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SHORT REPORT

Uncommon Presentation of Syphilitic Aortitis

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A 71-year-old lady underwent an aortobifemoral bypass for extensive vascular disease which was found to be caused by syphilitic aortitis. She made a good initial recovery from the procedure but succumbed to septicaemia on the 20th postoperative day despite the use of appropriate antibiotics. Syphilis remains a rare cause of aortitis.

Key Words: Syphilis; Aortitis; Aortic aneurysm.

Introduction

Syphilitic aortitis has become rare since the advent of antibiotic therapy. It is typically responsible for ascending aortic aneurysm, coronary ostial stenosis and aortic regurgitation. We report a case of a woman with syphilitic aortitis limited to the descending thoracic aorta.

Case Report

A 71-year-old woman was referred to our hospital for reno-vascular hypertension treatment. Her medical history suggested congenital syphilis. She was a non-smoker.

A MAG-3 scan demonstrated that her right kidney contributed 95% to total renal function, and late clearance. A computed tomography (CT) scan confirmed the small size of the left kidney, and also revealed the existence of an aortitis from the origin of the innominate artery to the aortic bifurcation. Aortic angiography confirmed the aortitis and revealed intimal ulceration. The ascending aorta was normal, but there was a tight stenosis of the coeliac artery, an irregular stenosis of the superior mesenteric artery, an occlusion of the inferior mesenteric artery, an ostial stenosis of the right renal artery and an occlusion of the left renal artery (Figs 1 and 2). The coronary arteries and the aortic valve were normal.

The urea was 15.1 mmol/l, creatinine 149 mmol/l, ESR 34 mm/h and the fibrinogen level was 4.27 g/l (normal: 2–4 g/l). The VDRL was positive at a titre of 1/16, Treponema Pallidum Hemagglutination Assay (TPHA) and Fluorescent Treponema Antibodies Absorb (FTA-Abs) were also positive.

An aorto–bifemoral bypass was performed via a transperitoneal approach. The superior mesenteric and right renal arteries were reimplanted and a left nephrectomy was carried out at the same time.

Histological examination of aortic fragments showed the typical stigmata of tertiary syphilis with periarterial and adventitial fibrosis, and focal inflammatory lymphoid follicles. These lesions also destroyed the media of the aorta in some areas. Treponema pallidum was not found in the vessel wall.

The patient was extubated on the first postoperative day. On the 14th postoperative day the patient developed a pyrexia and severe septic shock. The WBC rose to 70 000. The patient required respiratory assistance. She died of multi-organ failure on the 20th postoperative day despite receiving the correct antibiotics in large doses.

Discussion

With the advent of antibiotics and particularly penicillin, the incidence of syphilis and its complications

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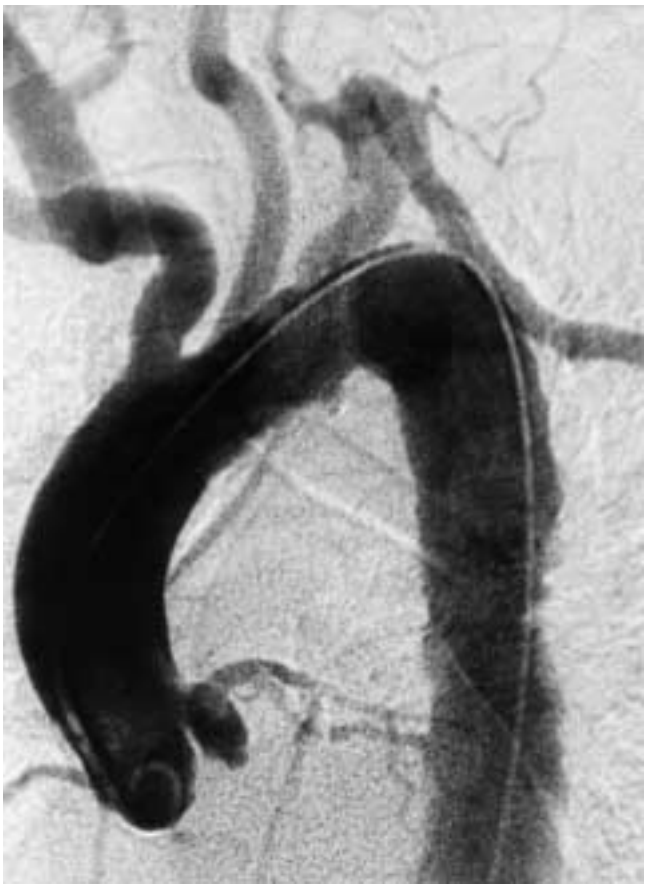

Fig. 1. Aortic digitalised angiography demonstrating the irregular and inflammatory parietal infiltration of the aortic wall at the thoracic stage rising from the innominate artery.

has declined considerably to almost nil. Because of the average 20–30 year period between infection and the onset of tertiary syphilis, there are very few patients left who contracted the disease before antibiotics became available.[1]

The most frequent macroscopic cardiovascular lesions seen in tertiary syphilis are aortic regurgitation, coronary ostial stenosis (due to the thickening of the aortic wall) and saccular aneurysmal dilatation of the ascending aorta.[2,3] Although our patient had an unusual presentation, a history of congenital syphilis, the positive serological tests for syphilis in association with the pathological appearance of the biopsies led to the diagnosis.

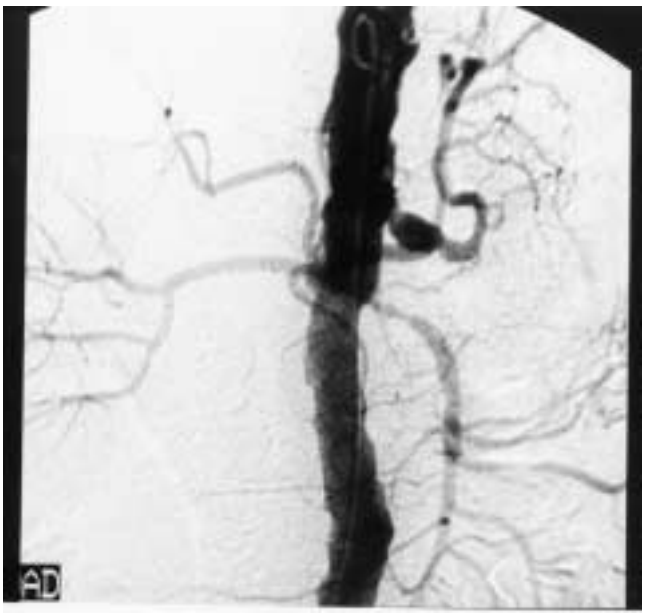

Fig. 2. Aortic digitalised angiography demonstrating abdominal aortitis aspect, the preocclusive stenosis of the coeliac artery, the irregularly infiltrated stenosis of the superior mesenteric artery and occlusion of the left renal artery.

Whether syphilis as an infectious agent may be a cause of atherosclerosis as well as chlamydiae and other as yet unknown infective agents, remains to be determined.[4]

This case emphasises the importance of maintaining a high index of suspicion for rare causes in cases of inflammatory aortitis. Indeed we consider it is always important to systematically screen for syphilis in such circumstances.

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