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· 病例报道 ·

## Ultrasonic misdiagnosis of granulomas on polyacrylamide hydrogel granuloma as breast cancer: a case report 聚丙烯酰胺水凝胶肉芽肿超声误诊为乳腺癌 1 例

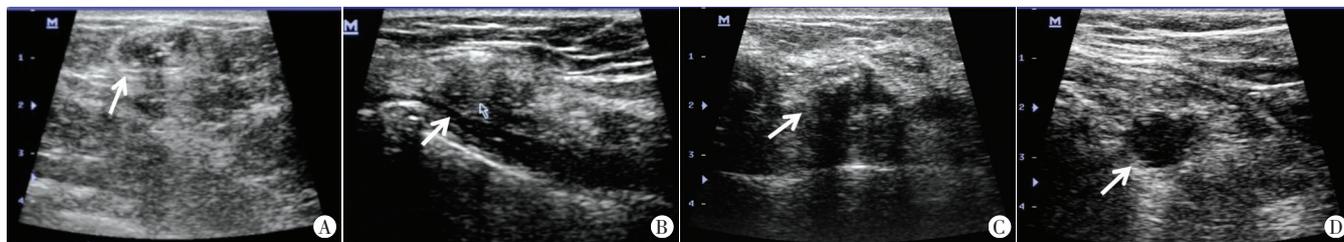
周芳 张刚

[中图法分类号]R445.1

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患者女,53岁,因“发现右乳包块4个月”就诊。有注射水溶性聚丙烯酰胺凝胶(polyacrylamide hydrogel, PAHG)隆乳术史及抽吸PAHG术史。体格检查:右侧乳腺外上象限扪及一大小约2.0 cm×1.0 cm包块,质中,表面尚光滑,无波动感。超声检查:右乳皮下脂肪层、腺体内、乳腺后间隙及右侧胸大肌层见多个异常回声,以低回声或极低回声为主,较大者位于11点钟距乳头4 cm(皮下脂肪层),大小约1.8 cm×1.1 cm,呈混合性,形态欠

规则,边界欠清晰,其内回声不均,可见不规则极低回声区及多个点状强回声,后伴声影;CDFI于其周边及内部未探及明显血流信号。超声提示:右乳异常回声,癌? BI-RADS 4a(图1)。乳腺增强MRI提示:右侧乳腺下方、胸大肌及腹直肌深面占位性病变(图2),考虑假体残留炎性病变可能性大,肿瘤待排? BI-RADS 4a类。后行粗针穿刺活检术,术后病理诊断:异物伴多核巨细胞反应,符合PAHG肉芽肿(图3)。



A:箭头示皮下脂肪层;B:箭头示腺体内;C:箭头示乳腺后间隙;D:箭头示胸大肌层

图1 PAHG肉芽肿声像图

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组织,成分较单一。本研究3例患儿病变边界不清楚,形态不规则且病变周边回声增强,结合病理组织学检查考虑为病变合并感染所致。

关于皮肤型幼年性黄色肉芽肿病变的CDFI表现,本研究与既往研究<sup>[5-6]</sup>报道有明显差异。本研究中15例(75%)的病变可见血流信号,3例(20%)提示为丰富血供,12例(60%)提示为少许血供;仅5例(25%)提示无血供。笔者认为,幼年性黄色肉芽肿本质是迟发超敏反应所致的炎症,其内部必定有微小血管增生,支持CDFI病变内部少血供的表现。而本研究中CDFI提示血供丰富的3例患儿,结合病理组织学检查证实伴有感染;此外,有5例患儿病变的CDFI提示无血供,与Martínez-Morán等<sup>[5]</sup>和Höck等<sup>[6]</sup>研究结果一致。

临床皮肤型幼年性黄色肉芽肿的超声图像表现需与婴幼儿血管瘤、浅表部位囊肿、钙化上皮瘤等浅表肿物鉴别。婴幼儿血管瘤表面常呈鲜红或暗红色,声像图多表现为中强回声,内部血流信号丰富<sup>[7]</sup>。浅表部位的囊肿表面常无明显颜色改变,声像图多为无回声伴有侧方声影及后方回声增强,内部无明显血流信号<sup>[8]</sup>。钙化上皮瘤表面常呈暗青色、质地硬,声像图多表现为低回声伴有强回声钙化,后方常伴有声影,其内可见血流信号<sup>[9]</sup>。

综上所述,高频超声可作为诊断皮肤型幼年性黄色肉芽肿的可靠辅助工具。当婴幼儿伴发橘黄色皮损,声像图表现为皮肤及皮下浅层形态规则且边界清楚的均质低回声,内部探及少许血供时,可考虑本病可能。

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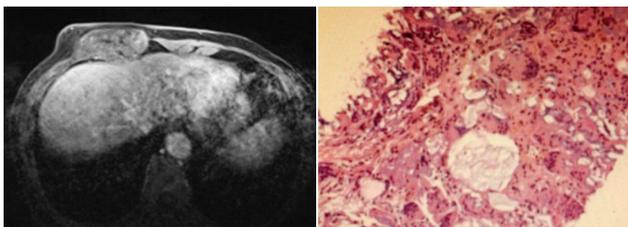


图2 PAHG肉芽肿增强MRI图 图3 PAHG肉芽肿组织病理图(HE染色,×100)

讨论:PAHG肉芽肿是注射PAHG后填充物在组织中分散与周围组织混合,被淋巴细胞、巨噬细胞等炎症细胞包裹形成的结节状病灶。PAHG降解后的单体丙酰胺具有毒性,与人体水分结合后可沿周围组织游走、浸润,对局部组织产生毒性作用<sup>[1]</sup>,刺激周围组织产生持续炎症,且有合并乳腺癌的文献<sup>[2]</sup>报道。即使曾行PAHG抽吸也不能完全除外相关肉芽肿可能,因抽吸通道可能导致注射物播散,加重组织损伤<sup>[3]</sup>。常见的PAHG肉芽肿超声表现为乳腺皮下脂肪层、腺体层、胸大小肌层及腋窝等处见一个或多个低回声或极低回声结节,边界不清,内部回声欠均,与假体回声相似;部分患者因重力作用、体位变化等因素影响,PAHG对组织浸润可超出乳房以外的区域,如腹壁、腰部等部位<sup>[4]</sup>。本例超声表现为右乳皮下脂肪层、腺体内、乳腺后间隙及右侧胸大肌层见多个异常回声,以低回声或极低回声为主,部分呈混合性,部分边界不清,其内回声不均,可见

不规则极低回声区及多个微钙化,后伴声影,与乳腺恶性肿瘤声像图高度相似,易误诊为乳腺恶性肿瘤,本例即为此。乳腺增强MRI可作为超声检查的有力补充手段,PAHG隆乳术后MRI表现为假体形态不规整,边缘凸凹不平,内信号多数不均匀,并多发低信号分隔影,致高信号假体被分隔成单发或多发条块状、结节状<sup>[5]</sup>,本例MRI图也有类似发现并提示假体残留炎症改变。因而对结节进一步穿刺活检取得病理证据,减少了误诊风险。

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