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乳腺侵袭性纤维瘤病超声表现及误诊分析

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[摘要] 回顾性分析昆明医科大学第三附属医院经病理确诊为乳腺侵袭性纤维瘤病而超声误诊的5例患者的超声图像特征及超声诊断, 并分析误诊原因。5例患者均为单乳发病, 左侧3例, 右侧2例, 病灶直径为20~48 mm, 5例患者病灶二维超声均表现为不规则形状, 边界不清楚, 内部为低回声, 后方回声稍衰减; 彩色多普勒显示病灶周边及内部可见点条状血流, Adler血流分级II~III级; 弹性成像评分为4~5分; 1例患者行超声造影检查, 表现为病灶稍早于周围腺体开始增强, 增强形态为不均匀稍高增强, 增强范围无明显扩大, 未见滋养血管; 5例患者同侧腋窝淋巴结均表现为“假肾征”, 无异常肿大淋巴结。超声诊断4例均考虑乳腺癌可能, 1例因行超声造影检查, 提示乳腺癌与其他疾患待鉴别, 建议病检。乳腺侵袭性纤维瘤病是一种少见病, 超声诊断极易误诊为恶性病变, 临床工作中拟诊断乳腺恶性肿瘤, 尤其对年轻患者, 须结合各种超声图像特征综合分析, 并考虑到该病的可能。

[关键词] 侵袭性纤维瘤病; 超声表现; 误诊

Ultrasonic manifestations and misdiagnosis analysis in primary breast aggressive fibromatosis

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Abstract Retrospective analysis ultrasound images and ultrasound diagnosis of 5 cases, which diagnosed as breast aggressive fibromatosis by pathology and misdiagnosed by ultrasound in our hospital, and analyze the cause of misdiagnosis. All the 5 patients had single breast disease, 3 cases on the left side and 2 cases on the right side. The diameter of the lesion was 20–48 mm. The two-dimensional ultrasound of the lesions showed irregular shape, unclear boundary, internal low echo, slightly attenuated rear echo. Color Doppler showed a strip of blood flow around the lesion and inside, Adler blood flow classification II–III. The elastography score is 4 to 5 points. One patient underwent contrast-enhanced ultrasonography, which showed that the lesions began to strengthen slightly before the surrounding glands, and the enhancement morphology was slightly higher than the unevenness. The enhancement range was not significantly expanded, and no nourishing blood vessels were seen. In all cases, the ipsilateral axillary

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lymph nodes showed "false kidney sign" and no abnormal enlarged lymph nodes. Ultrasound diagnosis of 4 cases were considered for breast cancer, 1 case due to ultrasound contrast examination was considered that breast cancer and other diseases to be identified, and recommended medical examination. Breast aggressive fibromatosis is a rare disease. Ultrasound diagnosis is easily misdiagnosed as malignant lesions. In clinical work, when diagnose breast malignant tumors, especially in young patients, we need to consider the possibility of the disease by comprehensive analysis of various ultrasound image features.

Keywords aggressive fibromatosis; ultrasound performance; misdiagnosis

乳腺侵袭性纤维瘤病是一种少见病, 发病原因仍不明确, 目前普遍认为可能与创伤、遗传性疾病和家族性腺瘤性息肉病等有关; 临床通常表现为无痛的硬乳腺肿块; 治疗方式提倡以手术为主, 辅以多学科的治疗方法。该病术前诊断极易误诊为恶性病变, 尤其是影像学诊断。该病相关的超声报道并不多, 本文总结5例乳腺侵袭性纤维瘤病的超声表现, 并分析其误诊原因, 旨在提高对乳腺侵袭性纤维瘤病的超声诊断认识。

1 临床资料

1.1 对象

收集2015年10月至2019年3月经昆明医科大学第三附属医院病理证实为乳腺侵袭性纤维瘤病的5例患者。患者均为女性, 在术前均行超声检查(其中1例患者亦行超声造影检查), 年龄25~45岁, 2例为体检时发现乳腺肿块, 3例表现为无意中触及肿块。患者均无疼痛, 无局部皮肤改变, 无乳头溢液等症状。

