An Unusual Cause of Sepsis: Infected Iliofemoral Junction False Aneurysm following Extracorporeal Membrane Oxygenation

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Here we present a case of 61-year-old male patient referred for an unusual cause of sepsis after heart transplant. Due to severe ischemic cardiomyopathy, the patient underwent a left ventricular assist device implantation in January 2018. In January 2019, orthotopic heart transplantation was performed with concurrent percutaneous venoarterial extracorporeal membrane oxygenation (ECMO) implantation for a primary graft dysfunction during 6 days. Seven weeks after the heart transplant, while there was no visible clinical sign of infection, especially at the ECMO cannulation site, recurrent bacteremia (Proteus mirabilis) warranted a computed tomography (CT) and positron emission tomography scans, revealing a hypermetabolic focus on a false aneurysm of the left iliofemoral junction (►Fig. 1). Intraoperative findings confirmed a left infected iliofemoral junction false aneurysm (►Fig. 2). Surgical therapy consisted of an iliofemoral cryopreserved arterial homograft by both retroperitoneal and inguinal approaches combined with Sartorius myoplasty (►Fig. 3). We totally removed the false aneurysm and the infected artery (►Fig. 2). Peroperative bacteriological samples were positive to P. mirabilis, indicating a 2-week meropenem–vancomycin therapy. As the infection was not severe, we did not change the immunosuppression protocol. The wound was healed by secondary intention using vacuum-assisted closure therapy. At present, the patient is doing well. Postoperative CT did not show any anastomotic pseudoaneurysms. Wounds are clean and no skin infection is noted.
Fig. 1 Extracorporeal membrane oxygenation cannulation site (A), computed tomography (B), and positron emission tomography scan (C), revealing a hypermetabolic focus on a false aneurysm of the left iliofemoral artery.

Fig. 2 Intraoperative view: left iliofemoral artery false aneurysm infection by both retroperitoneal and inguinal approaches.
Fig. 3  Iliofemoral homograft by both retroperitoneal and inguinal approaches.

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Conflict of Interest
The authors declare no conflict of interest related to this article.