

우심방 점액종으로 오인된 우심방 혈전

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Right Atrial Thrombus Mimicking Right Atrial Myxoma

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A right atrial thrombus in structurally normal heart is very rare. A 66-year-old woman was admitted with chest discomfort and dyspnea. She was diagnosed of right atrial myxoma on echocardiography and chest computed tomography. We performed an excision of the mass attached to atrial septum, which was found to be an organized mural thrombus by pathologic examination. We report this rare case with a review of literature.

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Key words: 1. Myxoma
2. Thrombosis
3. Heart atrium

CASE REPORT

A 66-year-old woman was admitted with a chief complaint of dyspnea and chest discomfort over the previous 10 days. She has no specific past medical history except for herniorrhaphy 10 years ago and has taken medication for osteoporosis. Echocardiography revealed a mass about 30 mm in diameter in right atrium without other cardiac abnormalities (Fig. 1). The mass was suspended by a pedicle on the atrial septum. Chest computed tomography showed a lobular heterogeneous mass with calcification in the right atrium (Fig. 2). Accordingly we presumed it right atrial myxoma. Laboratory test revealed a white blood cell count of 6,560/mm³, hemoglobin 13.1 g/dL and platelet count 354,000/mm³. The partial thromboplastin time was 25.6 seconds (reference range 22.4~40.4 seconds), prothrombin time 10.5 seconds (reference range 11~15 seconds). The level of serum electrolytes, serum

glutamic oxaloacetic transaminase, serum glutamic pyruvic transaminase, and alkaline phosphatase were all normal. The smooth surfaced round mass was attached by a short pedicle to the atrial septum between coronary sinus and inferior vena cava (Fig. 3), which was removed with a part of atrial septum under cardiopulmonary bypass. The cut-surface was containing necrotic materials and multiple calcified nodules (Fig. 4). It was confirmed mural thrombus by pathologic examination. The postoperative course was satisfactory, and the patient was discharged on the 11th postoperative day.

DISCUSSION

Suspicious diseases when a patient without a specific medical history is found to have an intracardiac mass on an echocardiography are atrial myxoma, thromboses, metastatic tumors, primary benign or malignant tumors, and vegetations[1].

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본 논문의 저작권 및 전자매체의 지적소유권은 대한흉부외과학회에 있다.

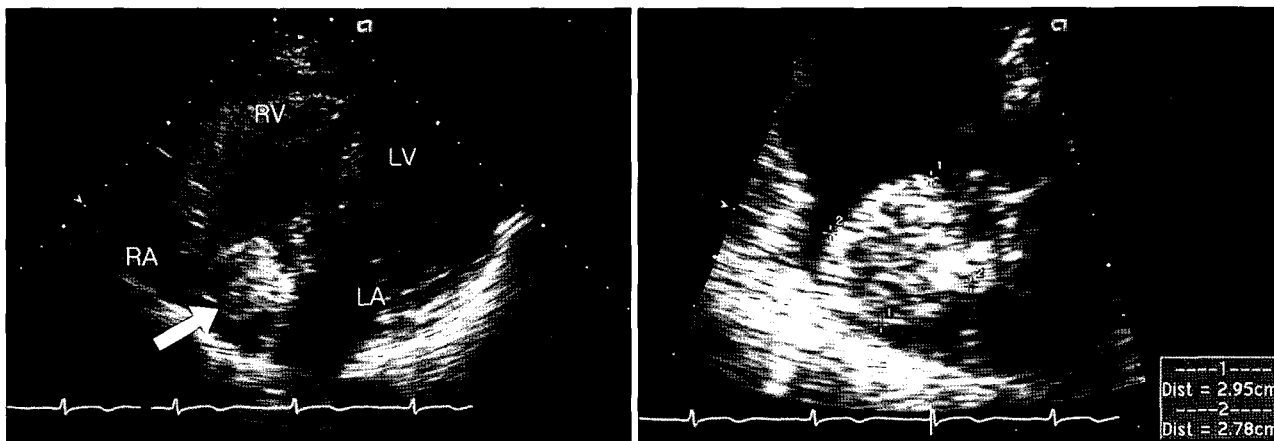


Fig. 1. TTE apical four chamber view (left) and magnification (right) show the mass (white arrow) about 30 mm in diameter in the right atrium. The mass was attached to the atrial septum by short pedicle. LA=Left atrium; LV=Left ventricle; RA=Right atrium; RV=Right ventricle.