1.2 仪器与方法

使用东芝Aplio 500, GE Logiq E9及日立HIVISION Preirus彩色多普勒超声诊断仪, 探头频率6~12 MHz, GE Logiq E9配有超声造影软件, 选用注射用六氟化硫微泡超声造影剂。超声造影剂使用前注入冻干粉剂25 mg和0.9%氯化钠液5 mL振荡混匀, 每次造影时抽取4.8 mL混合溶液经肘部静脉行弹丸式注射, 随后快速推入5 mL生理盐水冲管。所有患者取平卧位或侧卧位, 在二维超声下观察病灶位置、大小、形态、边界、内

部回声、是否有钙化灶、后方回声以及与周围组织关系等超声征象, 通过彩色多普勒血流显像观察病灶血流特点。采用超声实时弹性成像技术, 对病变进行弹性评估, 应用罗葆明等^[1]的改良5分法对病灶的弹性图像结果进行评分, 弹性评分 ≤ 3 考虑良性病变, 4~5分考虑恶性病变。对于行超声造影检查者, 注射造影剂后开始计时, 观察所选取病灶的增强方式以及增强特点, 观察时间为2 min, 所有图像存档后由2名高年资医师进行分析并做出判断。观察病灶及其同侧腋窝有无肿大淋巴结。

1.3 超声表现

5例患者均为单乳发病, 左侧3例, 右侧2例, 病灶直径为20~48 mm, 5例患者病灶二维超声均表现为不规则形状, 边界不清楚, 内部为低回声, 后方回声稍衰减(图1); 5例患者病灶周边及内部可见点条状血流, Adler血流分级II~III级(图2); 5例患者病灶弹性成像评分为4~5(图3); 1例患者行超声造影检查, 表现为病灶稍早于周围腺体开始增强, 增强形态为不均匀稍高增强, 增强范围无明显扩大, 未见滋养血管(图4); 5例患者同侧腋窝淋巴结均表现为“假肾征”(图5), 无异常肿大淋巴结。4例的超声诊断均考虑乳腺癌可能, 1例超声造影检查结果提示: 乳腺癌与其他疾患待鉴别, 建议病检。

1.4 病理特征

肿块呈灰白色, 质硬, 形态不规则, 无包膜, 与周围组织分界不清, HE及免疫组织化学检查, 倾向侵袭性纤维瘤病(图6)。

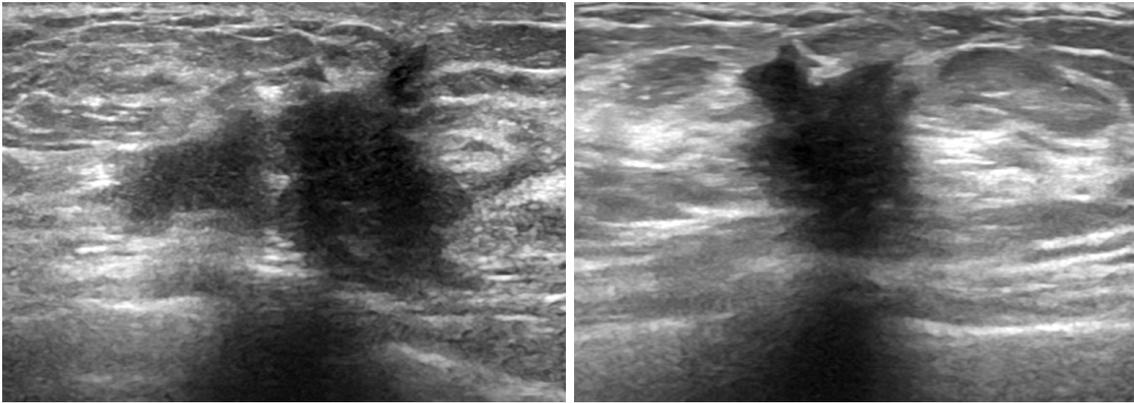


图1 病灶二维超声(同一病灶横切面及纵切面)

