

胰腺病变

MRI 表现与诊断

叶慧义 等

北京 解放军总医院放射科

MRI 胰腺基本扫描方式

- 平扫：层厚5~6毫米，间隔 1毫米
横轴面呼吸触发脂肪抑制 FSE T2WI
T1WI*（同反相位图像） DWI
预扫 3D LAVA
选用：冠状面FIESTA 或者 SSFSE
- 动态增强扫描： 3D LAVA

MRI 胰腺基本扫描方式

- DWI： 1.5 T b = 500 ~ 800
3.0 T b = 800 ~ 1000
- 动态增强扫描
层厚一般 3-5毫米

少血供病变

- 恶性：胰腺癌（常见），囊腺癌
转移瘤（少见或罕见）
- 良性：囊腺瘤，SPT，炎性病变

多血供病变

- **恶性:** 胰腺癌和类癌（少见），转移瘤（罕见少见）
- **良性:** 神经内分泌肿瘤（胰岛细胞瘤最常见），SPT, 炎性病变（较少见）

囊实性病变

- **恶性:** 囊腺癌（常见）胰腺癌, 类癌（少见），转移瘤（罕见）
- **良性:** SPT 和胰岛细胞瘤（常见），囊腺瘤（常见），炎性病变（少见）

局灶/弥漫性病 变

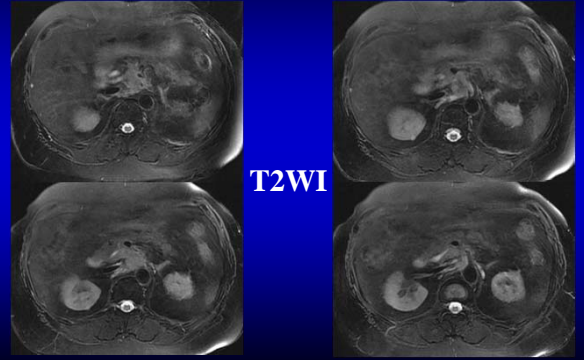
- **局灶:** 良/恶性肿瘤（常见）, 炎性病变少见
- **弥漫性:** 炎性病变常见, 恶性肿瘤少见

