Primary hydatid cyst of the descendant aorta revealed by peripheral embolism of lower limbs

Chaari Zied ; Damak Aimen ; Saif Hadhri ; Nizar Elleuch ; Imed Frikha

Departement of thoracic and cardiovascular Surgery – Habib Bourguiba University Hospital Sfax – Tunisia

Hydatidosis is a worldwide pathology. Primitive aortic localization is exceptional with few isolated clinical cases documented.

✓ Woman, 55 years old
✓ Previous medical history : NONE
✓ Complain : A week ago ➔ progressive pain in her left lower limb.
✓ Examination :
  - Abolition of left femoral pulse .
  - Left lower limb slightly cold compared to the other side.
  - Peripheral pulses of both limbs were not palpable.
  - Toes’ sensitivity and mobility preserved on both sides.

✓ Doppler Echography :
✓ Angiogram & Abdominal Scan :
✓ Angiography 3D reconstruction :

✓ Surgery ➔ Treat ALL LESIONS at the same time !!

✓ Postoperative follow-up uneventful. Patient put under daily anti-platelet aggregation + Albendazole + prophylactic anti-pneumococcal & haemophilus vaccination.
✓ Five months after surgery : CT angiography : patent bypass, with no local hydatid recurrence with a satisfactory perfusion in both lower limbs.

Primitive aortic hydatid cyst : We believe that it is secondary to presence of a “preexisting elementary lesion” at this level (complicated plaque of atheroma, parietal dissection) exposing the tunics of the aortic wall to the parasite. The treatment of this pathology is essentially surgical +++

- Tight stenosis in the left external iliac artery.
- Complete obliteration of the left superficial femoral artery without re-permeabilization at the popliteal level.
- Fluid-density mass adhering intimately to the wall of the descending thoracic aorta.
- Size : 85X50X34mm .
- Splenic hydatid cyst.
- Low-density aortic endoluminal subtraction image ➔ intra-aortic rupture with endoluminal hydatid material?
- Complete occlusion of the left iliac artery and the proximal half of the external left iliac artery.
- Leg arteries were thin and poorly filled.
- Fluid-density mass adhering intimately to the wall of the descending thoracic aorta.
- Size : 85X50X34mm .
- Splenic hydatid cyst.
- Low-density aortic endoluminal subtraction image ➔ intra-aortic rupture with endoluminal hydatid material?
- Complete occlusion of the left iliac artery and the proximal half of the external left iliac artery.
- Leg arteries were thin and poorly filled.

- Right femoro-femoral bypass
- Thoraco-Phreno-Laparotomy with other thoracotomy for aortic control
- The Aortic cyst : per operative vue
- Aortic control : above and after the lesion
- Hydatid vesicle in the aortic lumen & Resection on the destroyed aorta
- Hydatid vesicles evacuated from the aortic wall
- Left iliac artery approach : Thrombectomy & extraction of hydatid thrombi
- Destroyed spleen : Splenectomy

- Fluid-density mass adhering intimately to the wall of the descending thoracic aorta.
- Size : 85X50X34mm .
- Splenic hydatid cyst.
- Low-density aortic endoluminal subtraction image ➔ intra-aortic rupture with endoluminal hydatid material?
- Complete occlusion of the left iliac artery and the proximal half of the external left iliac artery.
- Leg arteries were thin and poorly filled.

- Right femoro-femoral bypass
- Thoraco-Phreno-Laparotomy with other thoracotomy for aortic control
- The Aortic cyst : per operative vue
- Aortic control : above and after the lesion
- Hydatid vesicle in the aortic lumen & Resection on the destroyed aorta
- Hydatid vesicles evacuated from the aortic wall
- Left iliac artery approach : Thrombectomy & extraction of hydatid thrombi
- Destroyed spleen : Splenectomy

- Fluid-density mass adhering intimately to the wall of the descending thoracic aorta.
- Size : 85X50X34mm .
- Splenic hydatid cyst.
- Low-density aortic endoluminal subtraction image ➔ intra-aortic rupture with endoluminal hydatid material?
- Complete occlusion of the left iliac artery and the proximal half of the external left iliac artery.
- Leg arteries were thin and poorly filled.