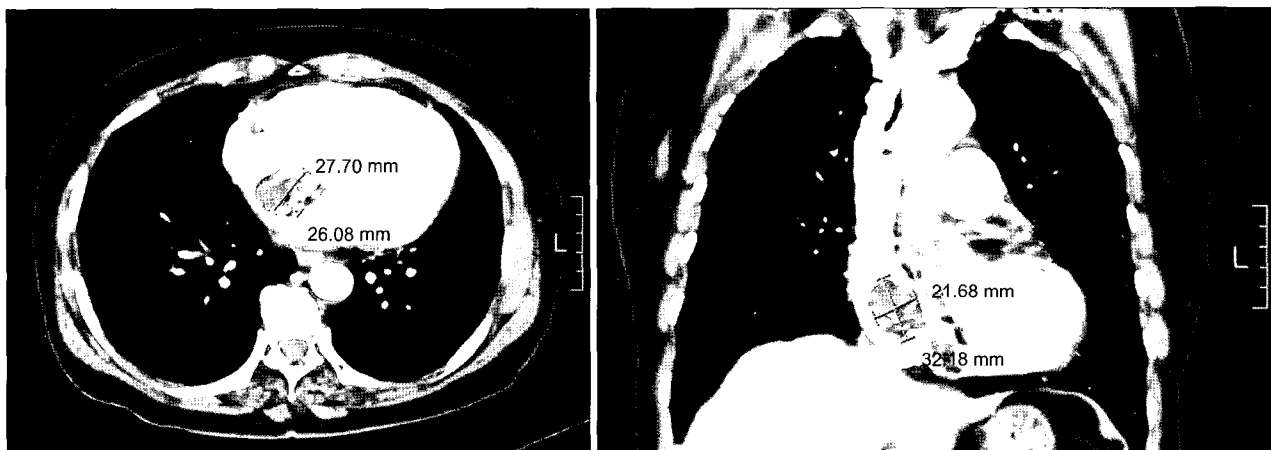


Fig. 2. Transaxial (left) and coronal (right) images obtained by computed tomography show an lobular heterogeneous mass in right atrium.

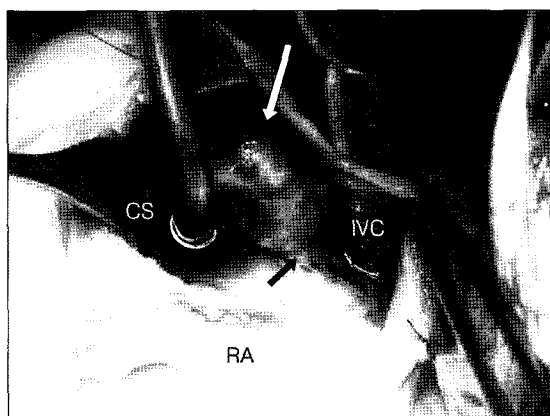


Fig. 3. This is a surgeon's view. Left is cephalad and right is caudal side. This picture shows the mass (white arrow) which attached to atrial septum by short pedicle (black arrow). CS=Coronary sinus; IVC=Inferior vena cava; RA=Right atrium.

