

A case of complicated *Salmonella* aortitis treated by endovascular aortic repair as a bridge to definitive surgery

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INTRODUCTION

Infectious aortitis is a rare but life-threatening disease¹. An infected aorta can lead to aneurysm formation and rupture causing fatal bleeding. Currently, there is no consensus about the management of an infectious aortitis². The endovascular procedure in the early stage of the infection is starting to draw attention and even being considered by some as a long term alternative treatment²⁻³. We report a case of *Salmonella* aortitis with perforation that were first treated by endovascular aortic repair (EVAR) as a bridge to definitive surgery.

CASE REPORT

A 76-years-old man known for a hypertension and an obesity was hospitalised in the department of internal medicine for fever with abdominal pain and a back sore. These symptoms occurred after a dinner in a restaurant 4 days earlier where the patient had eaten a raw egg. The computed tomography angiography (CTA) showed an abdominal aortitis with an periaortic collection located around the inferior mesenteric artery (figure 1a) with positive blood cultures for *Salmonella* Enteritidis. A medical management was initiated with high doses of Ceftriaxone. A second CTA was performed 48 hours later and showed a perforation of his abdominal aorta (figure 1b) and the patient underwent an emergent EVAR (figure 2) as a bridge to definitive surgery. A week later, an abdominal aorta replacement with homograft was successfully performed (figure 3). The antimicrobial treatment was carried on for 4 weeks intravenously followed by 3 months of oral Ciprofloxacin. The patient was discharged at postoperative day 9 and the result was favorable and uneventful at 6-month follow-up.

