



# Endovascular Repair of an Infected Ruptured Isolated Iliac Artery Aneurysm Combined With Congenital Lymphedema: Report of a Case

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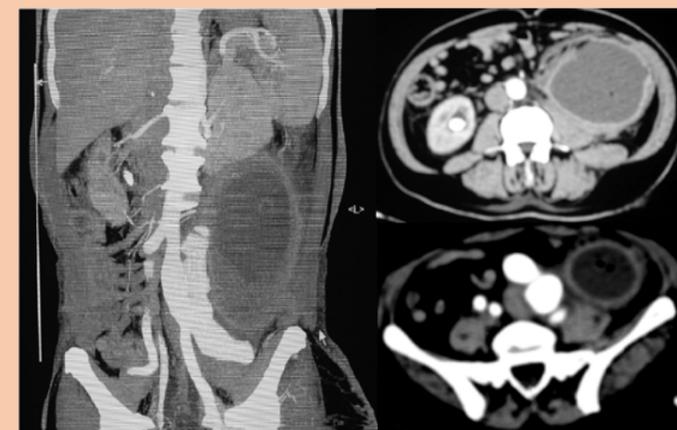
**Purpose.** A novel technique using the reversed iliac leg of a Zenith device has been reported. This study reports a complicated isolated iliac artery aneurysm (IIAA) using this novel technique and reviews the relative literature to discuss current treatment modalities. **Case report.** A 46-year-old man presented with a mass in the left lower quadrant accompanied by abdominal pain for 60 days. Computer tomography angiography (CTA) revealed a complicated IIAA and a massive retroperitoneal hematoma. Percutaneous puncture and drainage at the hematoma was done. Enterococcus faecium was isolated from the hematoma. The infection was controlled after 2 weeks of drainage and antiinfection treatment. The IIAs were successfully excluded using the novel technique. The 12-month CTA follow-up was unremarkable.



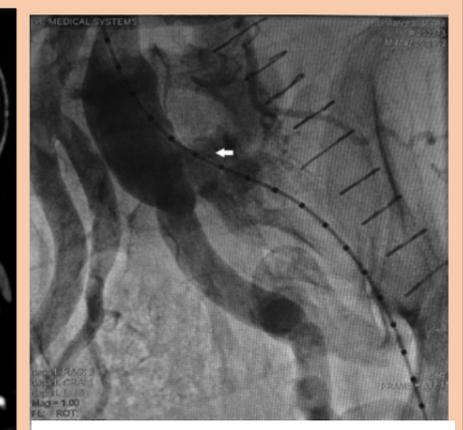
**Figure 1.** The patient had a congenital lymphedema of left lower limb for more than 40 years



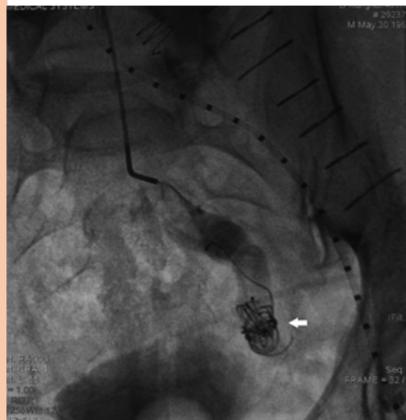
**Figure 2.** Three-dimensional rendering reconstruction of computer tomography angiography scan showing left common iliac artery aneurysm coexisting with internal iliac artery aneurysm



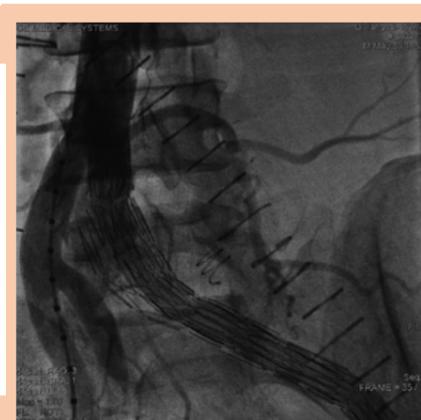
**Figure 3.** The massive retroperitoneal hematoma



**Figure 4.** Angiography revealed that common iliac artery aneurysms coexist with internal iliac artery aneurysm, and the arrow indicates the ostium of the ruptured left common iliac artery aneurysm



**Figure 5.** Spring coils (indicated by the arrow) placed selectively at the ostium of the ruptured common iliac artery aneurysm



**Figure 6.** The left common iliac artery aneurysm was completely excluded by placing inverted Zenith leg stentgrafts, and the left internal iliac artery aneurysm was successfully isolated by macrocoils



**Figure 7.** Twelve-month computer tomography angiography follow-up showed the significantly shrunken retroperitoneal hematoma and no signs of graft occlusion or endoleak

**Conclusion** This case illustrates the successful treatment and endovascular repair of an E faecium–infected IIAA combined with congenital lymphedema of the left lower limb. The technique of Zenith leg stent-graft inversion is a useful approach in cases of IIAs even in complicated cases. Further studies are warranted before it can become a widely acceptable definitive treatment option, including longer reported follow-up.