胰腺恶性肿瘤 胰腺癌的表现形式

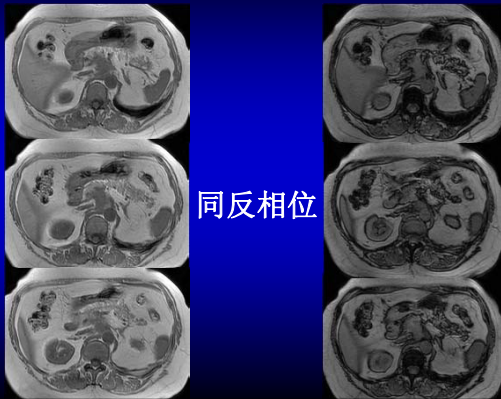
病例简介

- 77岁女性，上腹不适五月余
- CA 199 轻度升高，超声查体发现胰腺病变

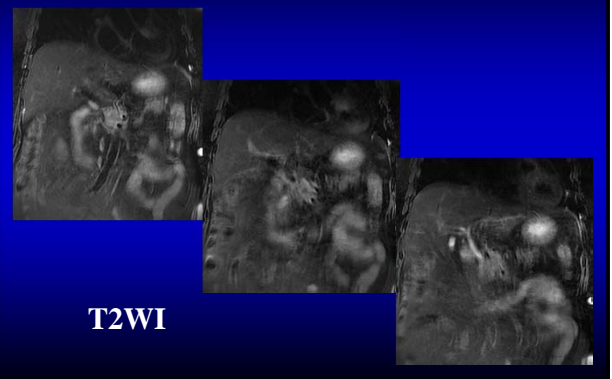
胰腺病变？

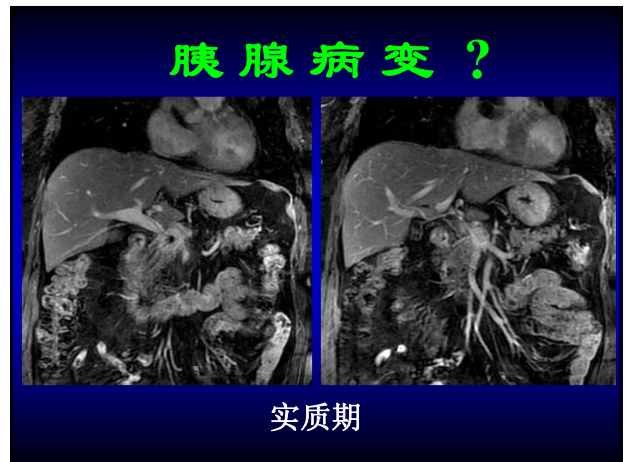
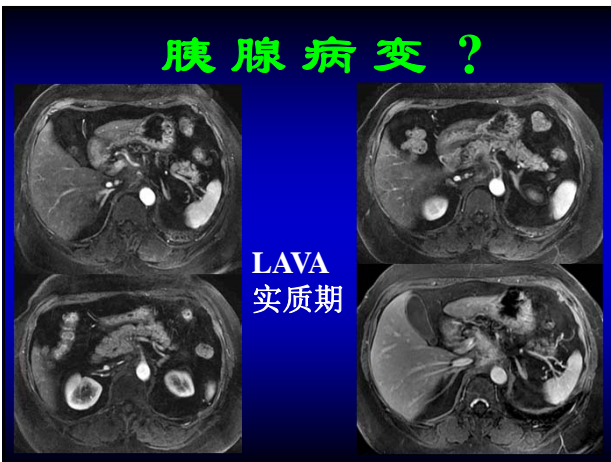
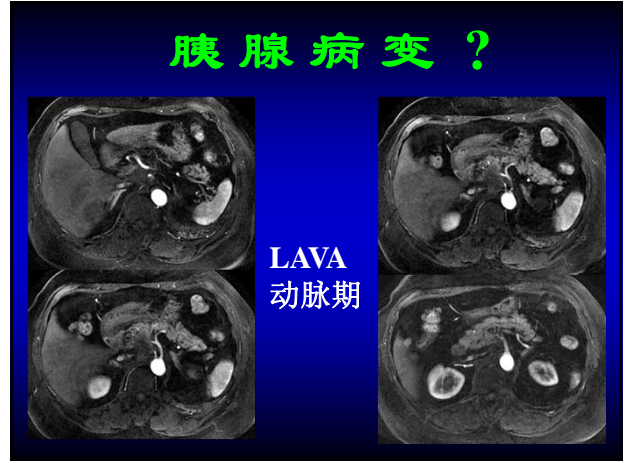
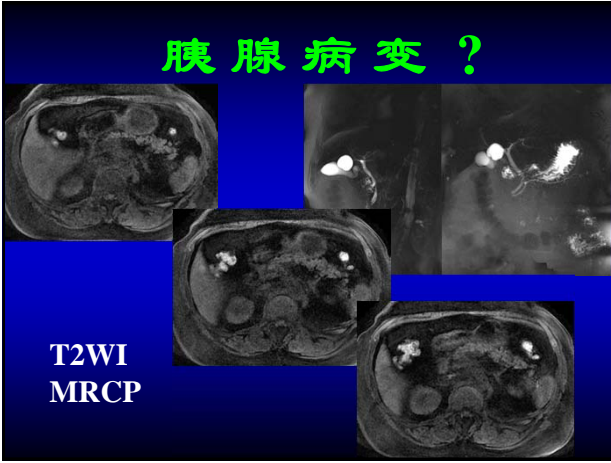