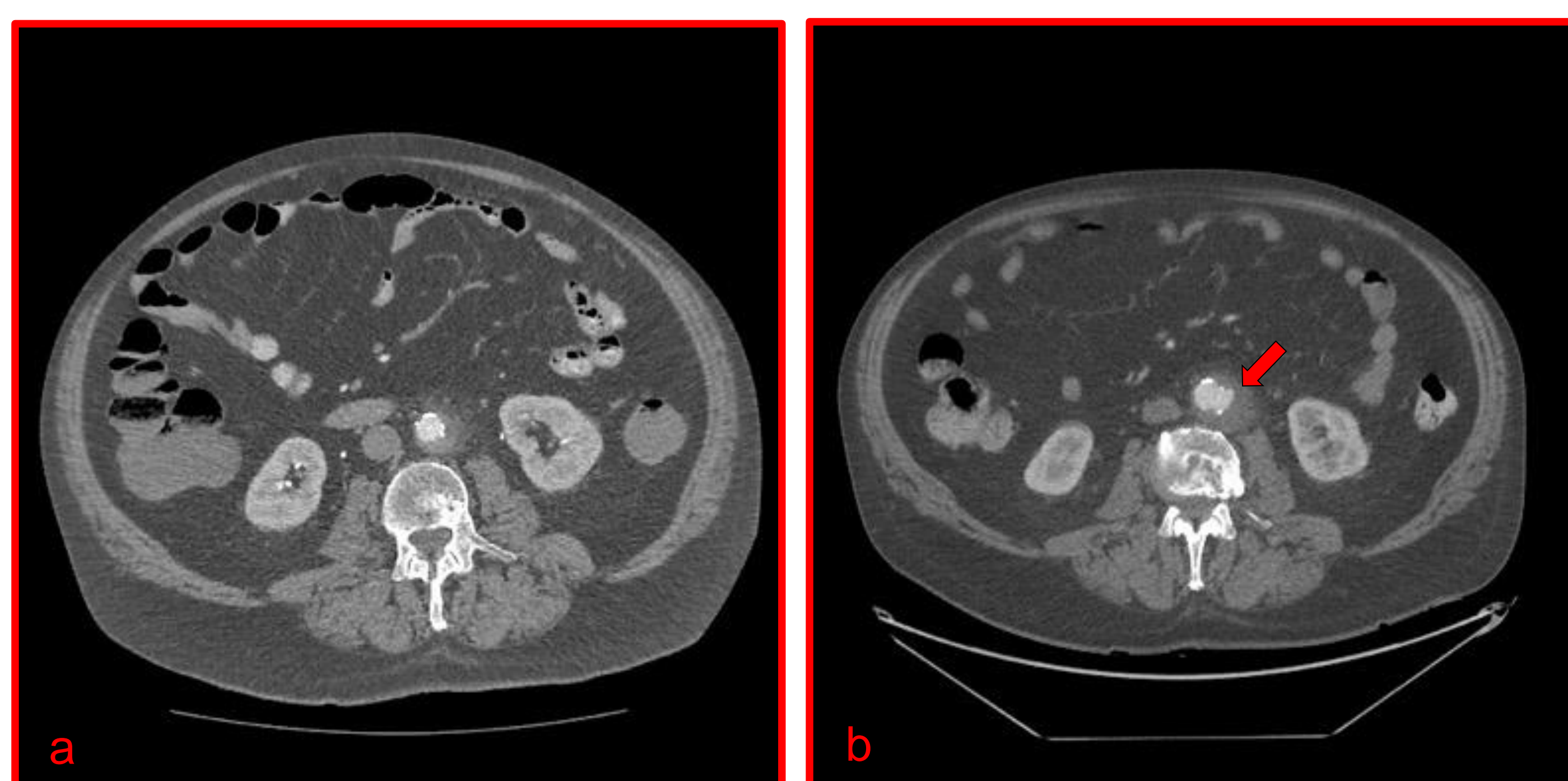


Figure 1. a) abdominal aortitis with an periaortic collection. b) perforation of abdominal aorta (red arrow)

DISCUSSION

Open surgery is currently considered as the treatment of choice for *Salmonella* aortitis¹. However, the endovascular procedure was reported to have good results in the emergency management of complications of *Salmonella* aortitis and there is growing interests regarding the use of EVAR in infectious aortitis³⁻⁴, especially for the high operative risk patients⁵⁻⁶.

