

SHORT CASES IN CARDIOLOGY

Suppurative pancarditis: a lethal complication of coronary stent implantation

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We diagnosed angiographically a greater than 90% stenosis of the left anterior descending artery (LAD) in a 54 year old man. The LAD stenosis was dilatated because the patient had Canadian Cardiovascular Society class III angina pectoris; a 15 mm Micro-stent (AVE Inc, Santa Rosa, California, USA) was implanted because of insufficient dilatation. A dissection distal to the stent was treated successfully with a second Micro-stent. Four days after uncomplicated stent implantation the patient had an acute anterior myocardial infarction caused by a proximal LAD occlusion. The recanalisation procedure was complicated twice by ventricular fibrillation terminated using self adhesive defibrillation patches. Over the next 72 hours the patient had high fever, leucocytosis, and increased C reactive protein. Two of four blood samples were positive for *Staphylococcus aureus*. The

patient died of progressive left cardiac failure despite maximum intensive care.

Two subepicardial abscesses 1.7 cm in diameter were found at necropsy in the sulcus interventricularis anterior (fig 1). Samples of these suppurative foci grew *S aureus* with similar antibiotic resistograms to those detected in blood samples. The histological picture was dominated by an extensive pancarditis with multiple myocardial abscesses and complete inflammatory destruction of the LAD in the region of the distal stent (fig 1). No suppurative focus was found in any other organs.

Postmortem examination showed very severe suppurative infection developing into pancarditis but the definite origin of the infection could not be determined. It seems remarkable that such severe pancarditis could have such a quiet clinical course over a long time. It also seems astonishing, that the suppurative inflammation was limited to the heart.

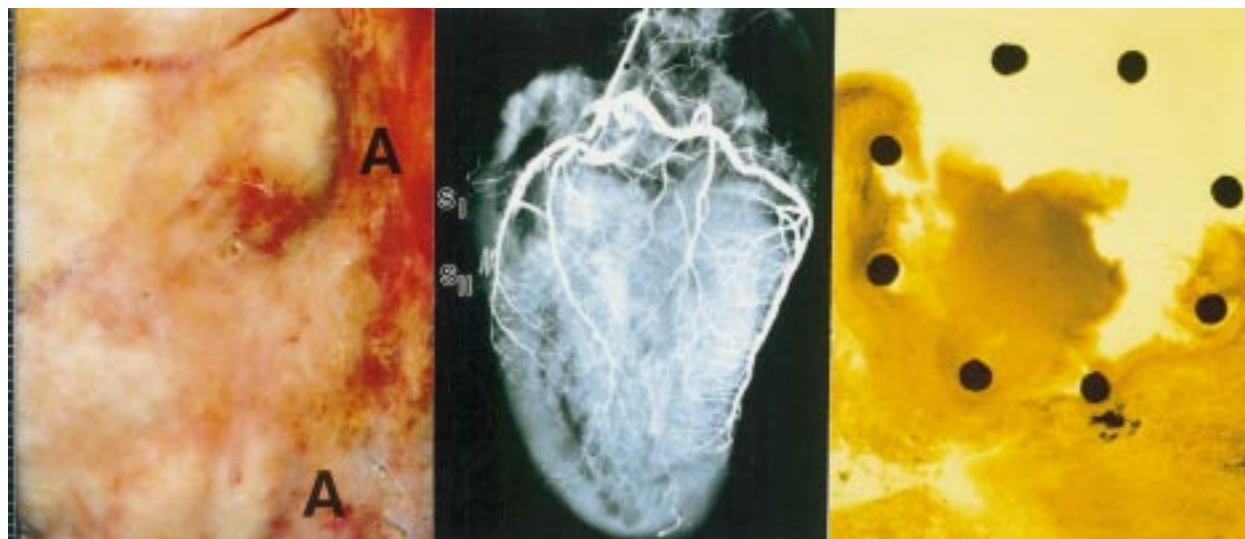


Figure 1 (Left) Macroscopic section of the anterior interventricular sulcus. There are two subepicardial, engorged, elastic abscesses (A) of up to 1.7 cm in diameter. (Middle) Postmortem coronary angiogram showing cessation of the contrast medium above the proximal LAD stent. The right coronary artery shows diffuse arteriosclerotic changes and restenoses of the dilated vascular section to the crux cordis. (Right) Thin section of the distal LAD stent showing eight filaments with complete, homogeneous expansion of the stent. In the outer circumferential regions of the stent filaments only remnants of the arterial wall can be seen. The major part of the vessel is destroyed by inflammation.