- Right femoro-femoral bypass
- Thoraco-Phreno-Laparotomy with other thoracotomy for aortic control
- The Aortic cyst : per operative vue
- Aortic control : above and after the lesion
- Hydatid vesicle in the aortic lumen & Resection on the destroyed aorta
- Hydatid vesicles evacuated from the aortic wall
- Left iliac artery approach : Thrombectomy & extraction of hydatid thrombi
- Destroyed spleen : Splenectomy

- Fluid-density mass adhering intimately to the wall of the descending thoracic aorta.
- Size : 85X50X34mm .
- Splenic hydatid cyst.
- Low-density aortic endoluminal subtraction image ➔ intra-aortic rupture with endoluminal hydatid material?
- Complete occlusion of the left iliac artery and the proximal half of the external left iliac artery.
- Leg arteries were thin and poorly filled.

- Right femoro-femoral bypass
- Thoraco-Phreno-Laparotomy with other thoracotomy for aortic control
- The Aortic cyst : per operative vue
- Aortic control : above and after the lesion
- Hydatid vesicle in the aortic lumen & Resection on the destroyed aorta
- Hydatid vesicles evacuated from the aortic wall
- Left iliac artery approach : Thrombectomy & extraction of hydatid thrombi
- Destroyed spleen : Splenectomy

- Fluid-density mass adhering intimately to the wall of the descending thoracic aorta.
- Size : 85X50X34mm .
- Splenic hydatid cyst.
- Low-density aortic endoluminal subtraction image ➔ intra-aortic rupture with endoluminal hydatid material?
- Complete occlusion of the left iliac artery and the proximal half of the external left iliac artery.
- Leg arteries were thin and poorly filled.

- Right femoro-femoral bypass
- Thoraco-Phreno-Laparotomy with other thoracotomy for aortic control
- The Aortic cyst : per operative vue
- Aortic control : above and after the lesion
- Hydatid vesicle in the aortic lumen & Resection on the destroyed aorta
- Hydatid vesicles evacuated from the aortic wall
- Left iliac artery approach : Thrombectomy & extraction of hydatid thrombi
- Destroyed spleen : Splenectomy

- Fluid-density mass adhering intimately to the wall of the descending thoracic aorta.
- Size : 85X50X34mm .
- Splenic hydatid cyst.
- Low-density aortic endoluminal subtraction image ➔ intra-aortic rupture with endoluminal hydatid material?
- Complete occlusion of the left iliac artery and the proximal half of the external left iliac artery.
- Leg arteries were thin and poorly filled.

- Right femoro-femoral bypass
- Thoraco-Phreno-Laparotomy with other thoracotomy for aortic control
- The Aortic cyst : per operative vue
- Aortic control : above and after the lesion
- Hydatid vesicle in the aortic lumen & Resection on the destroyed aorta
- Hydatid vesicles evacuated from the aortic wall
- Left iliac artery approach : Thrombectomy & extraction of hydatid thrombi
- Destroyed spleen : Splenectomy

- Fluid-density mass adhering intimately to the wall of the descending thoracic aorta.
- Size : 85X50X34mm .
- Splenic hydatid cyst.
- Low-density aortic endoluminal subtraction image ➔ intra-aortic rupture with endoluminal hydatid material?
- Complete occlusion of the left iliac artery and the proximal half of the external left iliac artery.
- Leg arteries were thin and poorly filled.

- Right femoro-femoral bypass
- Thoraco-Phreno-Laparotomy with other thoracotomy for aortic control
- The Aortic cyst : per operative vue
- Aortic control : above and after the lesion
- Hydatid vesicle in the aortic lumen & Resection on the destroyed aorta
- Hydatid vesicles evacuated from the aortic wall
- Left iliac artery approach : Thrombectomy & extraction of hydatid thrombi
- Destroyed spleen : Splenectomy

- Fluid-density mass adhering intimately to the wall of the descending thoracic aorta.
- Size : 85X50X34mm .
- Splenic hydatid cyst.