Salmonella-related mycotic pseudoaneurysm

A 74-year-old man is admitted to the hospital with a 7-day history of fever, rigors, chest pain, and general weakness. He underwent coronary artery bypass surgery 10 years ago.

High-resolution contrast-enhanced computed tomography of the chest shows an aneurysmal change near the mid-point of the descending aorta with a maximum diameter of 5 cm (FIGURE 1). Two sets of blood cultures done on admission identify Salmonella enteritidis, which was sensitive to ampicillin, sulfamethoxazole-trimethoprim (Bactrim), and ceftriaxone (Rocephin).

After 2 weeks of intravenous ceftriaxone 2 g/day, the patient undergoes excision of the mycotic pseudoaneurysm of the descending aorta, with placement of an aortic homograft. Biopsy of the excised aortic segment shows calcified fibroatheromatous plaques with no evidence of cystic medial degeneration or granulomas.

DISCUSSION

Mycotic aneurysm is a localized and irreversible dilatation of an artery due to destruction of the vessel wall by an infection. The dilatation is at least one and one-half times the normal diameter of the affected artery. It may be a true aneurysm or a pseudoaneurysm, involving all or some layers of the arterial wall. It is a rare but life-threatening condition.

A mycotic aneurysm can develop from septic embolization to the vasa vasorum, hematogenous seeding of an existing aneu-
REFERENCES


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