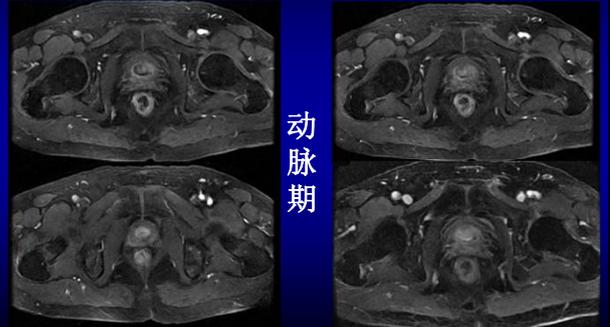
## 前列腺癌？



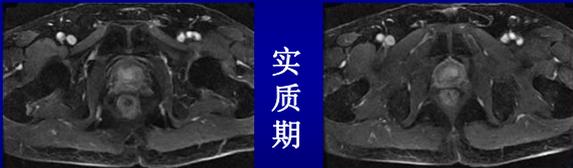
### 前列腺癌？



### 前列腺癌？



### 前列腺癌？



### 诊断

术前：前列腺外周带弥漫异常信号，符合前列腺癌表现

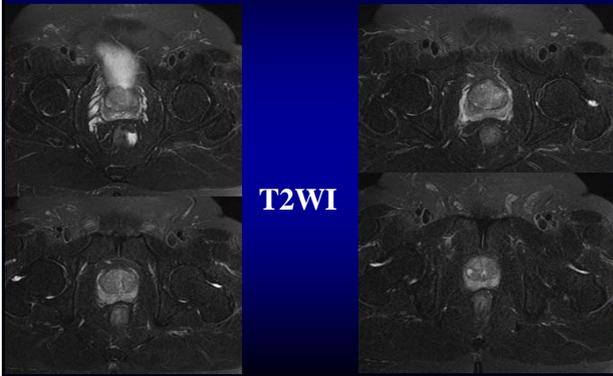
## 诊 断

**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

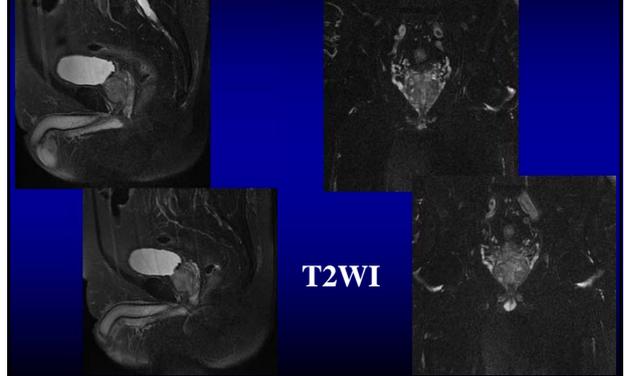
## 病例简介

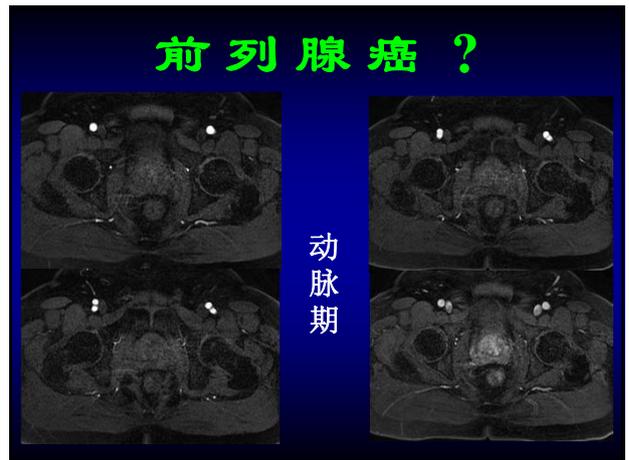
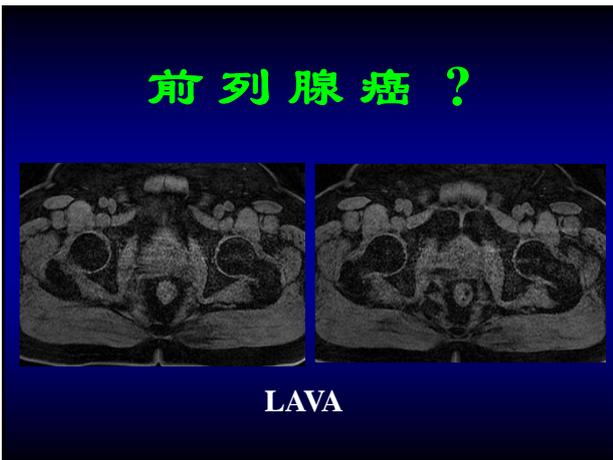
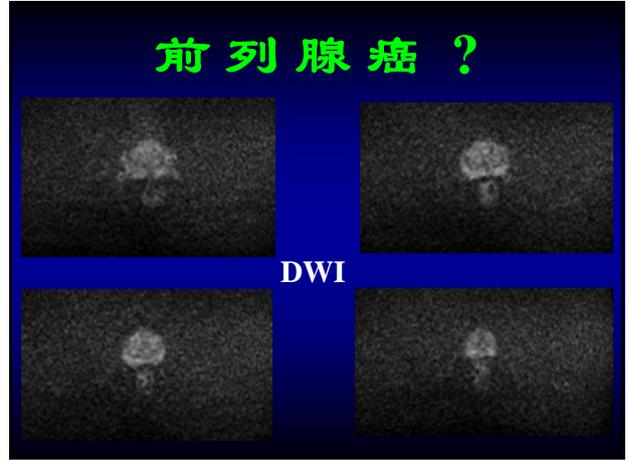
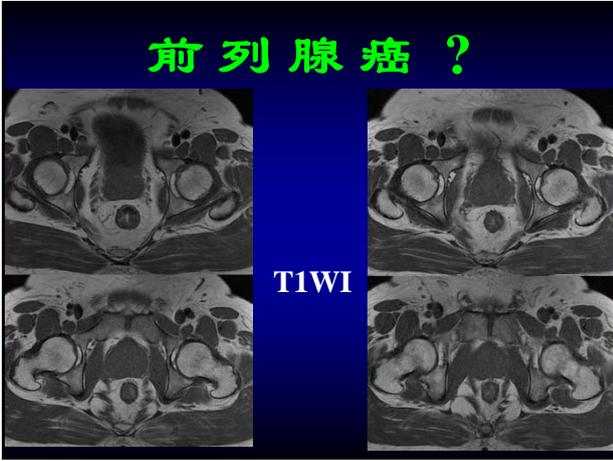
- 男，59岁，尿不尽一年
- 发现PSA高3月余 PSA 总 6.34 ng/ml PSA 游离 0.62 ng/ml