Figure 1 Two-dimensional ultrasound of the focus (transverse and longitudinal sections of the same focus)

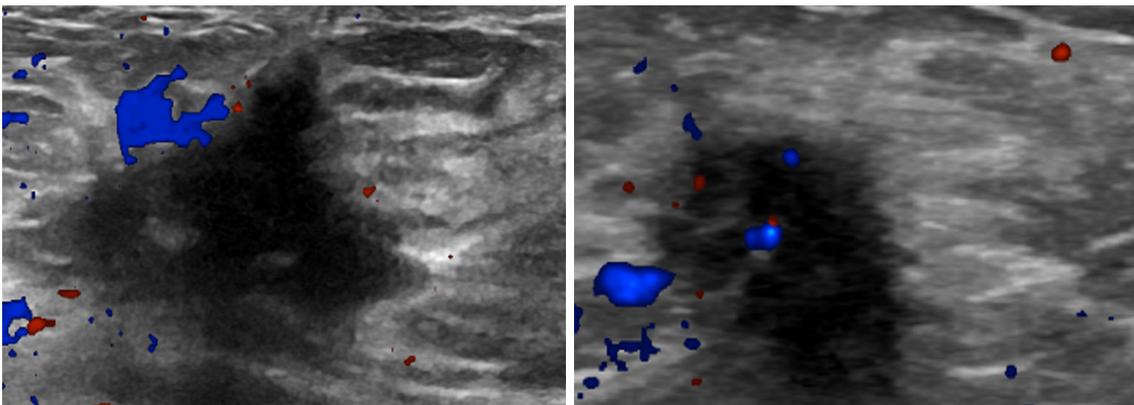


图2 病灶彩色多普勒血流显像: 肿块周边及内部可见点条状血流

Figure 2 Color Doppler flow imaging of focus: strip blood flow around and inside the mass

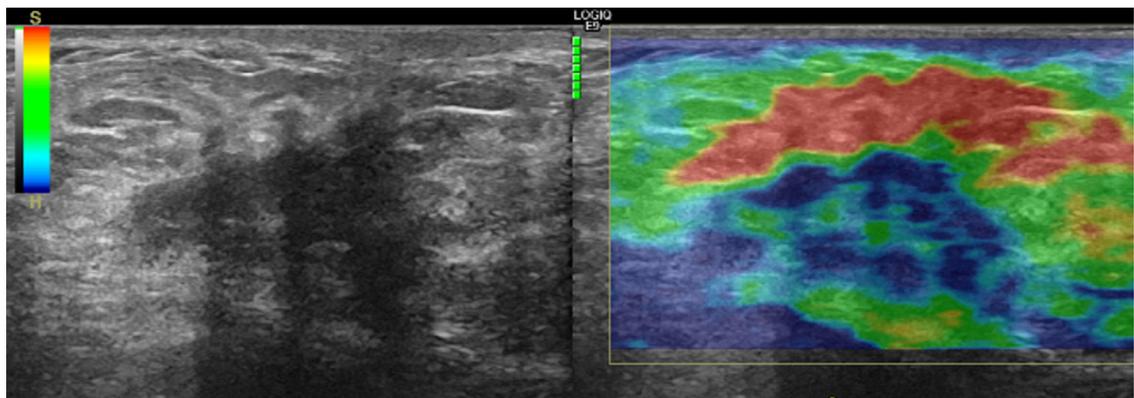


图3 病灶弹性成像(弹性评分为4)

Figure 3 Elastic imaging of focus (elastic score is 4 points)