胰腺病变？

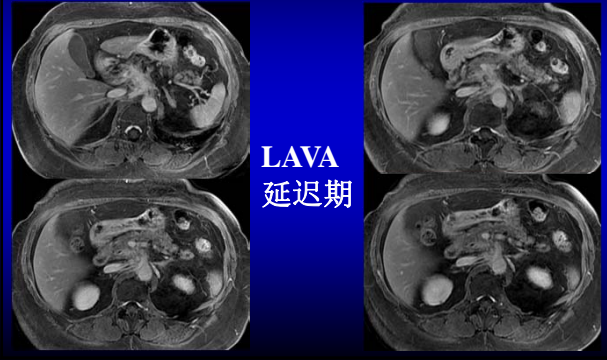


胰腺病变？





胰腺病变？



诊断

- 影像诊断：胰头后部少血供肿瘤包绕腹腔干和肠系膜上动脉，考虑：恶性肿瘤，以胰腺癌的可能性大
- 病理：胰腺癌

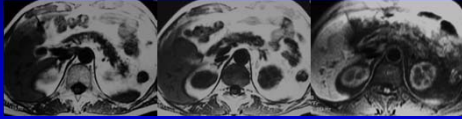
胰腺癌

- 两种主要表现形式：胰腺局灶 / 弥漫病变；胰腺周围（腹腔干或 / 和肠系膜上动脉 / 上静脉）病变
- 血供：少血供常见，多血供少见

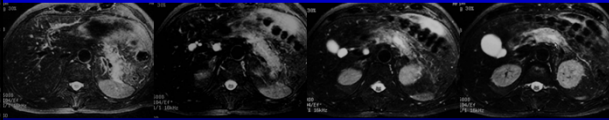
胰腺肿块？

- 65岁男性，上腹束腰样不适 10 余天
- 腰背持续钝痛一周，饭后加重

胰腺癌影像表现



T1WI



T2WI

诊断

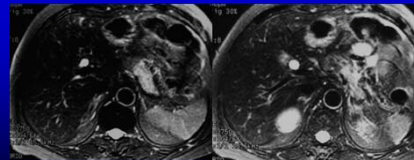
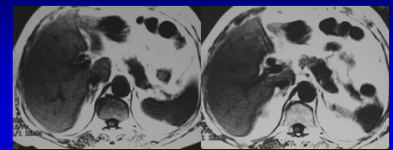
- 弥漫性胰腺异常改变，考虑为胰腺癌
- 手术切除后病理诊断：胰腺癌

病例简介

- 66岁女性，上腹不适一月余
- CA 199 升高，超声查体发现胰腺病变

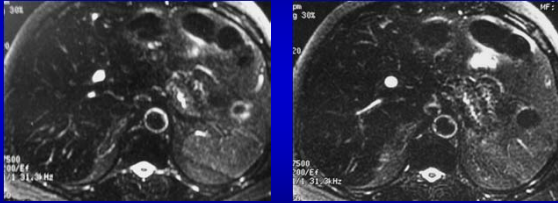
弥漫/多血供病变？

T1WI



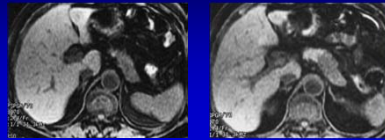
T2WI

弥漫/多血供病变 ?

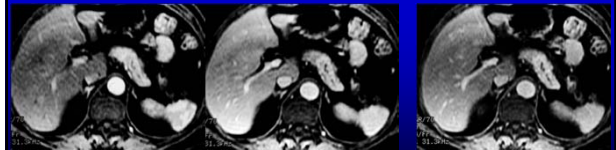


MRCP

弥漫/多血供病变 ?