## 前列腺癌？

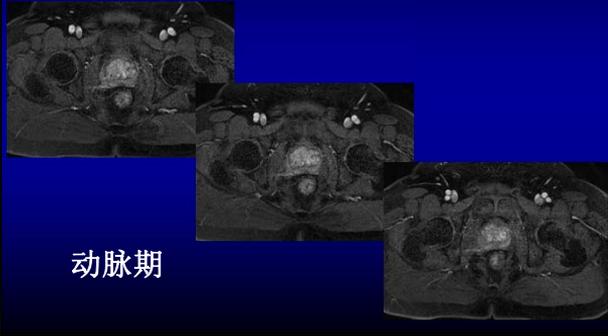


## 前列腺癌？

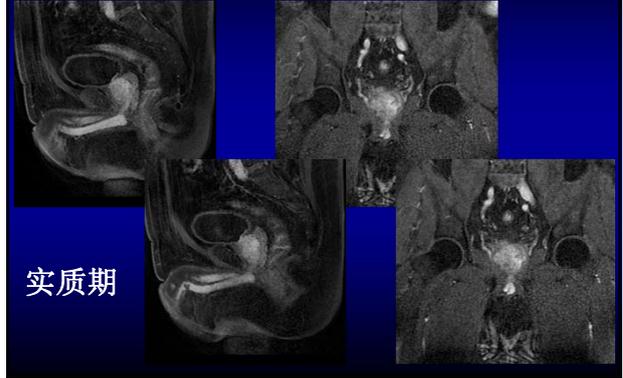




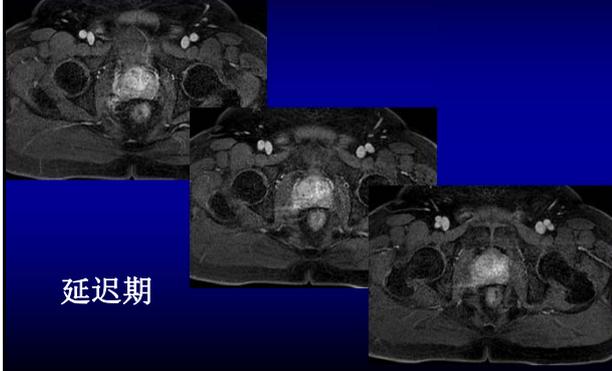
## 前列腺癌？



## 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

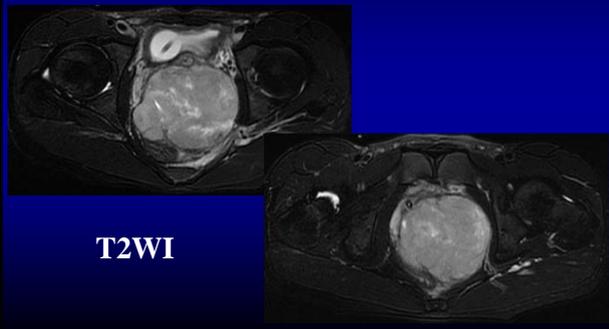
## 诊 断

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

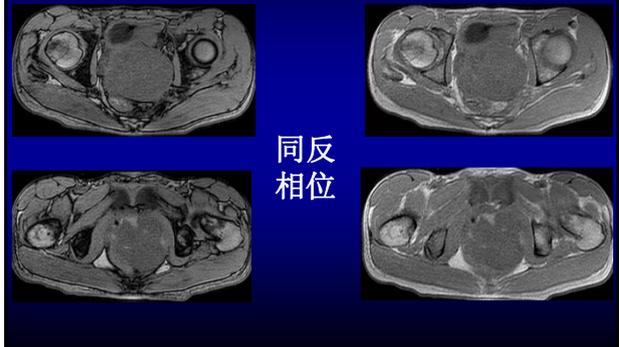
## 病例简介

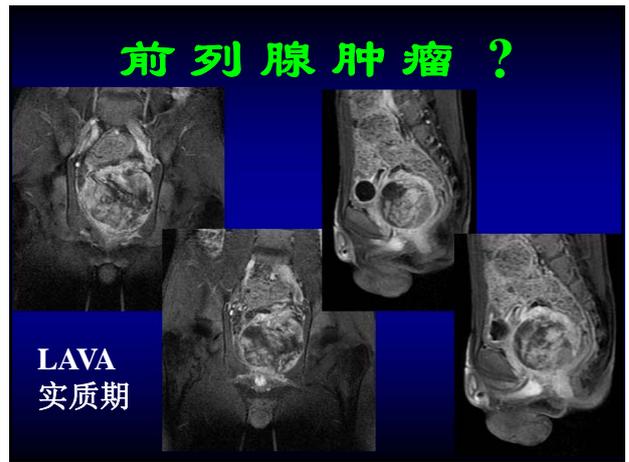
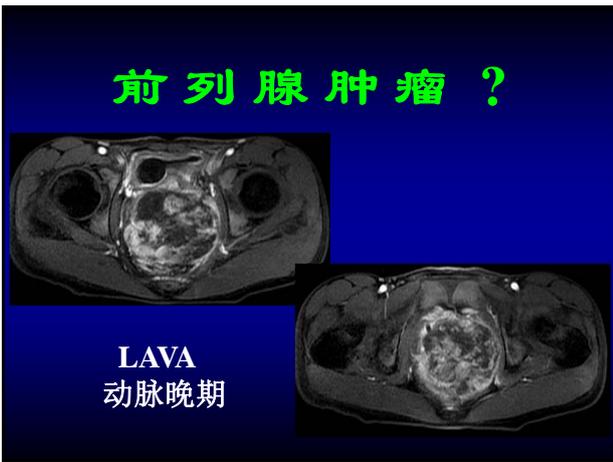
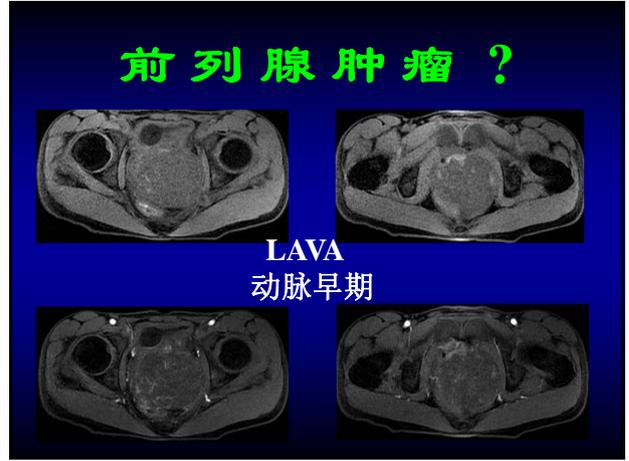
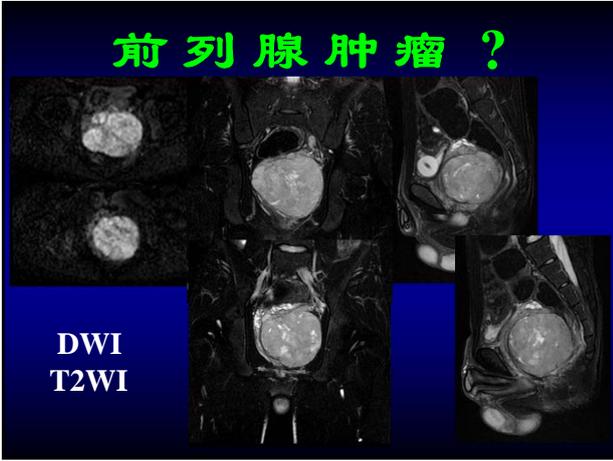
•男，18岁，肛门坠胀  
感六月，排尿困难一月

