Intracardiac Foreign Body: A Sewing Needle in Right Ventricle of Unknown Etiology

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A 34 year-old woman was hospitalized with anterior chest pain and indigestion. Chest radiograph and computed tomogram revealed a sewing needle in the cardiac cavity. She had no histories of surgical intervention, drug abuse, or acupuncture. We removed the needle from the right ventricle under cardiopulmonary bypass.

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Key word : 1. Foreign bodies
2. Needles

Case

A 34 year-old female visited outpatient clinic due to anterior chest pain and indigestion which were lasting for 5 months. We checked chest radiographs and detected a needle-like material in the heart. She denied any personal histories related to self-inflicted behavior, trauma, surgical instrumentation(including acupuncture), etc. By mental status examination, she had no evidence of psychosis. On computed tomography of the chest, a sewing needle in right cardiac chamber was noted. Initially, we decided to perform an endovascular intervention for needle removal. On angiographic scout film(Fig. 1), a needle which is located through tricuspid valve was seen. Right internal jugular venous puncture was done and pigtail catheter was introduced. Despite of several times of trials to remove the needle, the intervention failed. During the procedure, the radiologist felt the needle being fixed to the adjacent cardiac chamber. So, we planned open heart surgery to remove it. Minimally invasive T-shaped sternotomy at 2nd ICS was done. The tip of the sewing needle was felt just beneath the inferior portion of right atrial appendage, so we tried to remove it via a small atriotomy. However, the needle was immobile from the inner cardiac wall and we failed to remove it. Under the cardiopulmonary bypass, both venae cavae were snared down, a right atriotomy was...
important role. Hodlefe et al listed the surgical indications of intracardiac foreign bodies as follows: 1) to prevent embolization of the foreign body and/or the associated thrombus. 2) to reduce the danger of bacterial endocarditis. 3) to prevent recurrent pericardial effusions 4) to diminish the danger of myocardial damage with subsequent abscess and/or aneurysm and rupture. If the needle was floating or not fixed to chamber wall, intervention might have a role to remove it. In this case, as the needle was impacted in ventricular free wall just beneath the leaflet of the tricuspid valve, interventional removal was not successful and cardiopulmonary bypass was used.

References


=국문초록=

34세 여자가 간헐적 동증 및 소화불량을 주소로 내원하여 시행한 홍부 방사선 촬영 및 컴퓨터 단층촬영에서 심장 내부에 따뜻한 바늘이 발견되었다. 환자는 외래에 수술적 조작이나 약물남용 또는 침술을 시행받았던 병력은 없었다. 삼청관막 아래의 우심실벽에 끼어 있던 바늘을 실패바이패스하에 심공적으로 제거할 수 있었다.