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

Fuxian Zhang, Huan Zhang
Department of Vascular Surgery, Beijing Shijitan Hospital,
Capital Medical University, Beijing, China
Case report

- A 46-yrs-old man underwent extracorporeal shock wave lithotripsy (ESWL) for left renal calculus in other hospital.
- The patient presented with a mass in the left lower quadrant and abdominal pain 5 days later of ESWL.
- Past medical history: congenital lymphedema of the left lower limb for 40 years
However, the patient did not seek any treatment for 60 days until he was admitted to our hospital for high fever.

Physical examination showed a big nonpulsatile mass about $20 \times 10 \text{ cm}$ with tenderness at the left lower quadrant.

Laboratory investigations revealed white cell count of $12.3 \times 10^9/\text{L}$ and hemoglobin of $12.5 \text{ g/L}$ on admission.

Abdominal sonography revealed a massive retroperitoneal hematoma and a large aneurysm at the left common iliac artery.
Diagnosis and initial treatment

The initial diagnosis was a ruptured left common iliac artery aneurysm with infected hematoma.

Percutaneous drainage of the hematoma was done to control infection. **Enterococcus faecium** was isolated from the hematoma.
Patient was treated with antibiotics
The fever was well controlled and leucocyte count fell to normal, and hemoculture showed negative result after 2 weeks’ drainage and anti-infection therapy.
We selected 2 iliac graft limbs (TFLE 22 mm × 88 mm and 18 mm × 88 mm; William Cook Europe)

Used the technique for reversing the proximal and distal orientations of a flared bell-bottom Zenith iliac limb to avoid endoleak
• But angiography showed a little migration from the aortoiliac bifurcation to distal of the left common iliac artery and significant endoleak.

• An additional inverted Zenith device leg of iliac graft limb (TFLE 22 mm × 71 mm) was deployed to achieve complete exclusion of the left common iliac artery aneurysms.
15th post operation
6m post op
One year post op
Conclusion

- This case illustrates the successful treatment and endovascular repair of an infected IIAAs combined with congenital lymphedema of the left lower limb.
- The technique of Zenith leg stent-graft inversion is a useful approach in cases of IIAAs even in complicated cases.
- Further studies are needed
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