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From the Maadi Hospital, Cairo, Egypt

Isolation of *Candida albicans* from the blood after cardiac surgery

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In the last years many cases of fungal endocarditis following surgical operations in the heart have been reported in different countries (WILSON, 1961; SANGER et al., 1962 and SCHLAACK et al., 1973).

The present paper deals with the first isolation of *Candida albicans* from the blood after cardiac surgery in Maadi Hospital.

Clinical history

On 30. 1. 1975, a 30-year-old married woman was admitted into the Maadi Hospital complaining of dyspnea, occasional orthopnea, paroxysmal dyspnea and attacks of haemoptysis. There was no history of rheumatic fever. The pulse was 80/m, blood pressure was 130/80. Heart examination revealed severe mixed mitral valve disease, mainly stenosis with pulmonary hypertension.

E.C.G.: axis + 90, auricular fibrillation and enlargement of the right ventricle.

X-ray showed increased transverse diameter of the heart and enlargement of the right ventricle and left auricle.

Laboratory investigations

Erythrocytic sedimentation rate, kidney function, liver function and clotting mechanism were normal.

Right heart catheterization revealed wedge pressure of 30, pulmonary artery pressure was 70/40.

On 25. 2. she was operated upon and an aortic homograft replacement of the mitral valve was done. The patient developed fever (39,5 °C) one week after the operation, although she was under the umbrella of antibacterial antibiotics before and after the operation. The liver showed marked enlargement, the spleen

was not palpable, there was no petechiae, no haemorrhages, no clubbing and no haematuria. At the same time there was an increased intensity of apical systolic murmur.

It was realized that the patient developed postoperative endocarditis. The patient was put under intensive antibacterial antibiotic therapy including crystalline penicillin, 2.4 million units/day, streptomycin one gram/day and keflin 3 gram/day, but there was no response, and the patient developed acute pulmonary oedema.

Blood culture

On 19. 3., blood culture was done using treptone soya agar slants covered with treptone soya broth. After 48 hours incubation at 37 °C a pure culture of yeast was isolated which was thought to be contaminant. On 25. 3., blood culture was repeated and the same yeast grew in pure culture. On rice agar both isolates developed great numbers of chlamydozoospores characteristic of *Candida albicans*. The diagnosis was confirmed by the fermentation and assimilation of sugars.

Unfortunately, the patient's condition deteriorated suddenly and she died on 4. 4. 1975.

Comment

To our knowledge, this case can be considered as the first report of isolation of *Candida albicans* from the blood in Egypt. It is rarely thought of fungi as a possible cause of postoperative infection, and mostly only antibacterial antibiotics are given to the patients. The recovery of fungi in such cases is a matter of chance and is always too late, and therefore the prognosis is always poor.

HILDICK-SMITH et al., (1964) listed 24 cases of candidal endocarditis of which 22 (91%) died, although 11 of them have been treated with amphotericin B. SCHLAACK et al., (1973) described 3 fatal cases of fungal endocarditis, in which clotrimazol failed to bring improvement.

In the present case it is assumed that death occurred as a result of sudden leak of the valve as a sequel to endocarditis caused by *Candida albicans*.

The authors present this case with the hope to attract the attention to the importance of considering the fungi in the routine work in bacteriological examination.

Summary

Candida albicans was repeatedly isolated from the blood in a woman 25 days after an aortic homograft replacement of the mitral valve. The patient was under intensive antibacterial antibiotic therapy before and after the operation. After subsequent 10 days the patient died.

Zusammenfassung

Candida albicans wurde 25 Tage nach einer Mitralklappen-Transplantation aus dem Blut einer Patientin isoliert, die vor und nach der Operation intensiv mit antibakteriellen Antibiotika behandelt worden war. Nach weiteren 10 Tagen verstarb die Patientin.

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