Thromboses are rare in the structurally normal heart, except for catheter related thrombus, and can be found in patients with hypercoagulability[2], malignant tumors[3], ulcerative colitis[4], Behcet's disease[5], or injection of interleukin-2[6]. Thromboses which originate within the heart generally occur in the left heart and seldom in the right heart. Wartman and Hellerstein[7] reported that out of 2,000 autopsies, only 14 were found to have right side thromboses. Right side heart thrombosis is sometimes reported related to pericarditis[8] and can arise in the form of pulmonary artery embolisms. When a right side heart mass is found, it is important to differentiate the type of mass by transesophageal echocardiography, chest CT and MRI[2]. Transesophageal echocardiography allows accurate observation of the atrial septum and is

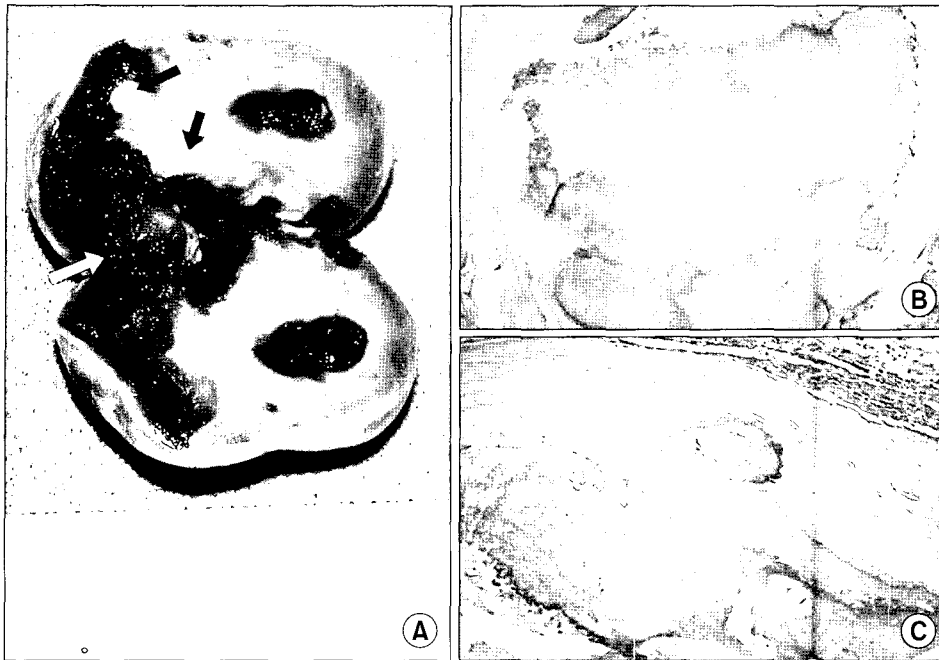


Fig. 4. The cut-surface of gross specimen (A) shows necrosis (white arrow) and multiple calcified nodules (black arrows). Microscopic examination shows a nodular calcified mass in low power view (B: H&E, $\times 12$) and microcalcifications with amorphous hyaline stroma in medium power view (C: H&E, $\times 100$).

useful in understanding the shape of masses in the right atrium[9]. Tsuchiya et al[10] reported that CT can be used to distinguish between thrombosis and myxoma by the difference in contrast enhancement. Also, if the mass is flat, pedunculated, and if it has a smooth or edged border, it is most likely a thrombus. However, there are many cases such as the one above where these methods cannot help in diagnosing the disease preoperatively. Right side thromboses have the risk of pulmonary embolisms and are surgically removed to be accurately diagnosed. If the thrombus is not securely attached to the atrial septum, it is important to take notice because the thrombus may detach and produce a pulmonary embolism.

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=국문 초록=

정상 심장에서의 우심방 혈전은 매우 드문 질환이다. 흉부 불편감과 호흡곤란을 주소로 내원한 66세 여자가 심장 초음파와 흉부 전산화 단층촬영에서 우심방 점액종으로 진단되었다. 종괴가 붙어 있는 심방 중격을 포함해 절제를 시행하였고 조직검사상 조직화된 우심방 혈전으로 진단되어 문헌 고찰과 함께 보고하는 바이다.

중심 단어 : 1. 점액종
2. 혈전증
3. 심방