

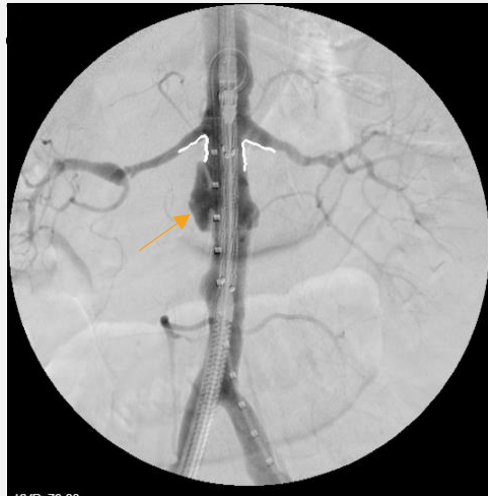
EVAR GRAFT REMOVAL AND BOVINE NEO AORTIC RECONSTRUCTION FOR AN INFECTED EVAR

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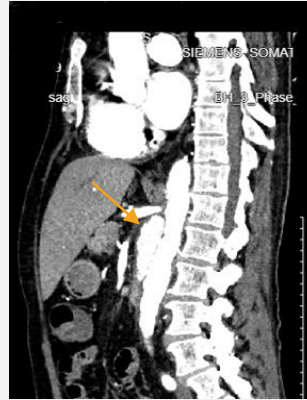
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Introduction:

Ruptured abdominal aortic aneurysms (AAA) are a rare surgical emergency associated with high mortality. According to the Irish vascular society either an open repair or endovascular aortic repair (EVAR) must be performed within 90 minutes of symptom onset to minimise mortality. Mycotic aneurysms are an important cause of AAA and are important to consider prior to the commencement of antibiotics. Such aneurysms pose an increased risk of graft infection – a rare but serious complication of EVAR, with few treatment options.



Intra operative image of EVAR demonstrating aneurysm rupture



CT Abdominal angiogram Sagittal & coronal views prior to explantation, demonstrating extent of endoleak

Case discussion:

EM, a 75-year-old lady with a PMHx significant for multiple myeloma, presented to an ED in a peripheral regional hospital with a one-day history of diarrhoea and upper abdominal pain. Four days post admission a CT abdomen was performed revealing a ruptured mycotic aortic pseudoaneurysm. EM was transferred to Beaumont Hospital for an emergency EVAR procedure. She recovered well post-operatively and was transferred back to her original hospital 2 weeks post her initial presentation with a planned 6-week course of empiric antibiotics (IV tazocin & daptomycin). Blood cultures were negative and serology for brucella, bartonella, Coxiella and syphilis were all negative

EM subsequently deteriorated and developed neutropenia and low-grade temperatures at which point her antibiotics were escalated to meropenem and daptomycin. A repeat CT AP revealed an endoleak at the upper part of the stent with fat stranding of the surrounding aorta, with high suspicion for mycotic AAA given previous emergency. Contact was made with Guys and St Thomas's Hospital in London for consideration of an explant of graft and bovine reconstruction of neo-aorta & re-implantation of the left renal artery. Intraoperative tissue cultures revealed no growth, pan bacterial and fungal PCR were negative, staphylococcal specific PCR was negative however a Group A streptococcus specific PCR returned positive. The surgery was a success and following a 2 week ICU stay for continuous veno-veno, EM was transferred back to Beaumont Hospital to complete a course of 6 weeks ceftriaxone, followed by a further 6 weeks of oral amoxicillin. EM is currently well, is not on a regular antimicrobial regimen and has been discharged from the ID service.

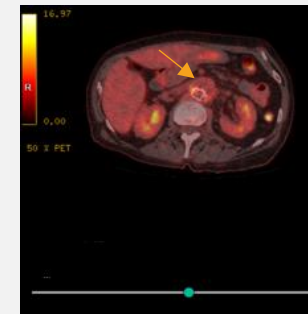
Case discussion:

This case exemplifies the benefit of a collaborative approach between vascular, infectious disease and international colleagues in the management of complicated EVAR infections.

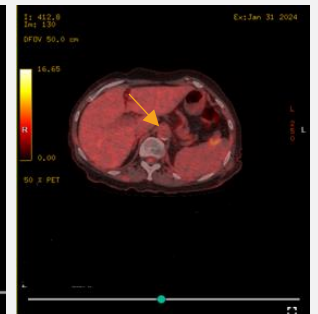
EM's case demonstrated the difficulties of curing infected endovascular material and the benefits of utilizing international expertise to explore treatment modalities not currently in practice in Ireland.

To the best of our knowledge this is the first time an Irish patient has travelled to the UK for this procedure.

In the absence of curative surgery an high mortality rate would have been expected.



PET CT pre explant demonstrating extent of endoleak & stent, with surrounding fat stranding,



PET CT post explant demonstrating health aorta