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·病例报道·

Contrast-enhanced ultrasound diagnosis of giant coronary artery aneurysm with attached wall thrombosis: a case report

超声造影诊断巨大冠状动脉瘤伴附壁血栓形成 1 例

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[中图法分类号] R540.45; R543.3 [文献标识码] B

患者男, 58 岁, 因血尿 1 周入院。自诉胸闷不适。心脏超声检查: 左房、左心耳及左侧冠状动脉起始部受压, 左心耳外缘见一大小 64 mm×43 mm 团块状混合实性低回声, 边界清, 内部可见大小约 26 mm×24 mm 类圆形无回声区, 团块内部未探及明显血流信号(图 1); 提示: 心包占位可能。心脏超声造影检查: 于左室显影后第 3 个心动周期病灶内见类圆形微泡充填, 其周围见半月形充盈缺损(图 2, 3); 提示: 冠状动脉病变, 巨大冠状动脉瘤伴附壁血栓形成可能性大。进一步胸部 CT 平扫+增强扫描检查: 平扫见中纵隔(肺动脉与左房之间)一椭圆形团块状等密度影, 范围约 53 mm×73 mm×57 mm, CT 值约 47 Hu, 边缘见弧形蛋壳样钙化; 增强扫描见病灶内团状明显强化区及新月形充盈缺损区域(图 4), 强化区与冠状动脉左旋支-左房旋支远端相连(图 5); 另于肺动脉根部前缘发现异常血管团显影, 且可见对比剂自血管团喷入肺动脉内, 血管团供血动脉分别来自左前降支-左动脉圆锥支、右冠副冠状动脉-右动脉圆锥支及支气管动脉(图 6); 提示: ①冠状动脉-左房旋支巨大动脉瘤伴附壁血栓形成; ②冠状动脉-肺动脉瘘、支气管动脉-肺动脉瘘。冠状动脉造影证实为冠状动脉左旋支-左房旋支巨大冠状动脉瘤伴冠状动脉-肺动脉瘘(图 7)。

讨论: 冠状动脉瘤指冠状动脉发生局限或弥漫性异常扩张, 且瘤体外径达到相邻冠状动脉的 1.5 倍以上。其发病率较低, 冠状动脉造影检查发现率约 0.15%~4.90%[1], 根据病因可分为先天性和后天性获得, 其中先天性有冠状动脉发育异常、冠状动脉瘘等; 后天性获得有动脉粥样硬化、大动脉炎、风湿或梅毒、川崎病、外伤及冠状动脉成形术后等, 以动脉粥样硬化最常见[2]。冠状动脉瘤好发于右冠状动脉, 其次为左前降支、左旋支, 左冠状动脉瘤相对少见, 发生率约为 0.1%[3-4]。临床上将管径扩张达 20 mm 及以上者定义为巨大冠状动脉瘤(giant coronary artery

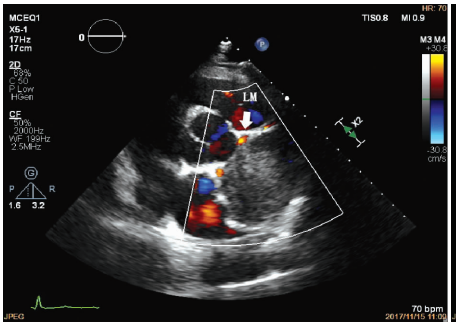

图 1 彩色多普勒示左侧冠状动脉起始部受压(箭头示)。LM: 左主干

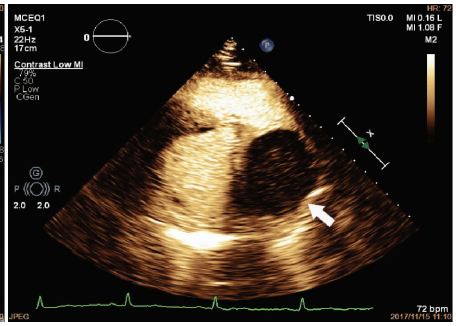

图 2 超声造影示病灶充盈缺损区(箭头示)

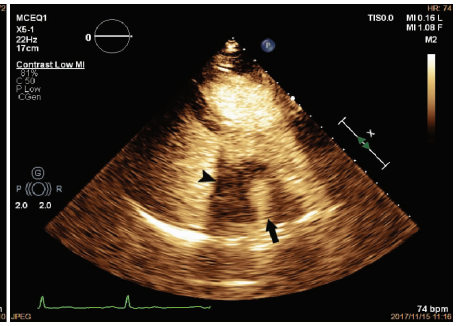

图 3 超声造影示半月形充盈缺损(无尾箭头示)及类圆形微泡充填区(箭头示)

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图 4 增强 CT 示病灶内团状明显强化区及新月形充盈缺损区域

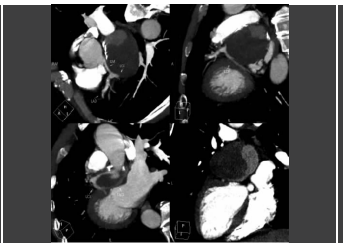

图 5 增强 CT 示病灶内强化区与冠状动脉左旋支-左房旋支远端相连

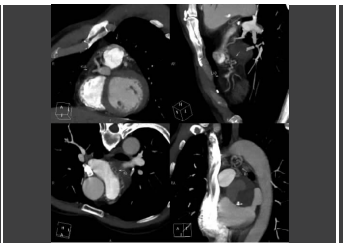

图 6 增强 CT 示冠状动脉（左、右动脉圆锥支）-肺动脉瘘及支气管动脉-肺动脉瘘

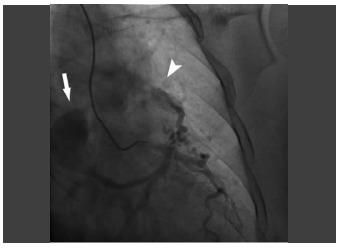

图 7 左冠状动脉造影示左房旋支远端膨大呈瘤样（箭头示），左动脉圆锥支-肺动脉瘘（无尾箭头示）

aneurysm, GCAA)[5]。冠状动脉造影检查是诊断 GCAA 的"金标准"。本例经冠状动脉造影证实为左房旋支 GCAA，并多发冠状动脉瘘，临床上实属罕见。冠状动脉瘤的临床表现及心电图缺乏特异性，本例患者行常规心脏超声检查偶然发现，经胸部 CT 增强及冠状动脉造影得以明确诊断。因其瘤体内伴有大量附壁血栓且为冠状动脉远端病变，其超声表现类似心脏肿瘤，考虑到左冠状动脉受压，使左房旋支流速减慢，彩色多普勒未能有效地显示其血流；行超声造影检查，于左室显影后 3 个心动周期病灶内见较大范围微泡充填，因超声造影为纯血池造影成像，提示病灶存在血管性病变，高度怀疑冠状动脉病变，即常见的冠状动脉瘘、冠状动脉瘤及冠状静脉病变等，因本例病灶呈椭圆形，其内见类圆形微泡充填区，故最终考虑为 GCAA 伴附壁血栓形成。

总之，心脏超声造影可清晰显示 GCAA 的大小、形态及位置，并可见超声造影剂充填，附壁血栓表现为充盈缺损、无血流灌注，可作为辅助临床诊断 GCAA 的一种安全、简便、有效的影像检查手段。

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