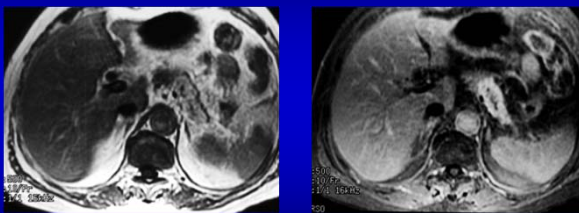
TIWI* + FS



动脉期

门脉期

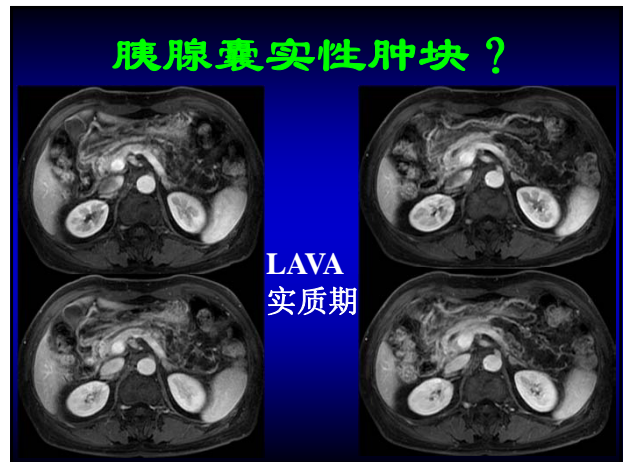
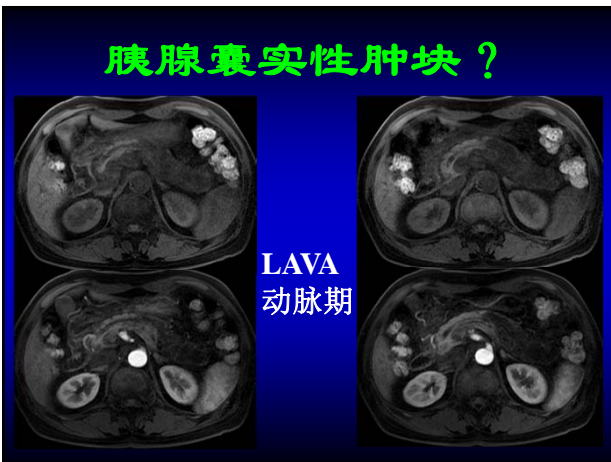
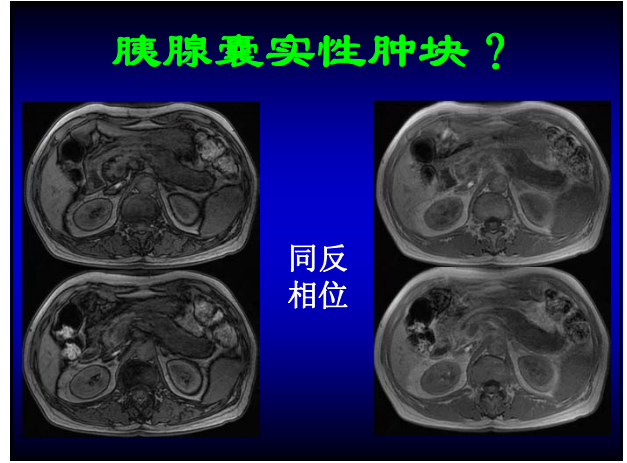
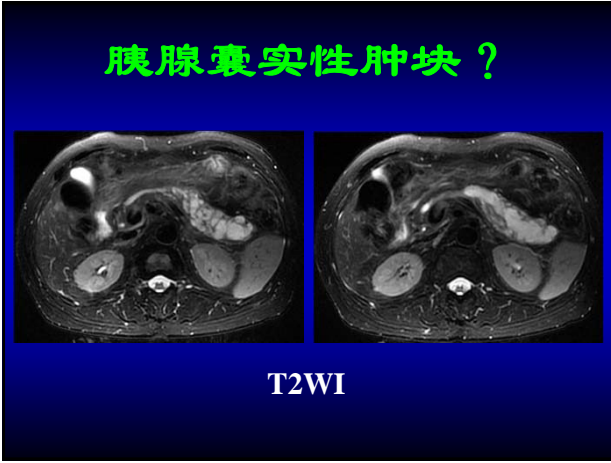
弥漫/多血供病变 ?