## 前列腺肿瘤？

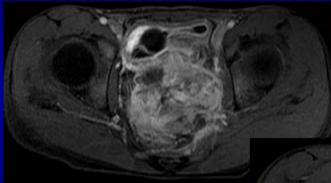


## 前列腺肿瘤？

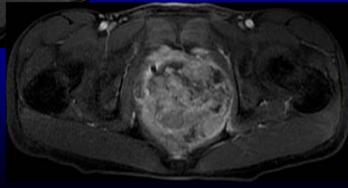




## 前列腺肿瘤？



LAVA  
延迟期



## 诊断

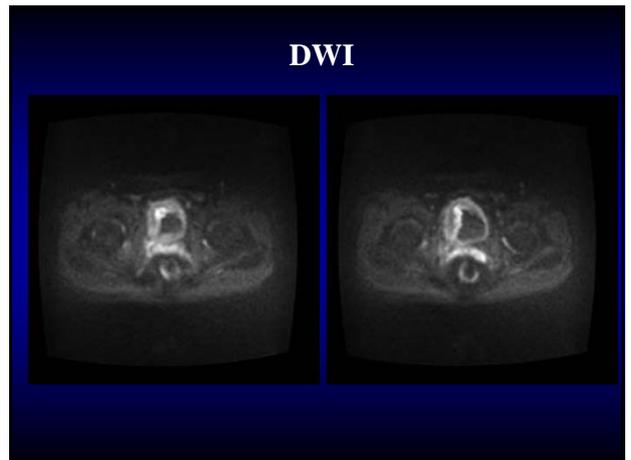
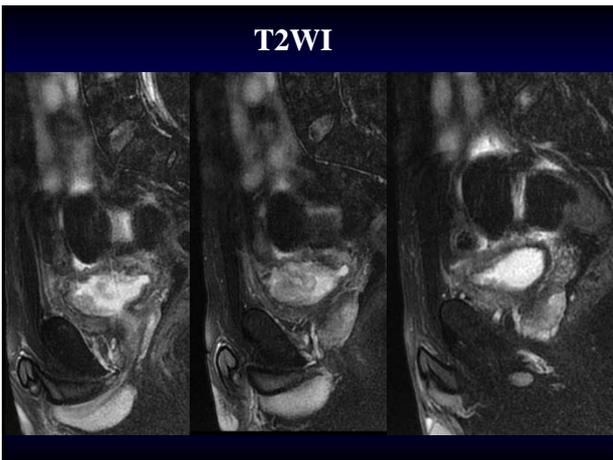
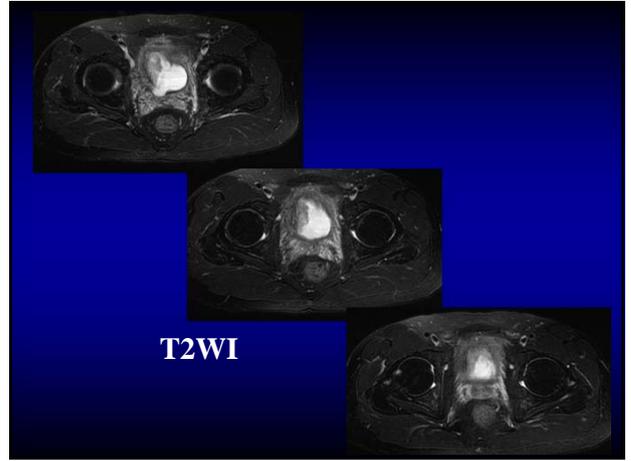
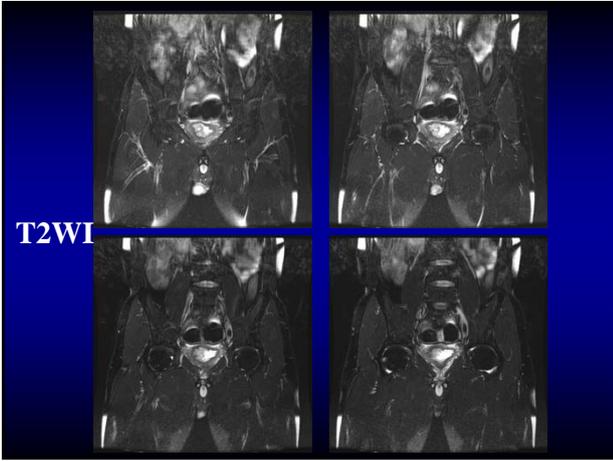
术前：盆腔巨大多血供肿瘤伴坏死出血，考虑：恶性肿瘤，以肉瘤可能性大

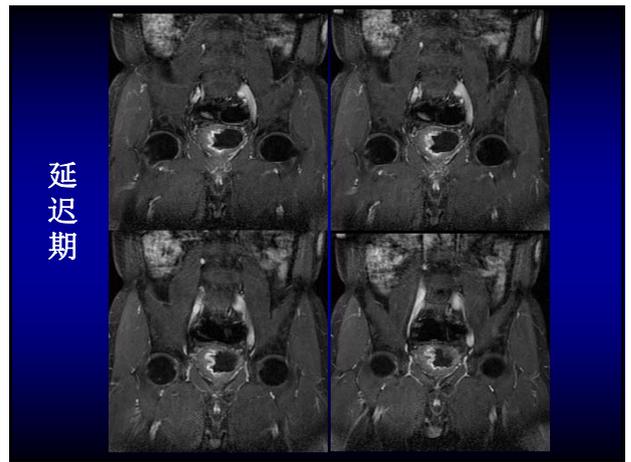
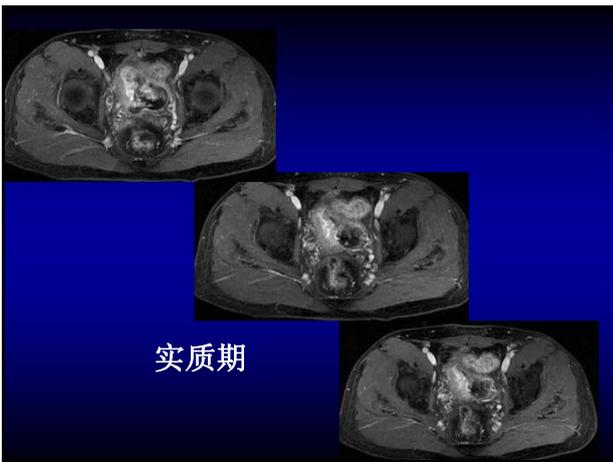
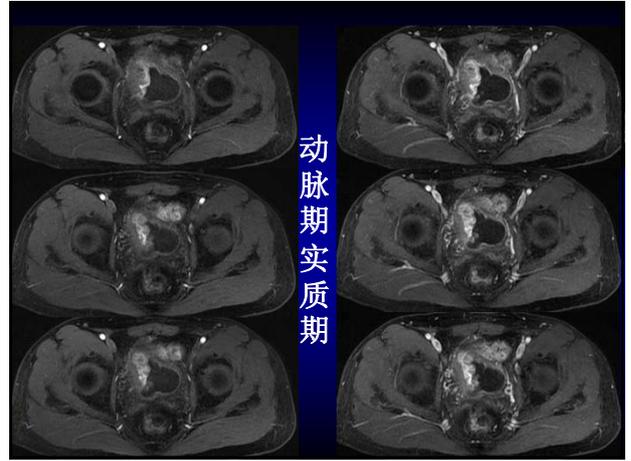
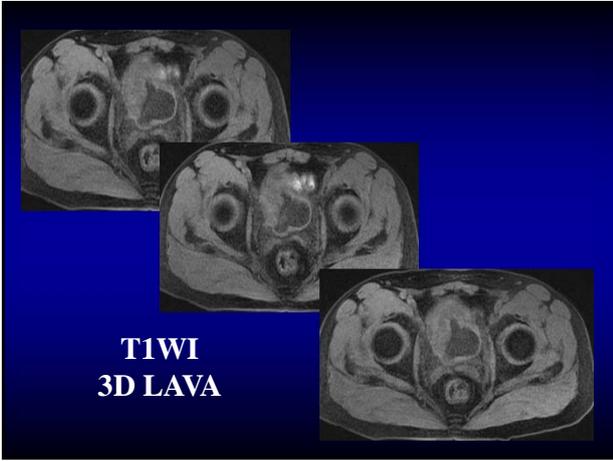
## 诊断