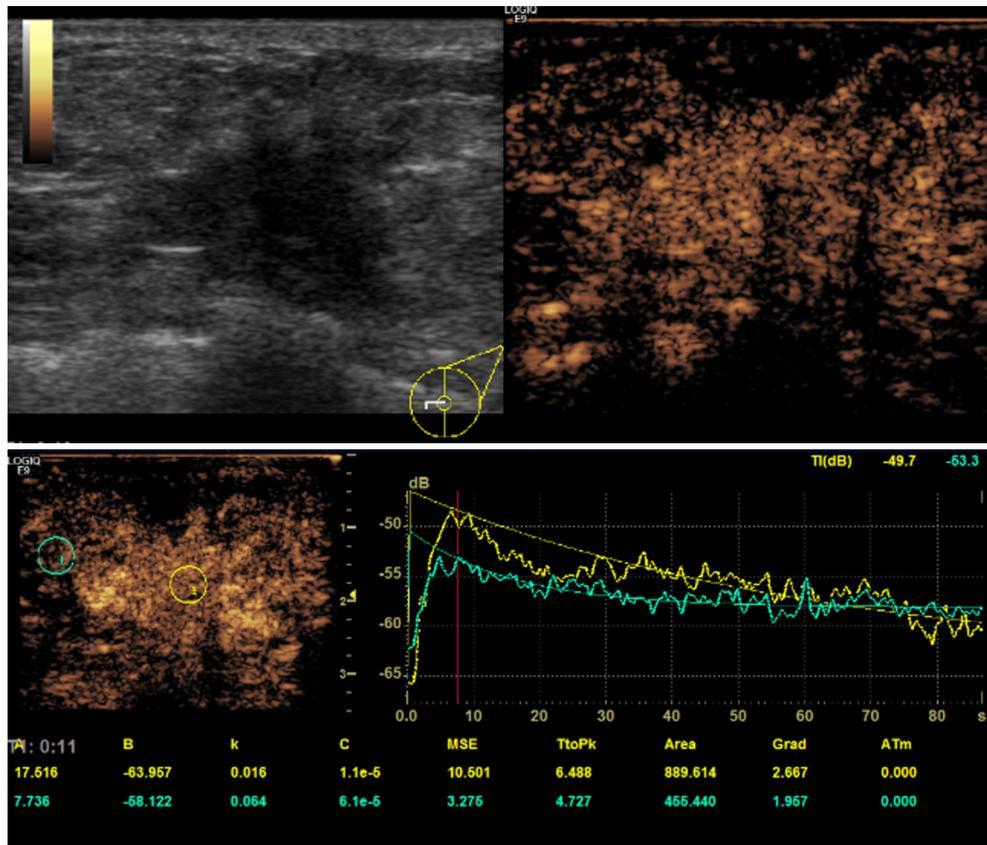


图4 病灶超声造影

Figure 4 Contrast-enhanced ultrasound of the lesion

病灶稍早于周围腺体开始增强，为不均匀稍高增强，增强范围无明显扩大，未见滋养血管。

The lesion began to strengthen earlier than the surrounding glands; the enhanced shape was uneven and slightly higher, the enhanced range was not significantly expanded, and there was no nourishing blood vessel.

