

· 临床病理讨论 ·

Clinicopathological Conference

A 64 year old man with palpitation and short breath after taking erythromycin

(The 13th case)

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Case Presentation

A male patient, 64 years old, received esophageal carcinoma radical surgery in Nov 1989. In March 1991, the symptom of cough took place because of cold. He was admitted into the hospital for palpitation and short breath after taking erythromycin. He denied the history of hypertension, diabetes mellitus and coronary heart disease. Physical examination on admission: BP 110/78 mmHg, P 40 bpm, R 16 bpm. ECG results: $\text{III}^\circ\text{AVB}$; ventricular escape rhythm; complete right bundle branch block; ST segment depression ≥ 0.05 mV in leads II, III, aVF and V4-9; ST segment elevation > 0.1 mV in lead V1-3; T wave elevation in leads I, II and aVL and T wave drop in lead aVF. X-Ray chest radiography

result: pneumonia of right lung. UCG result: no heart image was showed at left edge of sternum but heart image could be seen in the area near the xiphoid process. Diagnosis on admission: $\text{III}^\circ\text{AVB}$; infection in lung. He did not respond to anti-infective and symptomatic treatments, and died of circulatory and respiratory failure 15 days later. Autopsy findings: a gigantic metastatic squamous cell carcinoma on interventricular septum, with metastasis to mediastinal lymph nodes; carcinomatous cell emboli in left and right pulmonary arteries accompanied with hemorrhagic infarct in inferior lobe of right lung; lobular pneumonia.

Clinicopathological Discussion

Dr. Jing Quanmin: Secondary metastatic tumors usually are found in sinoatrial node, rarely below atrioventricular node in heart conduction system. This relates to the routes of metastasis. The carcinomatous cell emboli flow backward in lymphatic system or transfer through superior and inferior vena cava. It initially reaches the epicardium or myocardium of right atrium. Since the sinoatrial node is situated beneath the epicardium and between the atrial muscles, it is apt to be affected. The autopsy result of this case showed a gigantic metastatic squamous cell carcinoma at the interventricular septum. The routes of metastasis need to be studied further. The mechanism of occurrence of $\text{III}^\circ\text{AVB}$ may be that the compression effect of the tumor causes impairment of pacing, compression atrophy of conductive tissue and dystrophy of nerve, which results

in dysfunction, cell fibrosis, interruption of connection and conduction block.

Dr. Wang Xiaozeng: Cardiac metastatic tumors are rarely seen, most of which are occasionally found during operations or autopsies. The detection rate has greatly increased since the advent of UCG, which is easily repeatable and nontraumatic. For the tumors in different positions, we can choose different views to observe them; and for a single tumor, we can know its shape and its relationship with surrounding tissues through different views. Almost all patients can be diagnosed by UCG, however, we need to pay attention to distinguish it from vegetation in valve and particularly, atrial thrombi. The main distinguishing point are as follows: The metastatic tumors have special locations, pedicels, inhomogeneous texture and slightly low echo; while the atrial thrombi have homogeneous texture and are usually located in right auricle. This case had carcinoma of esophagus metastasizing to interventricular septum. The erosion of conduction bundle resulted in AVB. The examination of

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UCG did not point out hypertrophy of interventricular septum or limited bulge. This may be related to esophageal carcinoma operation, which make the stomach substitute for esophagus and influenced the recognition of cardiac morphology in UCG.

Dr. Han Yaling: Cardiac tumors are rare cardiac diseases, which account for only 0.001%-0.33% in autopsies and mostly are metastatic. Cardiac tumor is usually detected in UCG or medical imaging, and sometimes is verified by autopsy or surgery. Its clinical manifestation is complex and diverse. The common symptoms are palpitation, short breath, chest pain, edema, and cardiac tamponade. Different clinical manifestations are decided by the position, size, shape, speed of developing, mobility of tumor body and with or without shedding of fragments etc. The conduction system of heart is a special tissue which can make heart pacing

and regulate the heart rhythm. The infiltrating growth of malignant tumor destroys the sinoatrial node and atrioventricular node, and causes dissociation of their structure. The cardiac sympathetic and parasympathetic nerve plexuses change the heart rhythm by natural and humoral regulation, which makes up the pathologic basis of clinical cardiac arrhythmia. In clinic, if III° AVB is found to be the chief manifestation of a patient, who has no risk factor and history of coronary heart disease, but a definite history of tumor, especially the tumor in lung and mediastinum, we should consider the possibility of cardiac metastatic tumor. If the images in Doppler echocardiography are not clear, it is necessary to carry out the chest CT examination or MRI of heart to confirm the diagnosis and give corresponding treatment.

(Translator: XING Jun, HAN Yaling,
JING Quanming, et al)

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服用红霉素后心悸、气短 1 例

1 病例摘要

患者男性, 64 岁。于 1989 年 11 月行食道癌外科根治术。1991 年 3 月因感冒, 出现咳嗽症状; 服用红霉素后突感心悸、气短入院。否认高血压、糖尿病、冠心病病史。入院查体: 血压 100/78 mmHg, 脉搏 40 次/min。呼吸 16 次/min。心电图示: III° 房室传导阻滞, 室性逸搏心律, 完全性右束支传导阻滞, II , III , avF , V4-9 导联 ST 段下移 ≥ 0.05 mV, V1-3 导联 ST 段抬高 > 0.1 mV。I, II , avL 导联 T 波抬高, avF 导联 T 波低平。X 线胸片示: 右肺肺炎。超声心动图示: 胸骨左缘不能显示心脏图像, 于剑突附近方可显示心脏影像。入院诊断: III° 房室传导阻滞, 肺炎感染。给予抗感染、对症等治疗效果不明显, 15 d 后死于循环呼吸衰竭。尸检结果: 心脏室间隔巨块型转移性鳞状细胞癌(图 1), 伴纵隔淋巴结转移; 左、右肺动脉癌栓及血栓形成, 伴右肺下叶出血性梗死; 小叶性肺炎。