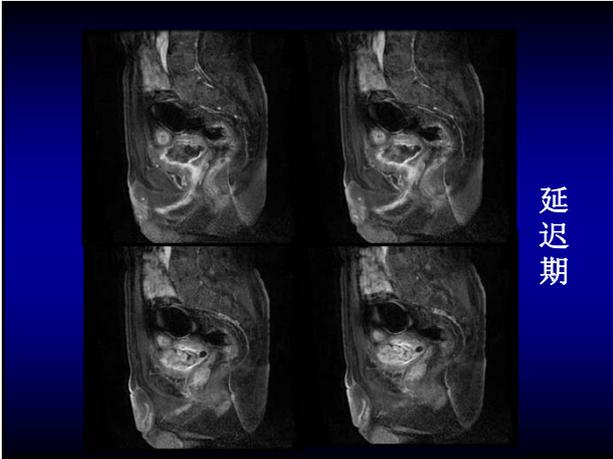
病理：前列腺肌源性恶性肿瘤，结合免疫组化考虑为胚胎性横纹肌肉瘤

## 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



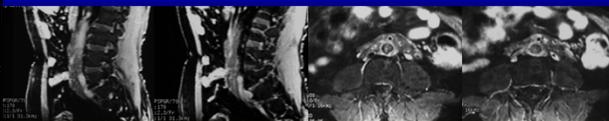
T2WI

### 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

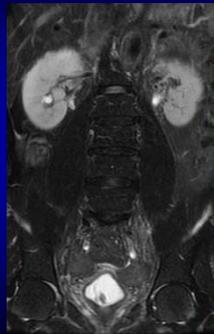
### 诊断

- 影像诊断：腹膜后纤维化

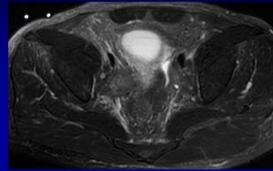
### 双输尿管下段病变 ?



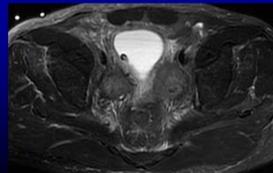
T2WI

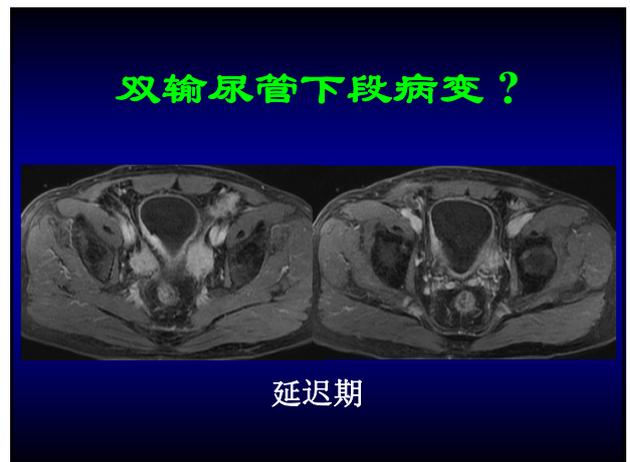
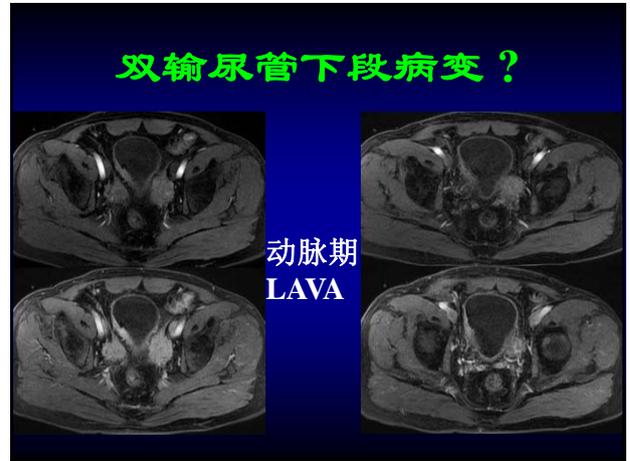
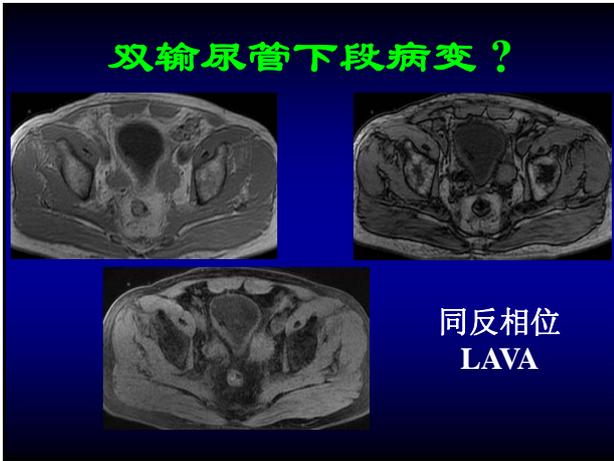