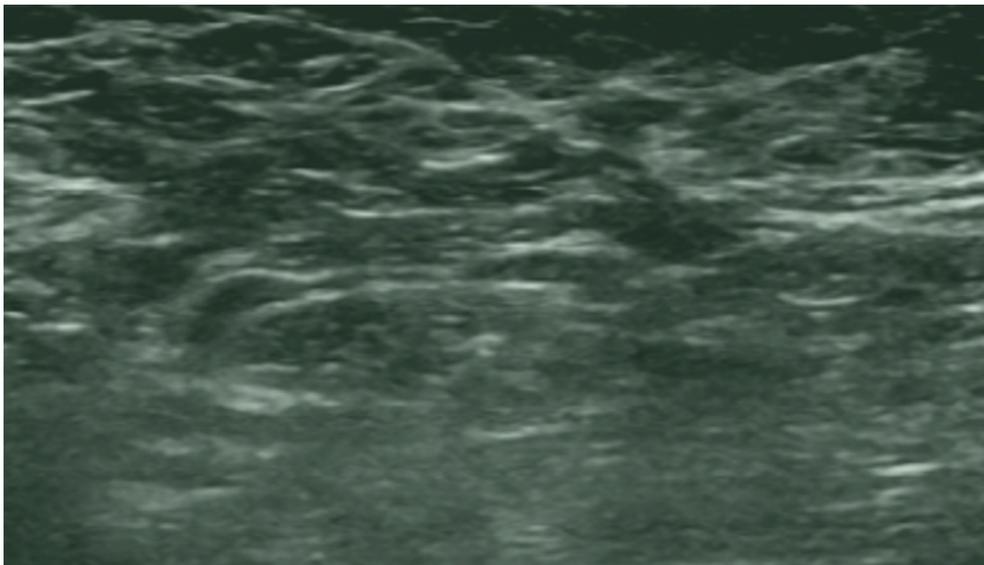


图5 同侧腋窝淋巴结：未见异常肿大

Figure 5 Ipsilateral axillary lymph nodes: no abnormal swelling

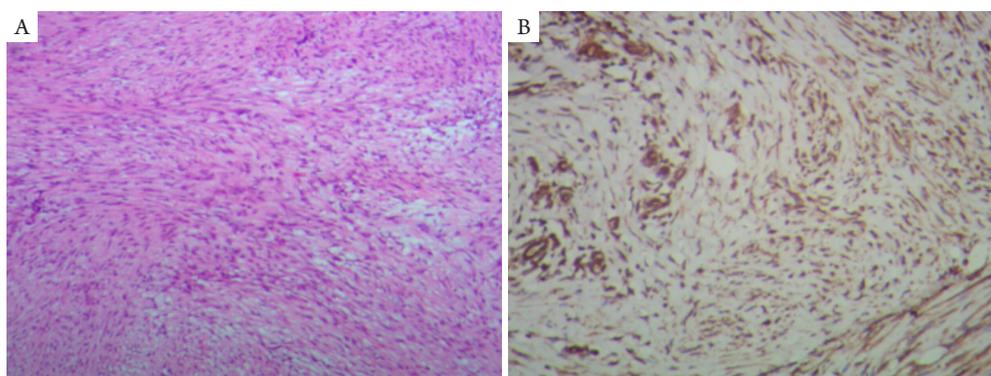


图6 HE染色(A, $\times 40$)及免疫组织化学染色(B, $\times 40$)结果, 倾向侵袭性纤维瘤病

Figure 6 HE (A, $\times 40$) and immunohistochemistry (B, $\times 40$) results, prone to aggressive fibromatosis

2 讨论

侵袭性纤维瘤病被定义为发生于深部软组织的克隆性纤维母细胞增生, 具有浸润性生长局部复发倾向, 但不发生远处转移, 生物学行为介于良恶性肿瘤之间, 属中间型。临床按发病部位不同分为腹内型、腹壁型、腹外型, 腹外型多发生于四肢, 很少发生在乳腺。乳腺侵袭性纤维瘤病为罕见病, 其仅占乳腺肿瘤的0.2%^[2]。有学者^[3]回顾性分析81例诊断为侵袭性纤维瘤病的患者, 其中发生于乳腺的只有5例, 仅占6.17%。

乳腺侵袭性纤维瘤病术前一般较难诊断, 尤其是影像学征象没有特异性, 通常表现为边界不清不规则的肿块, 易被误诊为乳腺癌^[4]。虽然两者超声鉴别诊断较困难, 但是治疗方式却不同, 故提高术前乳腺侵袭性纤维瘤病的诊断准确率具有重要意义。

