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Clincial Image

Treatment of External Iliac Artery Pseudoaneurysm Developing after Percutaneous Closure of Ventricular Septal Defect

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Clinical Image

A 16-year-old female patient, who underwent percutaneous closure of perimembranous type Ventricular Septal Defect (VSD) was taken to the Pediatric Cardiology Service for the post-catheterization follow-up. During the catheterization procedure, a 7F long sheath was placed in the right femoral artery and a 6F short sheath was placed in the left femoral artery. Approximately 24 hours after the procedure, severe pain extending from the left groin to the abdomen was observed. While both femoral artery flows were patent on abdominal USG, an iatrogenic pseudoaneurysm originating from the external iliac artery with a diameter of 21 mm was detected in the evaluation of the left lower abdomen. Color flow imaging also confirmed the existence of a pseudoaneurysm with simultaneous bidirectional flow in its lumen.A computed tomography scan also revealed a pseudoaneurysm that was a 20x22 m diameter arising from the left external iliac artery with a diffuse hematoma extending into the peripheral retroperitoneal area (Figure 1). We decided to attempt of ultrasound-guided thromb ininjection of the pseudoaneurysm. A18 gauge needle was used to cannulate the neck of the pseuduaneurysm percutaneously from the left groin and 0.88 cc thromb in was injected under USG very slowly. The blood flow in the pseudoaneurysm was interrupted at the first minute of the injection. While no flow was observed in the aneurysm, the blood flow was patent in the external iliac and femoral artery lumens, and no thrombus was detected in arteries lumens. The psaneurysm was completely thrombosed (Figure 2). No complications were observed during the procedure. Foot temperature was normal, there was no loss of sensation. Control USG that performed 72 hours after the procedure observed the thrombosed are a diameter was 16 mm and the external iliac artery flow was normal.

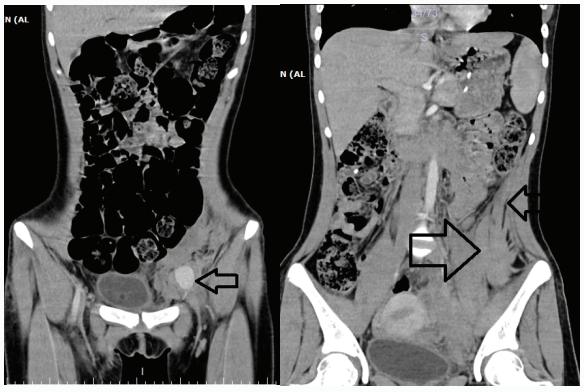

Figure 1: Computed tomography showing pseudoaneurysm arising from left external iliac artery(a) and a diffuse hematoma extending to the peripheral retro peritoneal area (b).

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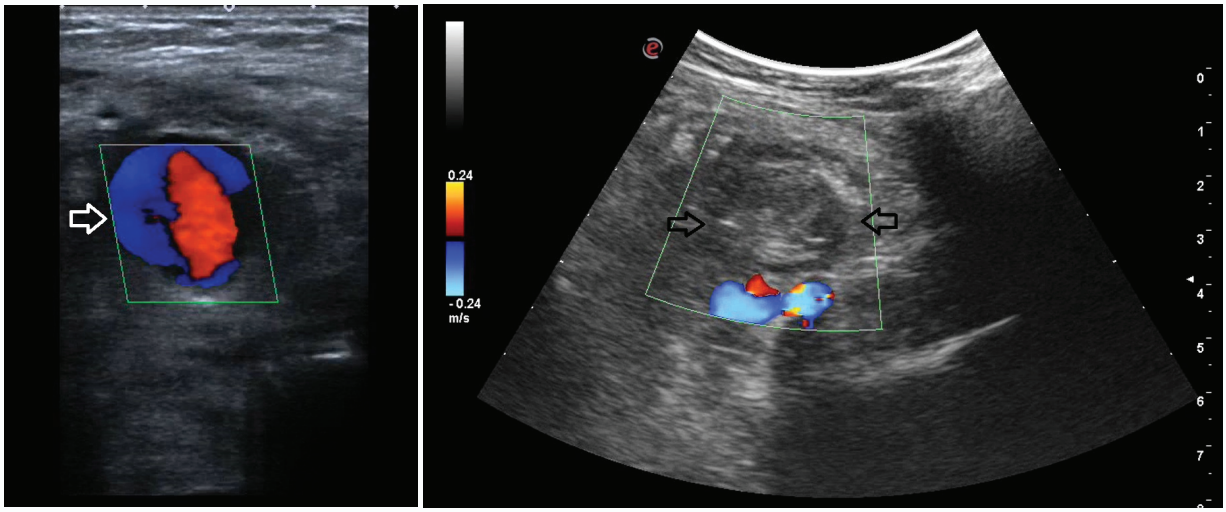

Figure 2: Colour flow Doopler USG imaging showing the existence of a pseudoaneurysm with simultaneous bidirectional flow in its lumen (a) and interruption of the blood flow at the first minute of thromb in injection (b).