### 双输尿管下段病变 ?



T2WI





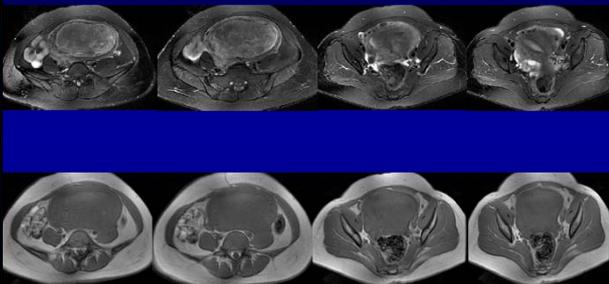
## 诊 断

- 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



T2WI

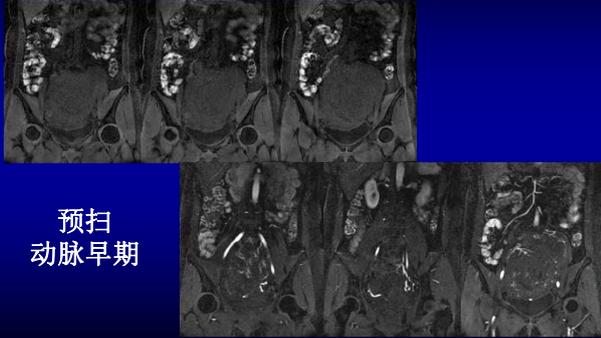
T1WI\*

### 子宫多血供肿块

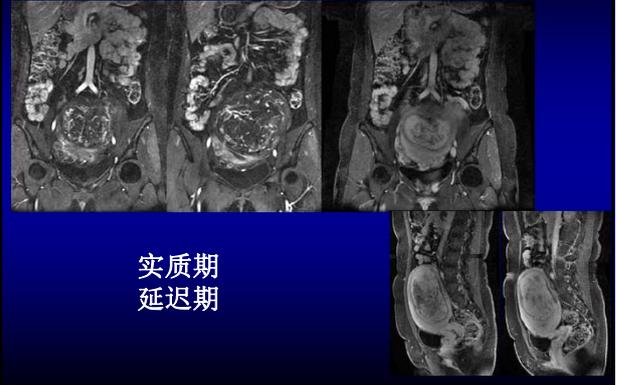


T2WI

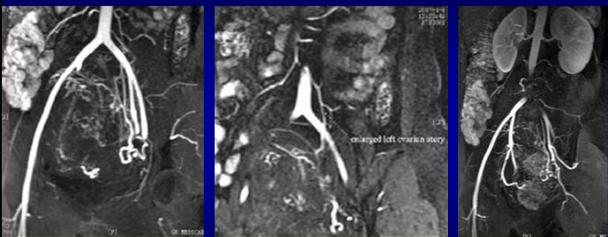
### 子宫多血供肿块



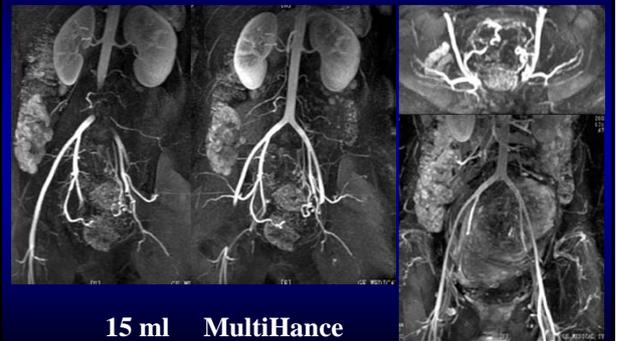
### 子宫多血供肿块



### 子宫多血供肿块



### 子宫多血供肿块



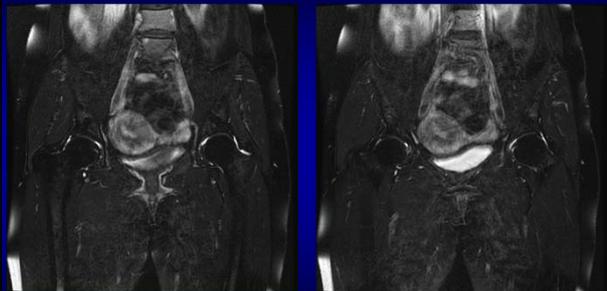
## 影像诊断

- 子宫多血供巨大肌瘤
- 建议：治疗后复查

## 病例简介

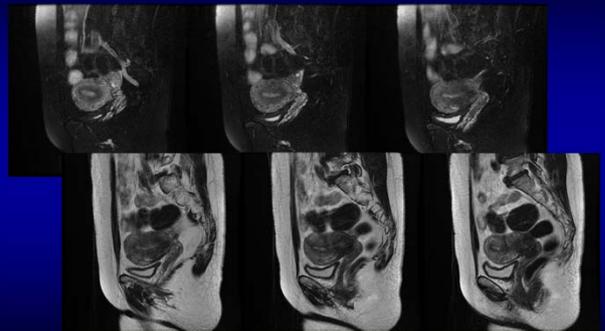
- 女，46岁，阴道不规则流血21天

### 子宫内膜病变？

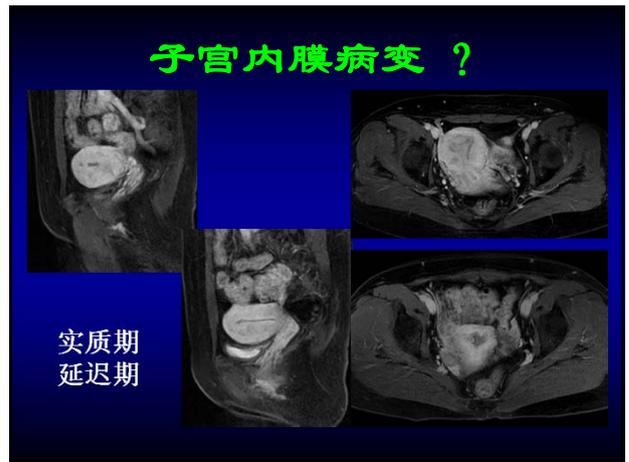
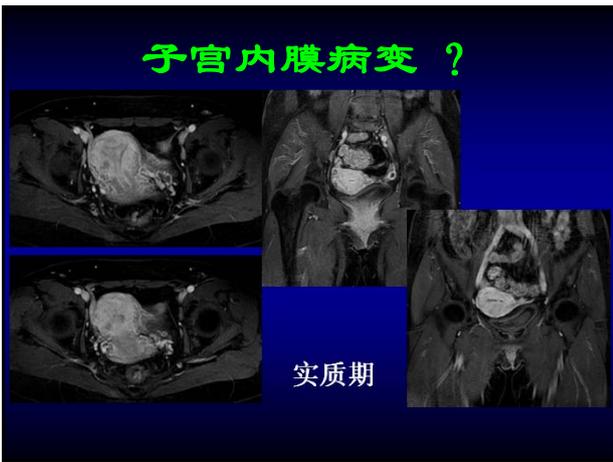
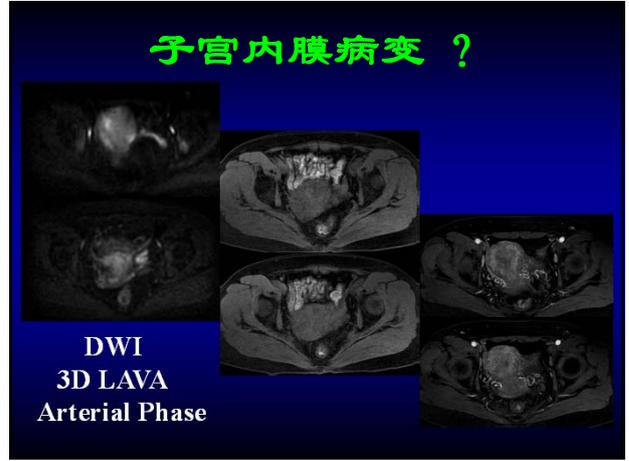
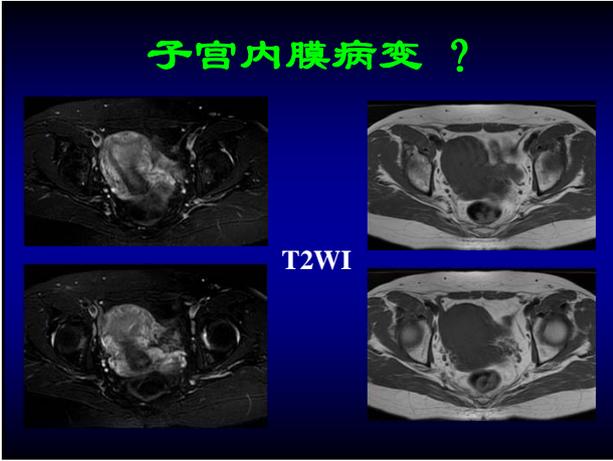