回顾本组病例, 笔者总结了以下乳腺侵袭性纤维瘤病的特征。1)临床资料: 发病年龄相对较年轻, 本组病例年龄均小于45岁, 最小者为25岁, 无临床症状, 均因发现肿块就诊。2)超声表现: ①二维超声。病灶形态不规则, 边界不清, 边缘毛糙, 可见毛刺或者呈“蟹足征”, 内部回声为低回声, 后方回声衰减。此二维超声表现与其他学者^[5-7]报道相似, 但病灶内部未见微小钙化灶, 这是区别与乳腺癌的一个重要超声征象。②彩色多普勒血流显像。病灶血管成分较少, 故病灶仅有少许血流。③弹性成像。弹性成像可以反映组织的生物力学, 通过组织的软硬度来鉴别病变的良恶性。乳腺侵袭性纤维瘤病病理表现为大量纤维母细胞以及胶原组织构成, 因此病灶质地坚

硬。本组5例病灶弹性成像显示病灶偏硬, 弹性评分与乳腺癌评分接近, 因此不能与乳腺恶性肿瘤相鉴别。④超声造影。乳腺侵袭性纤维瘤病病灶血管成分较少, 故超声造影表现为病灶稍早于周围腺体开始增强, 增强形态为不均匀稍高增强, 增强范围无明显扩大, 未见滋养血管。相反, 乳腺恶性肿瘤血供丰富, 而且血管走行杂乱迂曲, 超声造影大部分表现为早进高增强, 范围较二维扩大, 可见滋养血管。所以超声造影对乳腺侵袭性纤维瘤病与乳腺恶性肿瘤的超声鉴别诊断有一定帮助。⑤同侧腋窝淋巴结表现。乳腺侵袭性纤维瘤病属于良性病变, 不伴有腋窝淋巴结异常肿大及转移, 这与其他学者观点一致^[5,8]。

综上所述, 乳腺侵袭性纤维瘤病病灶的二维超声征象及弹性成像与乳腺恶性肿瘤相似, 但二者彩色多普勒血流显像、超声造影有所不同, 且乳腺侵袭性纤维瘤病病灶内无微小钙化灶。在临床工作中拟诊断乳腺恶性肿瘤, 尤其是年轻患者时, 需结合各种超声图像特征综合分析, 考虑到该病的可能。

参考文献

1. 罗葆明, 欧冰, 智慧, 等. 改良超声弹性成像评分标准在乳腺肿块鉴别诊断中的价值[J]. 中华生物医学工程杂志, 2006, 12(5): 396-398.
LUO Baoming, OU Bing, ZHI Hui, et al. The value of improved ultrasonic elastography scoring standard in the differential diagnosis of breast masses[J]. Journal of Modern Clinical Medical Bioengineering, 2006, 12(5): 396-398.
2. Glazebrook KN, Reynolds CA. Mammary fibromatosis[J]. AJR Am J

- Roentgenol, 2009, 193(3): 856-860.
3. Morales RD, Mendoza AG, Luces C, et al. Aggressive breast fibromatosis following augmentation mastoplasty: a series of case reports[J]. *Ecancermedicalscience*, 2018, 12: 833.
 4. Lee SM, Lee JY, Lee BH, et al. Fibromatosis of the breast mimicking an abscess: case report of unusual sonographic features[J]. *Clin Imaging*, 2015, 39(4): 685-688.
 5. Wuyts L, De Schepper A. Desmoid-type fibromatosis of the breast mimicking carcinoma[J]. *J Belg Soc Radiol*, 2019, 103(1): 13.
 6. Grimaldi MC, Trentin C, Lo Gullo R, et al. Fibromatosis of the breast mimicking cancer: a case report[J]. *Radiol Case Rep*, 2017, 13(1): 1-5.
 7. 范丽青, 付志勇. 浅表组织及乳腺侵袭性纤维瘤病的超声表现及价值[J]. *实用癌症杂志*, 2017, 32(9): 1467-1469.
FAN Liqing, FU Zhiyong. Ultrasound manifestations and value of superficial tissue and invasive fibromatosis of breast[J]. *The Practical Journal of Cancer*, 2017, 32(9): 1467-1469.
 8. Hill E, Merrill A, Korourian S, et al. Silicone breast implant associated fibromatosis[J]. *Surg Case Rep*, 2018, 2018(9): rjy249.

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