瘤好发于窦房结与其转移途径有关, 即癌栓经淋巴道逆流而上或经上、下腔静脉转移, 首先到达右心房之心外膜或心房肌内, 而窦房结位于心外膜下和心房肌间, 故易受累。本例尸检结果: 心脏室间隔巨块型转移性鳞状细胞癌, 其转移途径有待进一步探讨, 引起 III° 房室传导阻滞的机制可能是: 肿瘤的压迫作用, 使起搏、传导组织发生压迫性萎缩, 神经营养障碍, 导致功能异常, 致使细胞纤维化, 连接中断, 传导阻滞。

王效增副教授: 心脏转移瘤极少见, 多数是在手术或尸检时偶然发现, 自从超声心动图问世以来, 大大提高了心脏肿瘤的检出率, 超声心动图具有易重复性, 无创伤性, 对不同位置的肿瘤可以选择不同切面的观察, 对同一肿瘤亦可以通过不同切面了解它的形态以及和周围组织的关系。几乎所有病人都可以经超声心动图进行诊断, 但要注意与瓣膜赘生物, 尤其心房血栓相鉴别^[1], 其有助鉴别的特征包括: 瘤体生长部位特殊, 有蒂, 质地不均一, 回声略偏低; 心房血栓质地均一, 常位于右心耳处。本例为食道癌转移到室间隔。侵蚀传导束导致房室传导阻滞。经心脏超声检查未提示室间隔肥厚或局限性膨出, 可能与食管癌手术造成胃代食

2 临床病理讨论

荆全民副教授: 继发性转移肿瘤好发于窦房结, 而房室结以下传导系统则少见。继发性转移肿

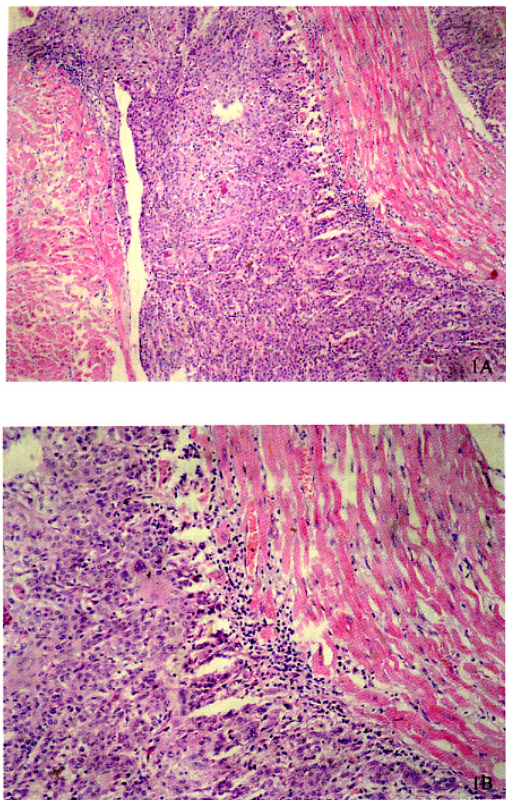


图 1 心脏鳞癌转移瘤. 1A: $\times 200$; 1B: $\times 400$

管影响超声心脏形态学辨认有关。

韩雅玲教授:心脏肿瘤是极少见的心脏疾病,

仅占尸检中的 0.001% ~ 0.33%。其中多数为转移性肿瘤^[2]。其临床表现复杂多样,常见症状为心悸、气短、胸痛、水肿以及心脏填塞的临床表现,不同的临床表现主要取决于瘤体所在的位置、大小、形状、生长速度、活动度、有无碎片脱落等。心脏传导系统是心脏起搏和调控心脏节律的特殊组织。恶性肿瘤的浸润性生长,破坏窦房结,房室结,使两结结构解离,病变的心内交感、副交感神经丛可以通过神经体液作用改变心脏的节律,构成临床上常有心律失常的病理基础。在临床上若发现患者以 III 度房室传导阻滞为主要表现,无冠心病危险因素及冠心病病史,有明确的肿瘤病史,尤其是有肺或纵隔内肿瘤者,应警惕心脏转移性肿瘤的可能。若多普勒超声心动图显像不明显,应及时行胸部 CT 或心脏磁共振成像检查,以便及时明确诊断,进行相应的处理。

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(参加讨论医师:韩雅玲 荆全民 王效增)

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· 消 息 ·

欢迎投稿 欢迎订阅《中华老年多器官疾病杂志》

《中华老年多器官疾病杂志》是经国家新闻出版署正式批准的医学期刊,创刊于 2002 年 6 月,由王士雯院士任总编辑、国内多学科知名专家组成编委会。

本刊已被评定为中国科技论文统计源期刊(中国科技核心期刊),自 2004 年起(用刊为 2003 年)收入国家科技部中国科技论文与引文数据库(CSIPC)。

本刊主要内容是交流老年心脏病和老年多器官疾病(两个及两个以上器官相继或同时患病)的诊治经验与教训,探讨其发病机制和有效防治措施,重点报道我国在老年心脏病尤其是涉及多器官疾病的临床、基础和预防方面的最新成果和经验,努力推广老年心脏病和老年多器官疾病的新观点、新方法、新措施和新药物。

本刊设有以下栏目:专题笔谈、述评、基础研究、临床研究、论著摘要、经验交流、英文临床病理讨论(附中文摘要)、综述、讲座、病例报告、学术动态等。读者对象为从事医学特别是老年医学的临床、科研、教学工作者及保健人员。

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