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· 病例报道 ·

Contrast echocardiographic manifestations of cardiac metastasis of malignant thymoma: a case report

恶性胸腺瘤心包转移心脏超声造影表现 1 例

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[中图分类号]R540.45

[文献标识码]B

患者男,63岁,因“胸闷气短伴间断背部疼痛,并逐步加重7d”入院。体格检查:体温36.8℃,血压157/105 mmHg(1 mmHg=0.133 kPa),呼吸23次/min,心律齐,未闻及杂音。二维经胸超声心动图检查:心包腔内可探及大小约22.2 mm×18.3 mm略高回声区,形状不规则,紧邻右室前壁、左室侧壁及心尖部,其内回声不均匀,与正常心肌组织分界不清晰(图1)。超声心动图提示:心包腔内存在占位性病变,建议结合CT检查。心脏超声造影检查:心包腔内探及形状不规则、回声不均匀的实质性回声,大部分位于右室前壁及左室心尖部,与正常心肌组织分界不清晰,最厚处约18.9 mm,其内呈高增强、快速灌注,见图2A;定量分析示肿块的时间-强度曲线幅度高于正常心肌,造影剂峰值强度(10.25 dB)大于正常心肌(7.68 dB),见图2B。超声造影提示:心包腔内占位组织呈高增强、快速灌注,恶性可能性大。增

强CT检查:前上纵隔可见形状不规则软组织密度肿块,边缘不清晰;增强扫描示肿块强化欠均匀,包绕主动脉、肺动脉主干及右支、上腔静脉;心包局部不均匀增厚,心包内可见液体密度影(图3)。增强CT提示:考虑前上纵隔占位为胸腺瘤,心包腔内占位为胸腺瘤恶性转移。进一步行心包穿刺置管引流术,术中病理检查:心包积液内见少许核大深染异形细胞;免疫组化检查:肿瘤细胞簇表达CD5、CD117、CK、P63、CK5/6,且Ki-67指数较高,符合胸腺上皮性肿瘤,倾向至少为B3型胸腺瘤(图4)。

讨论:心脏转移瘤临床较少见,原发病灶多为鳞状细胞癌、腺癌和淋巴瘤,恶性胸腺瘤心包转移罕见报道。胸腺瘤是前上纵隔中较常见的肿瘤,占有纵隔肿瘤的19.3%,多呈膨胀性生长,较少局部浸润性生长^[1]。浸润性胸腺瘤通常沿纵隔和胸膜表面生长,可发生气管、心包、心脏和大血管浸润,当肿瘤侵及

