



Supplementary material

Relationship Between *Enterococcus Faecalis* Infective Endocarditis and Colorectal Neoplasm: Preliminary Results From a Cohort of 154 Patients

Supplemental content: Clinical picture

Case 1: On February 2004, before colonoscopy was systematically performed in all patients with *E. faecalis* endocarditis in center 1, a 77-year-old male patient consulted due to a 45-day course of fever, malaise, and progressive dyspnea. He also reported 10 kg weight loss. Echocardiography showed mitral valve severe regurgitation and 4-mm vegetation on the posterior leaflet. Blood cultures drawn at his arrival grew *Enterococcus faecalis* without high-level resistance to gentamicin. Ampicillin and gentamicin were started. Barium enema showed dolichocolon but no obstruction was found. He underwent cardiac surgery with mitral valve replacement at day 28, confirming an active endocarditic process. He completed 42 days of antibiotic treatment. One month after discharge, he presented with rectal bleeding and was admitted again. A colonoscopy found a rectal mass with external signs suggestive of malignancy. Histopathology confirmed adenocarcinoma. A laparoscopic sigmoidectomy was performed. He died 16 days later due to multiorgan failure.

Case 2: In April 2014, a 73-year-old male patient presented to the emergency room due to fever and acute dyspnea secondary to mild left ventricular heart failure that improved with low doses of diuretics. The day after his arrival, because blood cultures grew *E. faecalis* with high-level aminoglycoside resistance, ampicillin plus ceftriaxone was started. An echocardiogram showed native aortic endocarditis with mild aortic regurgitation and 2 vegetations 7 mm in size. The same day, the case was discussed by the multidisciplinary working group. Cardiac surgeons agreed that he did not need surgery within a few days. Because heart failure and risk of liquid overload precluded colonoscopy, ¹⁸F-FDG positron emission tomography/computed tomography (PET/CT) was performed on the third day to rule out visceral emboli requiring drainage and colonic neoplasms. The imaging results showed an intense focal uptake in the

rectus-sigma union (SUVmax 8.3), suggestive of a neoplastic process. Thus, because early cardiac surgery might have been necessary in a subsequent phase, he underwent colonoscopy 1 week later, once an echocardiogram confirmed that the aortic insufficiency had not worsened and the patient was stable with low doses of oral diuretics. An extensive proliferative mass was found 6 cm from the anal margin and underwent biopsy. Pathological analysis identified the mass as villous adenoma with a focus of high-degree dysplasia. Another colonoscopy, which was ultrasound-guided, was performed some days later and the entire adenoma was removed. The patient completed 28 days of antibiotics. Two follow-up colonoscopies have thus far been performed and no new neoplasm has been found. Because aortic regurgitation did not worsen and the patient remained asymptomatic during follow-up, he did not ultimately undergo cardiac surgery. No relapses have been detected.

