Clinical vignette

Salmonella-infected left ventricular thrombus

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A 64-year-old man had an anterior AMI in 1996 leaving him with an ejection fraction of 40% but symptom free on treatment with ACE-inhibitor. In 2003, he developed Salmonella enteritidis infection but remained febrile despite ciprofloxacin. Leucocyte scintigraphy revealed activity in the heart and echocardiography showed apical akinesia covered with a mural thrombus that grew and accumulated cystic material over a week (Panels A and B, arrows). After severe attacks of chills, the thrombus had emptied the majority of its cystic material but the infection persisted over the following 2 weeks even after replacement of ciprofloxacin by chloramphenicol in maximum dosages. Simultaneously, an echo-weak apical bulge was emerging giving rise to suspicion of impending perforation, a feared complication of Salmonella-infected thrombi (Panel C, arrows). The aneurysm and thrombus were resected with Dor’s procedure and the resected myocardium and thrombus were spongious, containing culture negative greyish fluid (Panel D). Ciprofloxacin was administered for another 6 weeks, and at 1-year follow-up, no relapse of the infection had occurred. However, permanent NYHA class III heart failure developed despite treatment with furosemide, ACE-inhibitor, and beta-blocker.

Salmonella-infected thrombi in aortic aneurysms or deep vein thrombosis are well-known complications to salmonelloses, whereas less than 20 cases in the heart are reported. Aneurysmectomy was primarily avoided in our patient because of fear of provoking heart failure but persistent clinical infection and impending myocardial rupture forced surgical treatment. According to the literature, patients appear to succumb on medical treatment alone, although most cardiac thrombi are culture negative when extirpated.