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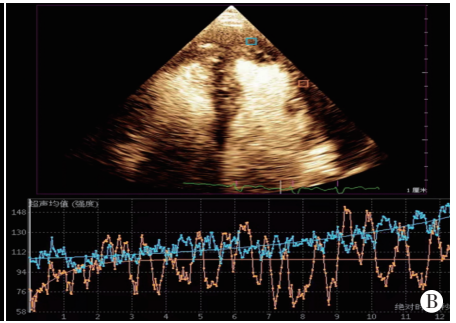
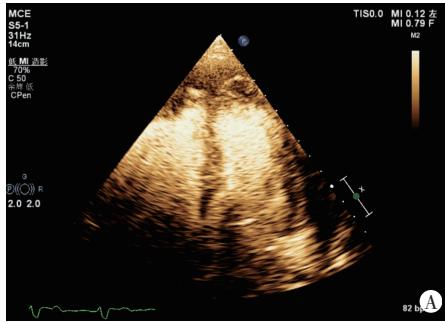
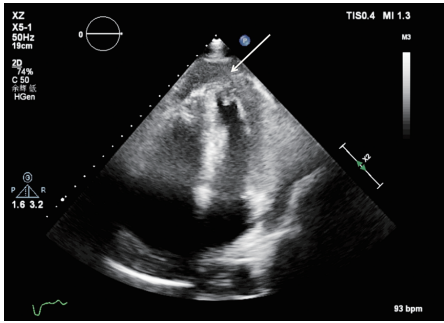
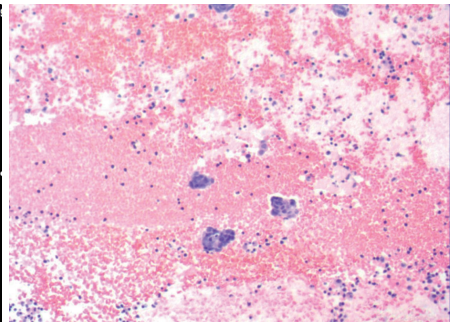
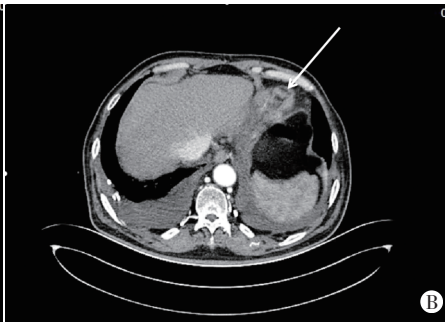
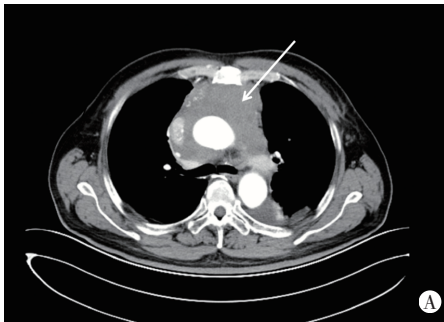


图1 二维经胸超声心动图示左室心尖部前方探及形状不规则的略高回声区(箭头示),其内回声不均匀,与正常心肌组织分界不清晰

A:右室及左室心尖前方可见肿块周围血流灌注影像,其内呈不均匀强化;B:定量分析示肿块的时间-强度曲线幅度明显高于正常心肌(蓝色曲线示肿块,橙色曲线示正常心肌)

图2 本例患者心脏超声造影图



A:前纵隔不规则占位(箭头示);B:心包腔内近左室心尖处可见心包积液及形状不规则的稍低密度肿块(箭头示),与正常心肌组织分界不清晰

图4 病理图示心包积液内可见胸腺上皮肿瘤细胞(HE染色,×100)

图3 本例患者增强CT图

心包导致大量心包积液时,患者可出现胸闷、气短等症状^[2]。经胸超声心动图是检查心脏肿块的首选方法,可以明确是否存在肿块及其大小、形状、移动性、附着点、对血流动力学的影响^[3]。目前临床诊断心脏肿块主要应用二维经胸超声心动图,但对于部分图像质量欠佳和肿块回声复杂的患者有一定的局限性。临床诊断心脏恶性肿瘤常应用增强CT及心脏MRI,但具有辐射、使用禁忌症或价格高昂等局限。心脏超声造影通过体外静脉向血管内注入声学造影剂微泡,对比增强提高图像质量,随后通过观察病灶内微泡灌注情况以评估其血流信号^[4],有助于早期诊断心脏肿块并鉴别其性质,具有价廉、安全、重复性高等优势,但其在心脏恶性肿瘤的应用较少。一般而言,良、恶性肿瘤及血栓间血流信号存在差异,恶性肿瘤往往生长迅速,需要生成更多的新生血管为肿瘤组织提供营养,故血供较丰富,心脏超声造影表现为明显增强;良性肿瘤生长多较缓慢,血供较少,心脏超声造影表现为无增强或轻微低增强;血栓内无血供,心脏超声造影表现为无增强^[5]。此外,心脏超声造影定量分析可为良、恶性肿瘤的鉴别提供更多的参考信息。研究^[6]显示,与邻近正常心肌相比,心脏恶性肿瘤的增强程度较高。本例患者心脏超声造影显示肿块内血流丰富,且其增强程度较周围正常心肌明显增高,提示恶性可能性大;术中病理提示心包积液中含有核大深染异形细胞,免疫组化证实为恶性胸腺瘤转移。总之,心脏超声造影可对心脏肿块进行定性

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