T2WI

### 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

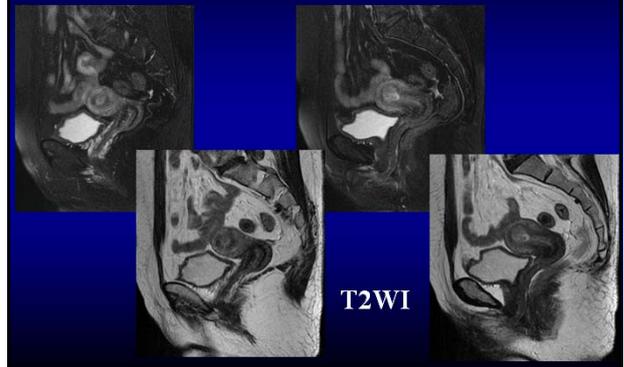
## 病例简介

- 女，58岁，阴道不规则出血1年，发现宫腔病变5天

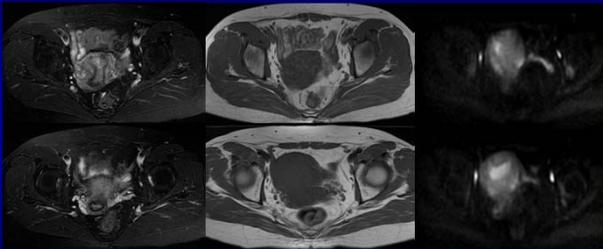
### 子宫内膜病变？



### 子宫内膜病变？

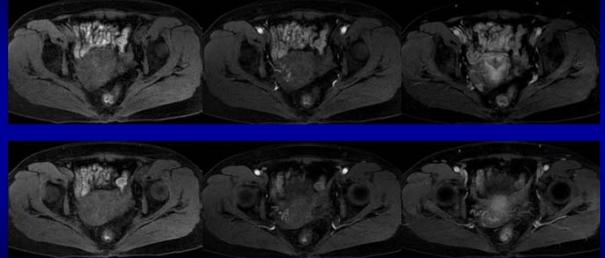


### 子宫内膜病变 ?



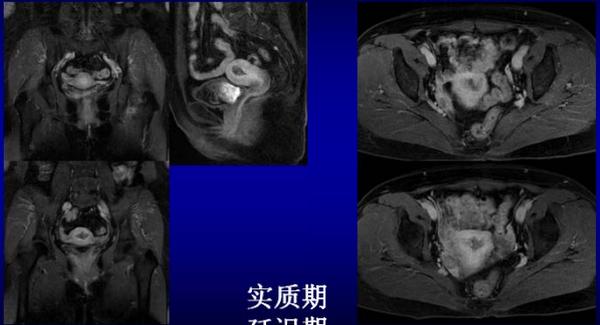
T2WI T1WI DWI

### 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

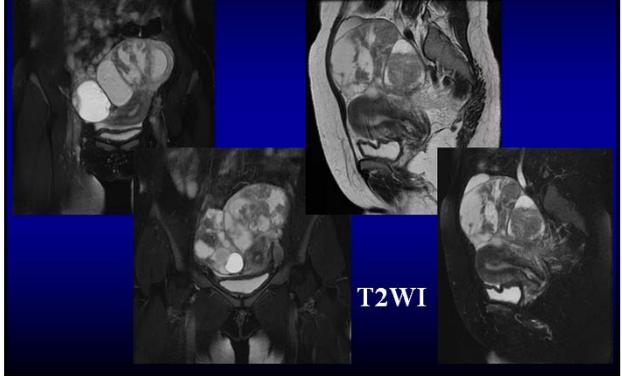
### 诊 断

- 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

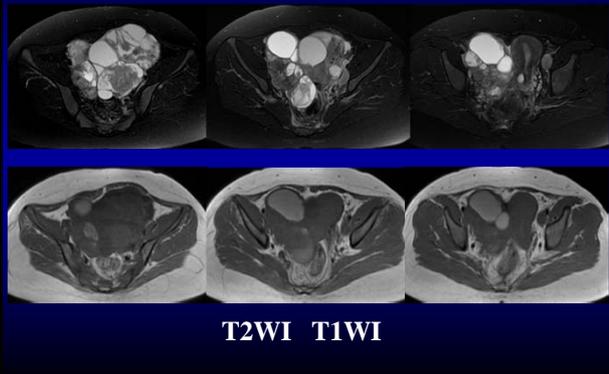
# 病例简介

•女，39岁，乳腺癌术后复查发现盆腔肿块1个月

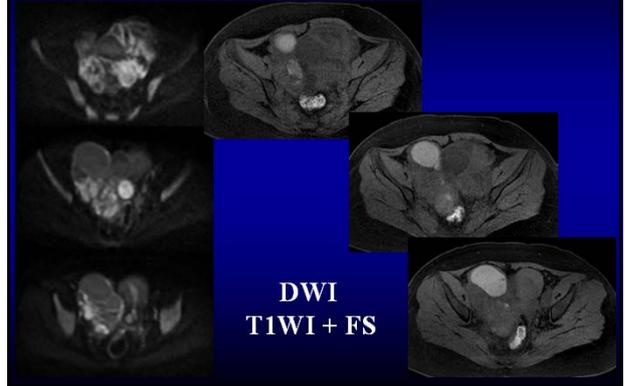
## 卵巢病变？

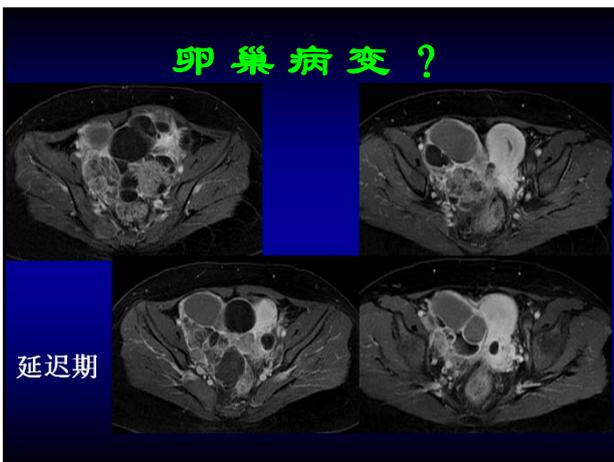
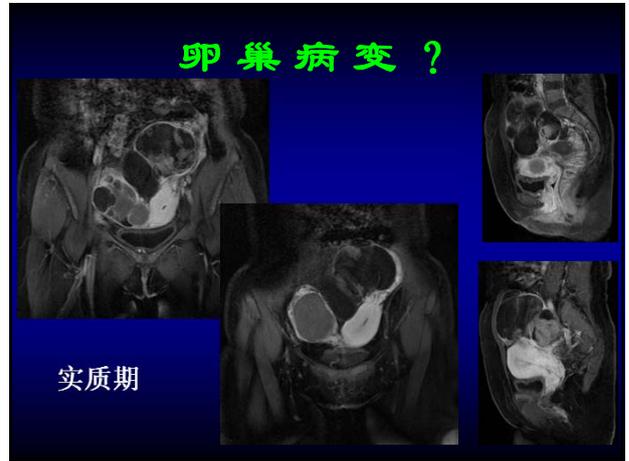
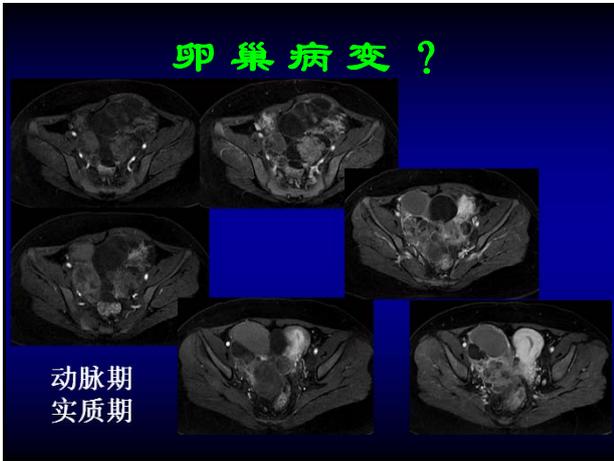