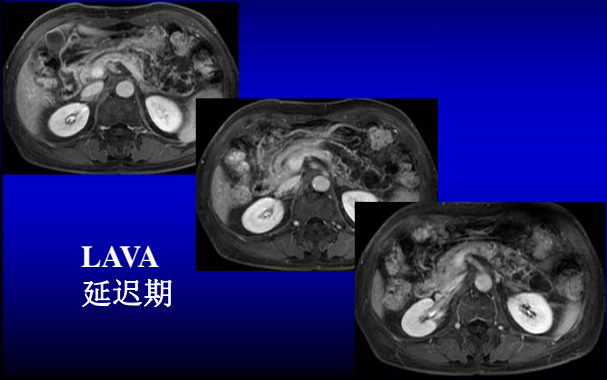
延迟期

诊断

- 影像诊断：胰腺体尾部异常改变，考虑：恶性肿瘤，以胰腺癌的可能性大
- 病理：胰腺中分化导管腺癌



胰腺囊实性肿块？



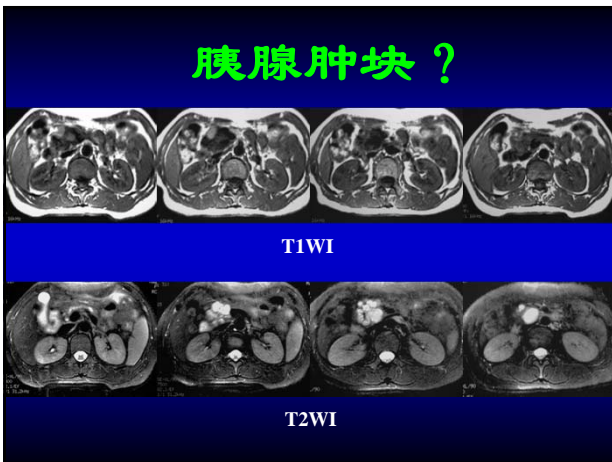
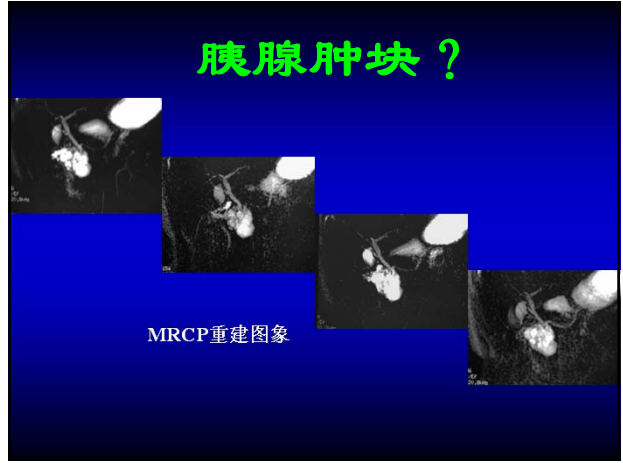
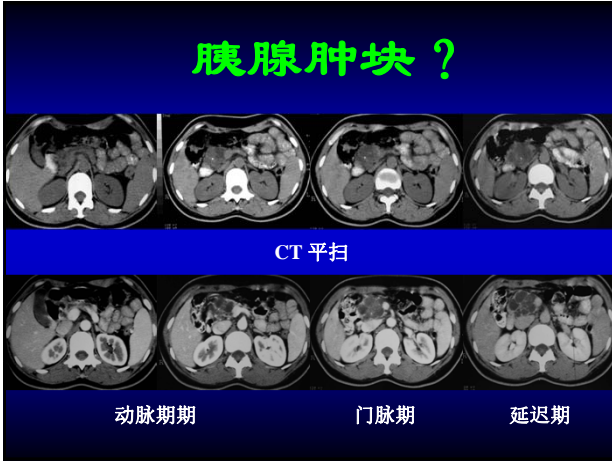
诊断