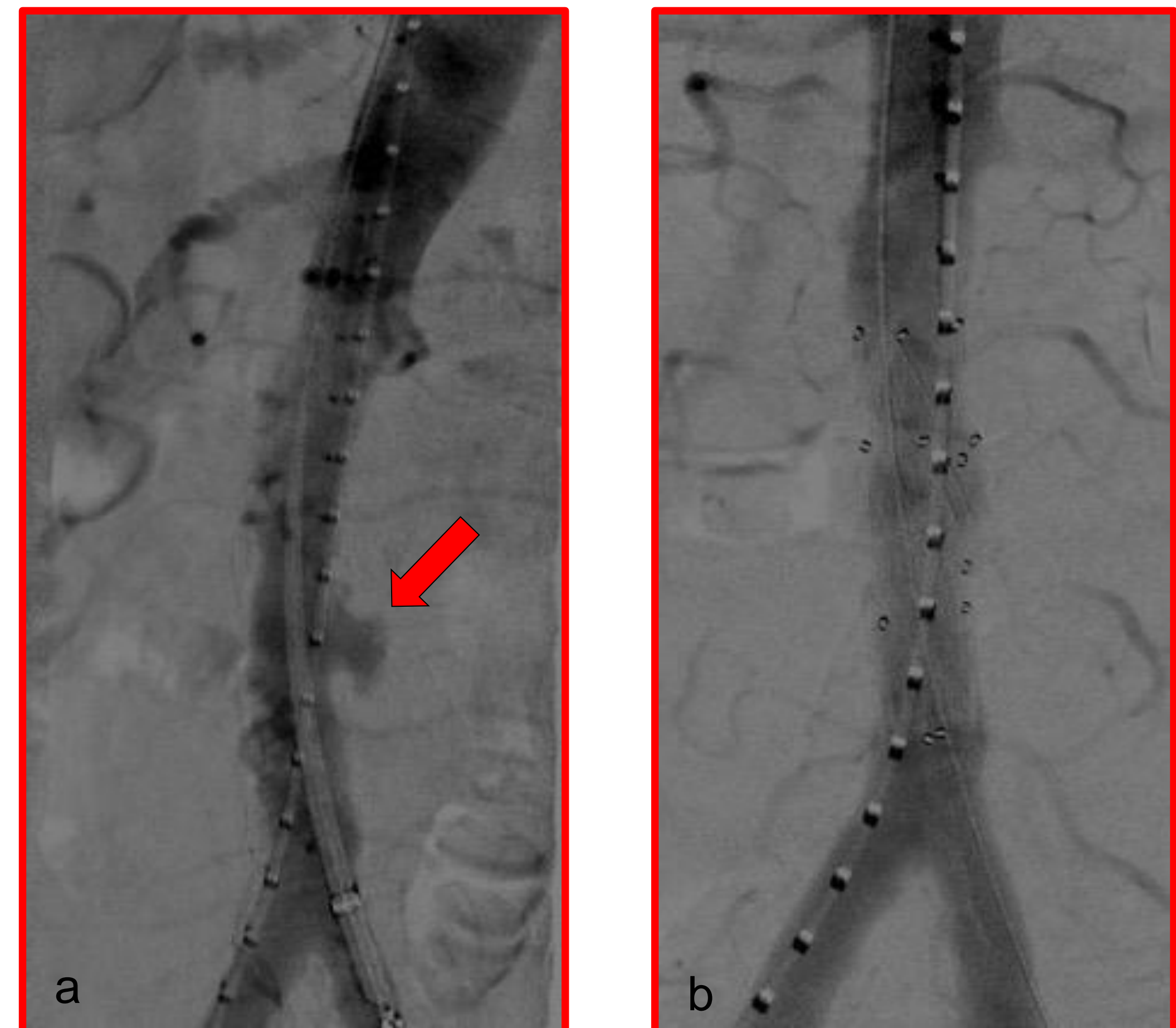


Figure 2. a) Pseudo aneurysm (red arrow) before EVAR. b) After EVAR

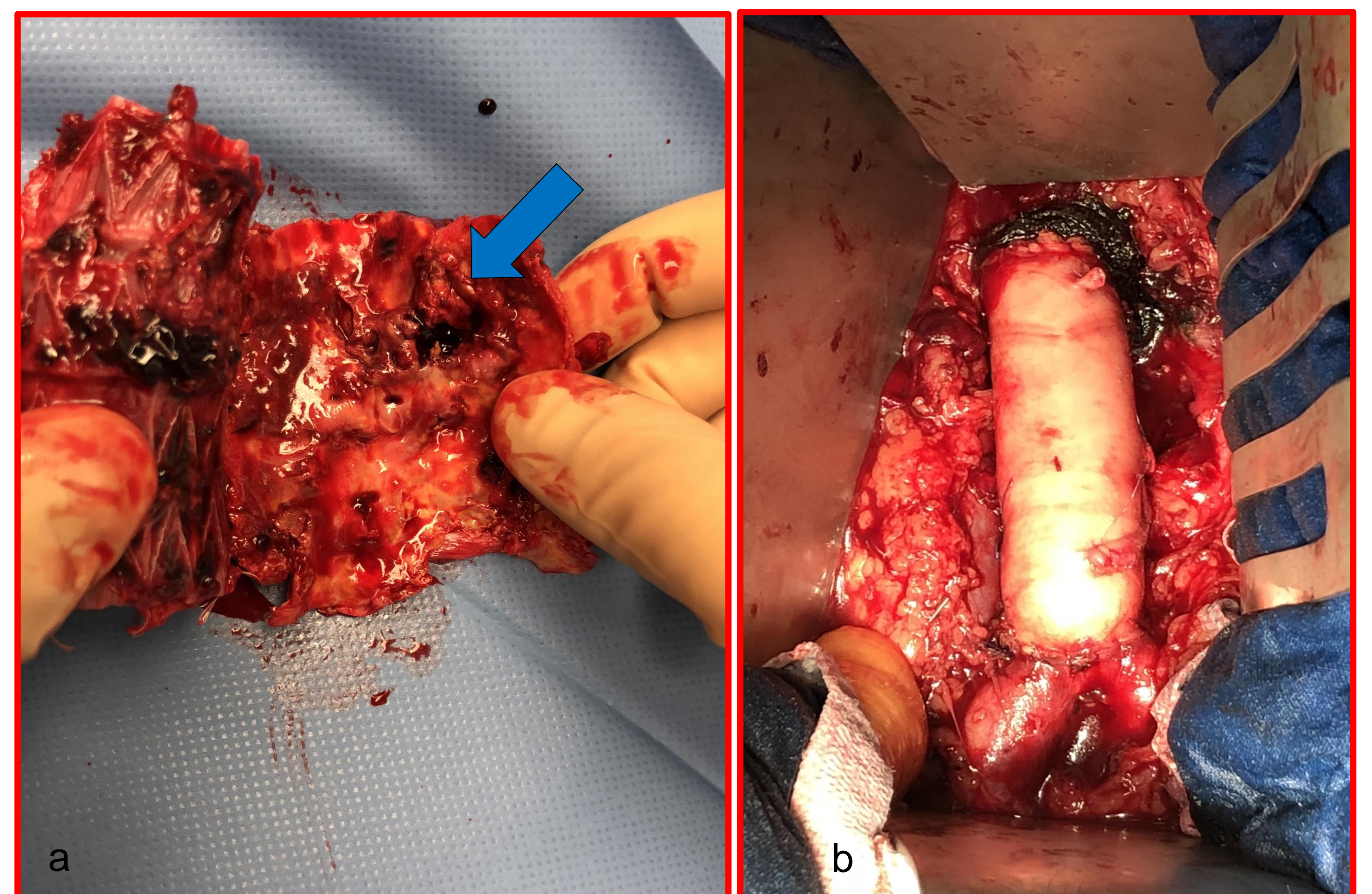


Figure 3. a) Perforation of abdominal aorta (blue arrow). b) Replacement of abdominal aorta with homograft

CONCLUSION

In an urgent situation such as an aortic perforation in *Salmonella* aortitis, EVAR should be performed first in order to save the patient's life, before considering a definitive surgery.

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