An 81-year-old woman presented with hypotension, paleness and spontaneous hematoma on the right breast. The patient's medical history included degenerative aortic and mitral valve disease treated with biologic aortic prosthesis, untreated moderate mitral stenosis, and paroxysmal atrial fibrillation, for which she received anticoagulant therapy with acenocoumarol. Lab work showed: Hb 7.9 mg/dL, 14,200 leukocytes (82% neutrophils) and INR 12.58. Upon examination, infected necrosis was identified in the right breast, which was suppurative and foul-smelling (Fig. 1). We debrided the necrotic tissue and took samples for culture (result: Enterobacter cloacae and Corynebacterium spp.). Despite aggressive medical/surgical management, the patient developed multiple organ failure with fatal outcome.