- 术前诊断：胰体尾部增大（囊实性病变）伴胰管扩张，考虑：低度恶性或者良性肿瘤，以胰管内假乳头粘液瘤可能性大
- 病理：粘液性囊腺癌

胰腺囊实性病变

病例简介

- 39岁女性，无自觉症状
- 超声查体发现腹部肿块
- 曾有子宫肌瘤切除史



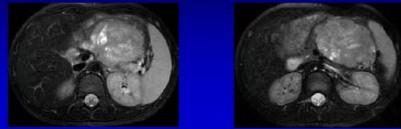
诊 断

- 影像诊断：胰头囊实性少血供良性肿瘤，考虑：胰腺囊腺瘤的可能性大
- 病理：囊腺瘤

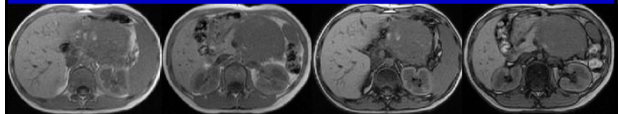
病例简介

• 9岁男孩，发现上腹肿块 9月

胰腺囊实性肿块？



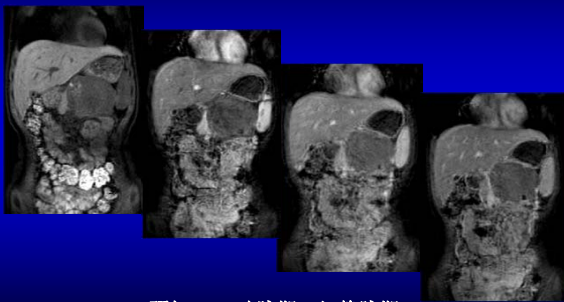
T2WI



In Phase

Opposed Phase

胰腺囊实性肿块？

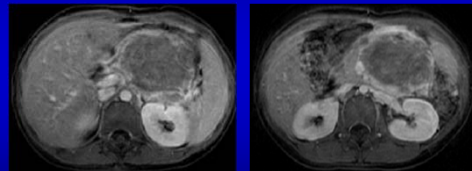


预扫

动脉期

门静脉期

胰腺囊实性肿块？



延迟期

诊 断

- 术前诊断：胰体尾部囊实性肿块伴出血，考虑：良性或者低度恶性肿瘤，以囊性-实性假乳头状肿瘤 (SPT) 可能性最大

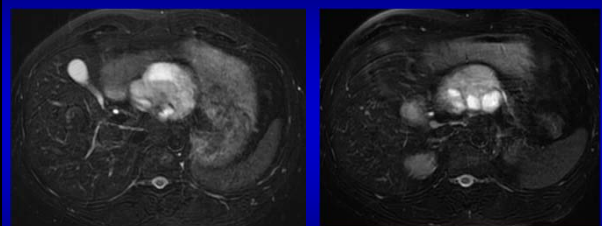
病 理 诊 断

胰腺囊性实性假乳头状瘤 SPT

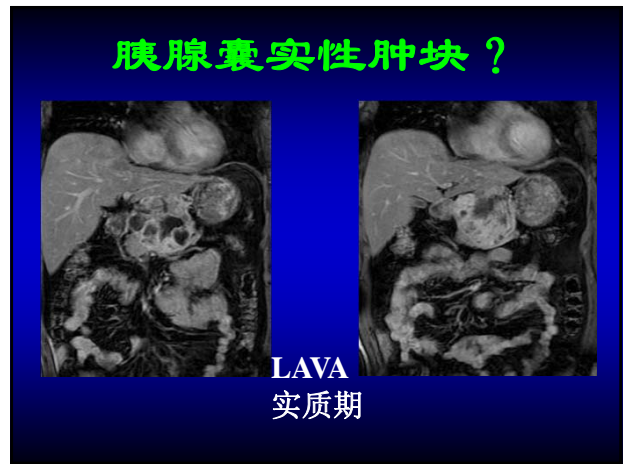
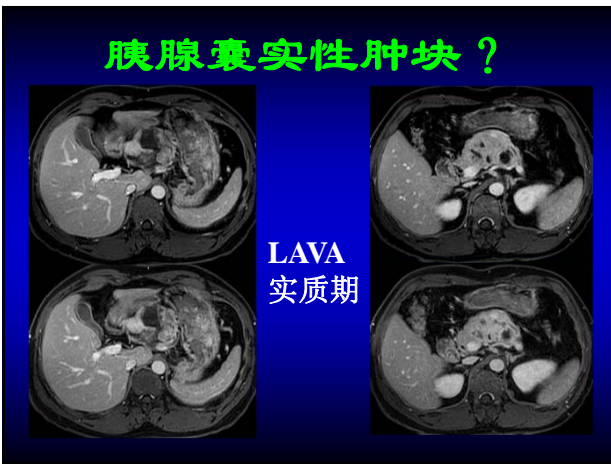
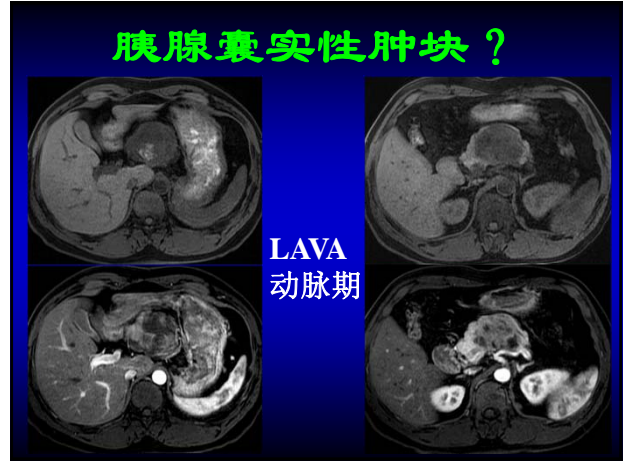
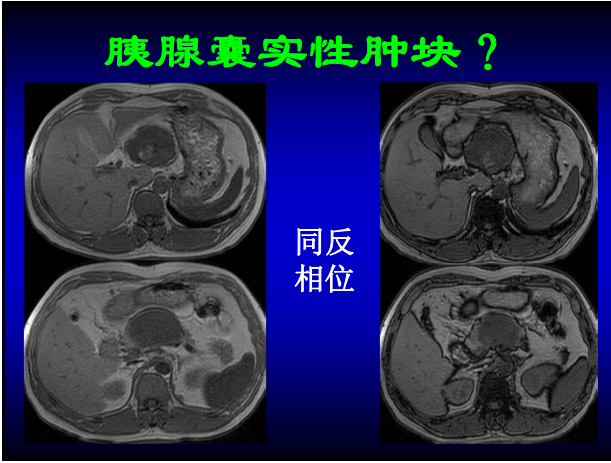
病 例 简 介