## 卵巢病变？



## 卵巢病变？





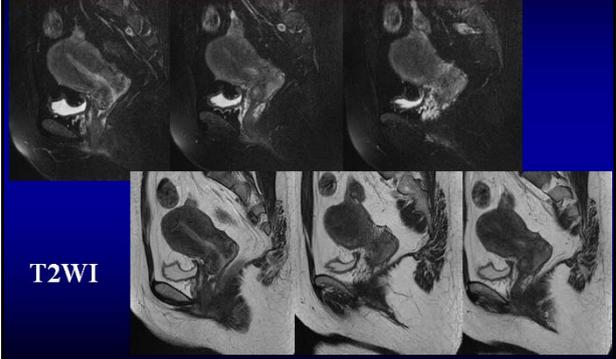
诊 断

- 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

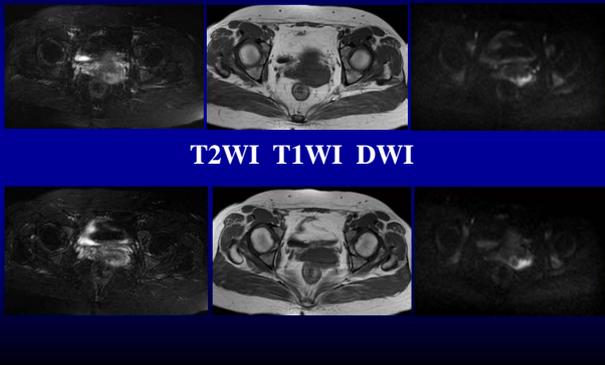
# 病例简介

•女，46岁，查体发现宫颈病变半个月

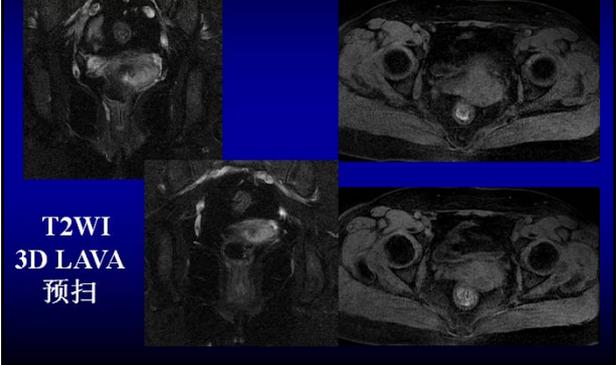
# 宫颈病变？

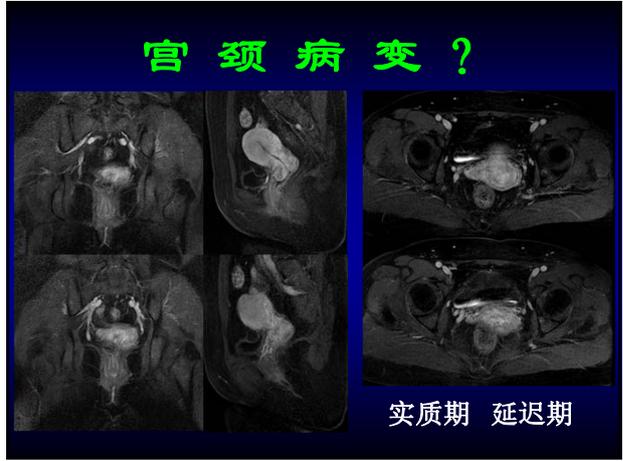
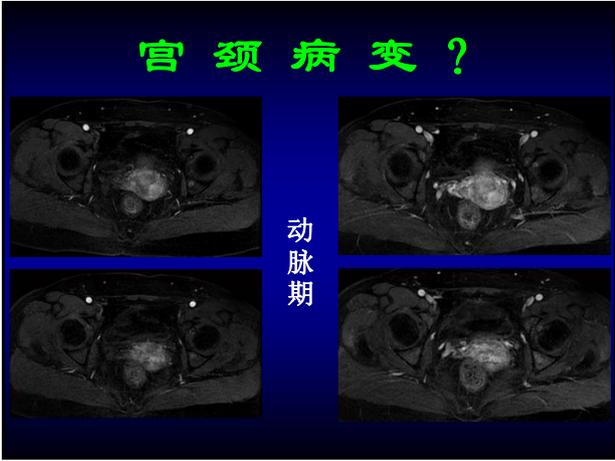


# 宫颈病变？



# 宫颈病变？



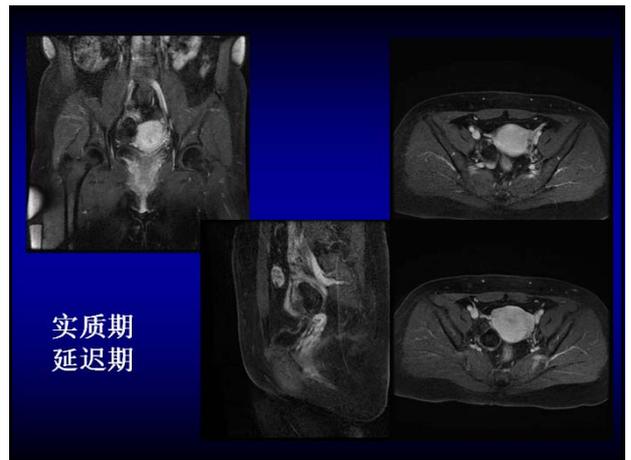
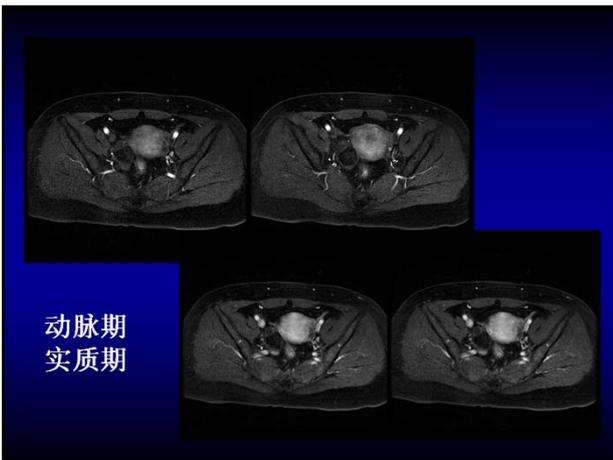
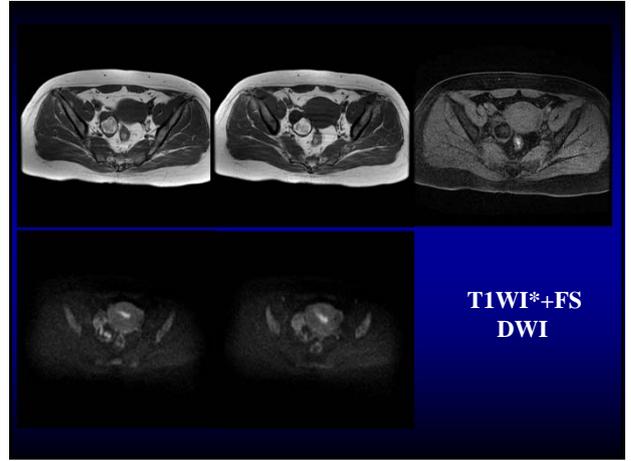
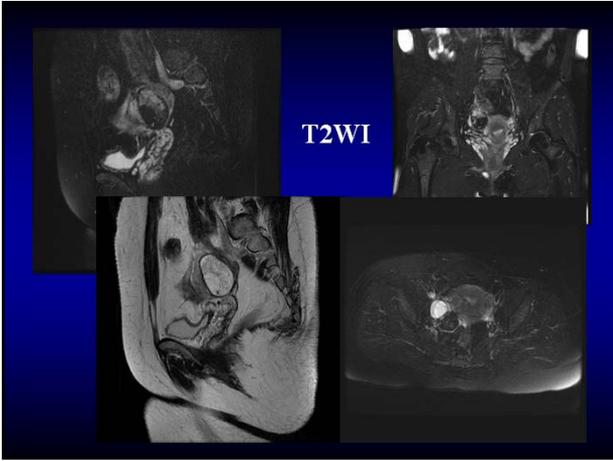