- 45 岁男性，上腹不适
查体发现胰腺病变

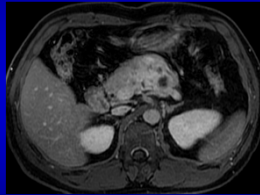
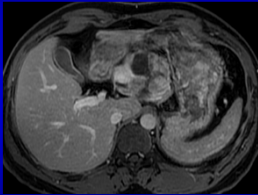
胰腺囊实性肿块？



T2WI



胰腺囊实性肿块？



LAVA
延迟期

诊 断

- 术前诊断：胰体部囊实性肿块伴出血，考虑：良性或者低度恶性肿瘤，以囊性-实性假乳头状肿瘤 (SPT) 可能性最大
- 病理：SPT

诊 断

- 术前诊断：胰体部囊实性肿块伴出血，考虑：良性或者低度恶性肿瘤，以囊性-实性假乳头状肿瘤 (SPT) 可能性最大
- 病理：SPT

少见疾病

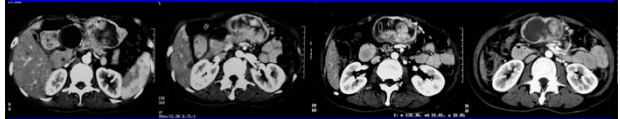
病例简介

- 41岁女性，动态性AFP显著升高（大于4000）
- 曾经有胰管-肠道吻合手术史

胰腺肿块？

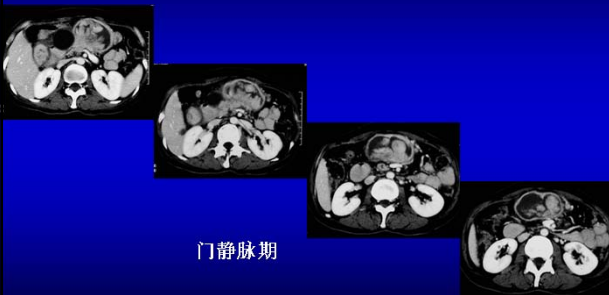


CT平扫



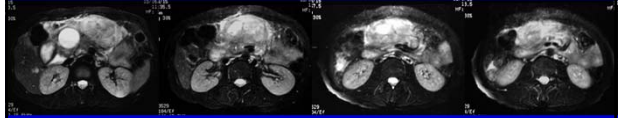
动脉期

胰腺肿块？

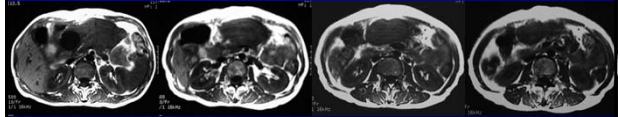


门静脉期

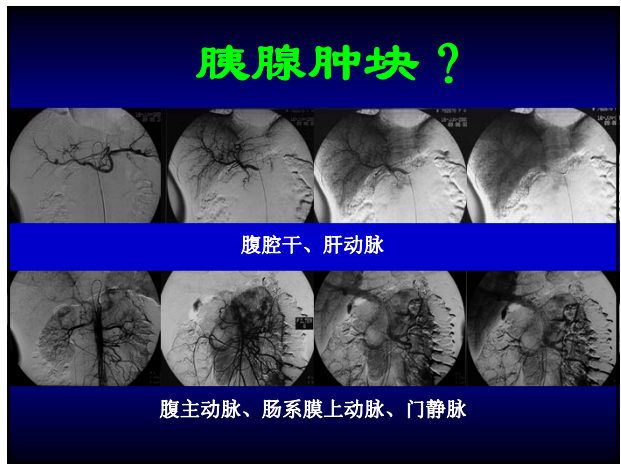
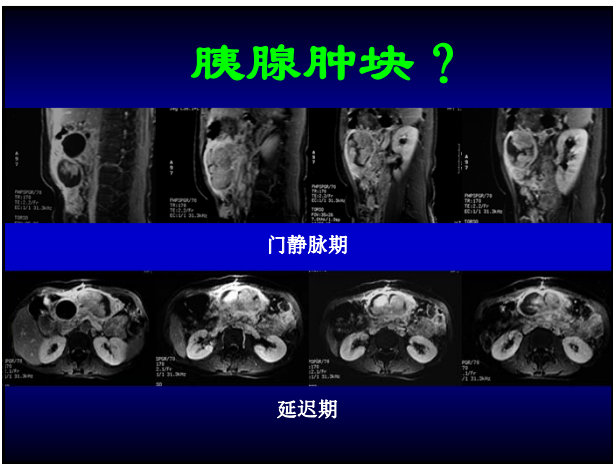
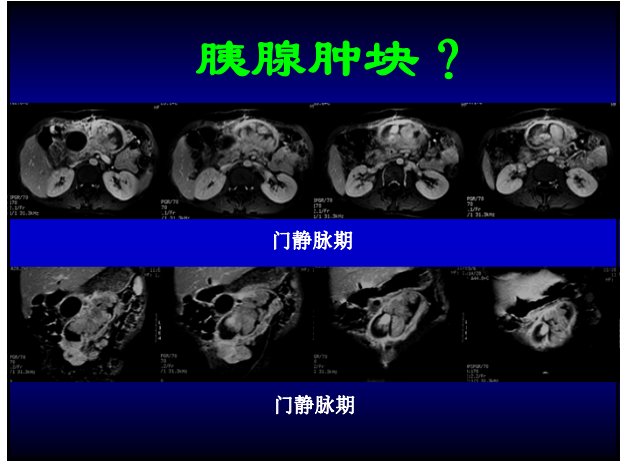
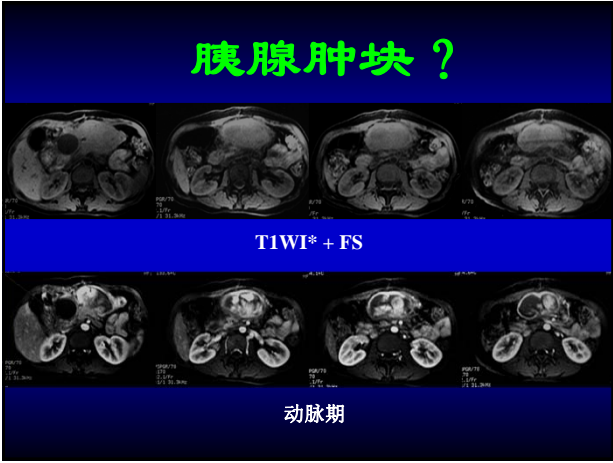
胰腺肿块？



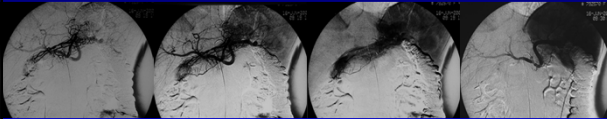
T2WI



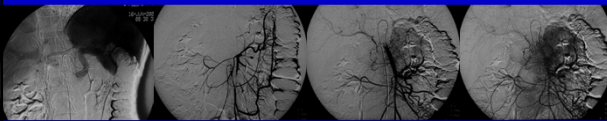
T1WI



胰腺肿块？



胃左动脉、脾动脉



脾静脉、肠系膜下动脉

诊断

- 影像诊断：胰腺肠管吻合区恶性肿瘤；慢性胰腺炎假性囊肿形成
- 病理诊断：AFP（肝样）腺癌，肿瘤侵犯肠壁全层

高场强 MRI
对胰腺病变具有重要
而且实用的诊断价值

谢谢！！