### 诊 断

- 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



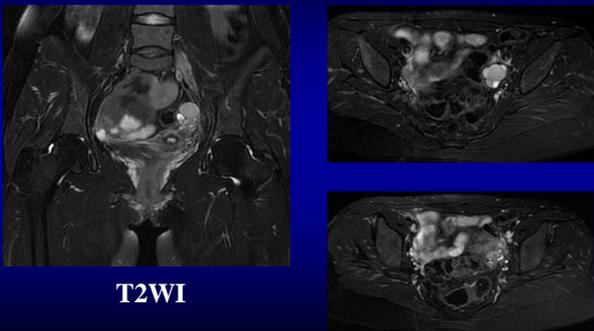
## 诊 断

- 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

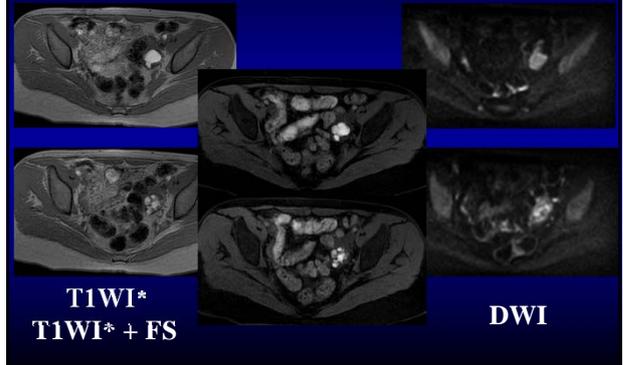
## 病例简介

- 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？



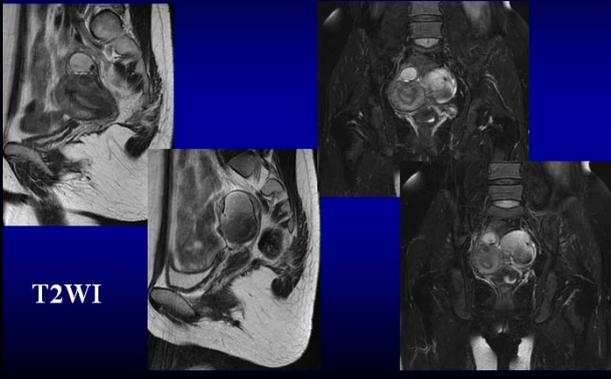
## 诊 断

- 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

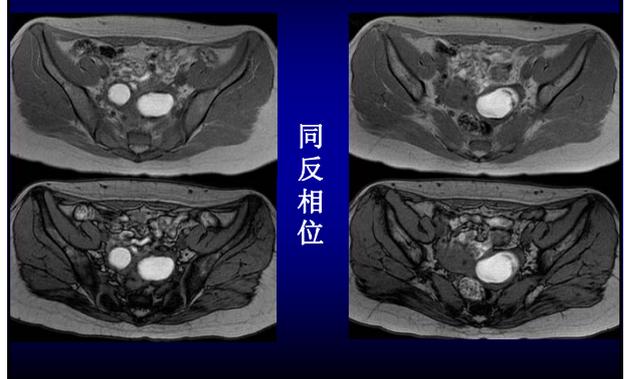
## 病例简介

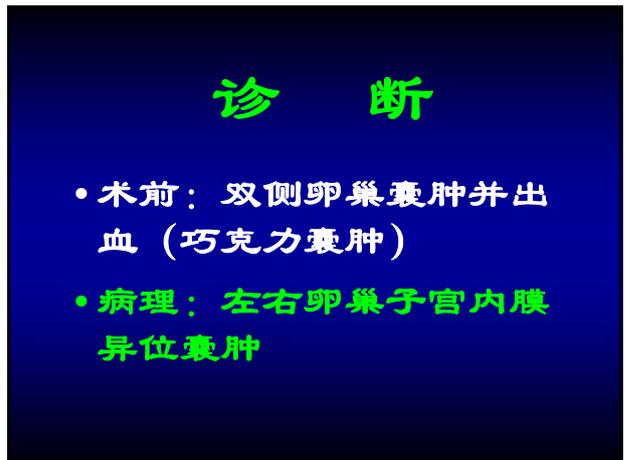
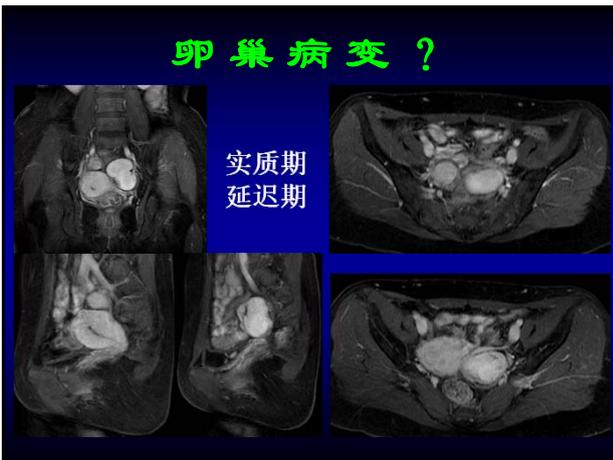
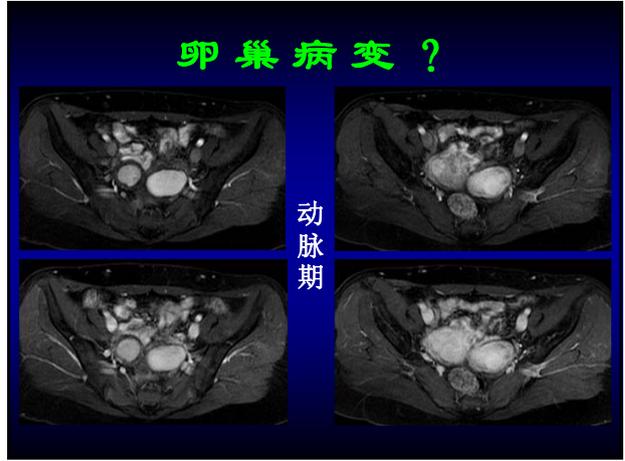
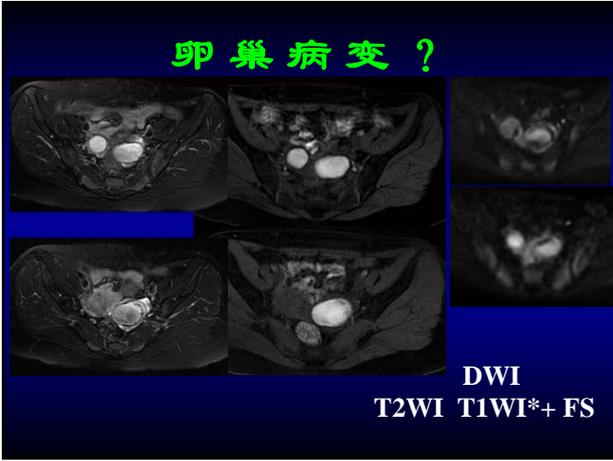
- 女，35岁，结婚12年  
未避孕不孕，发现双  
侧卵巢囊肿4个月

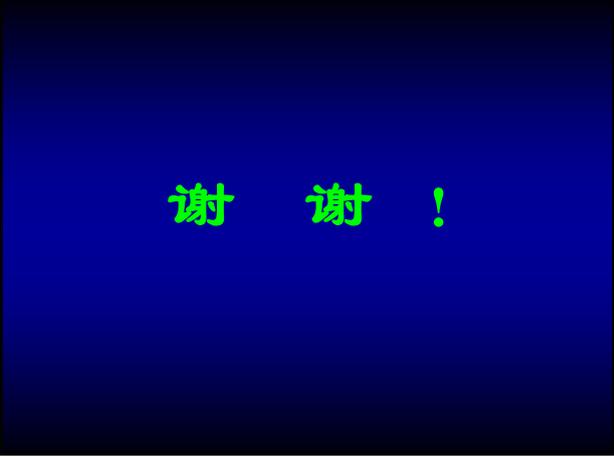
## 卵巢病变？



## 卵巢病变？







谢谢！