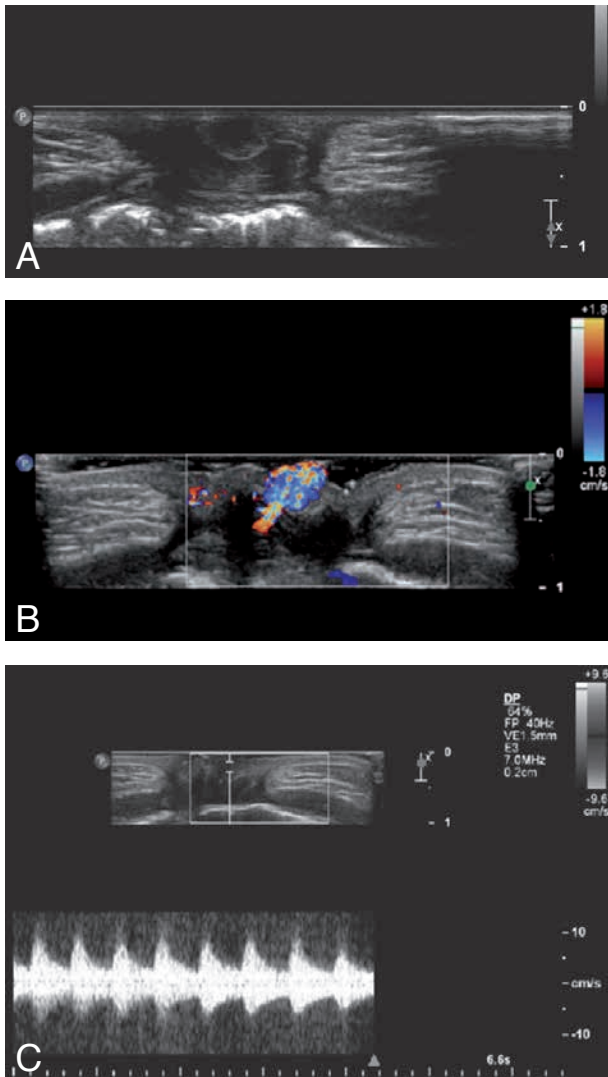


IMAGES IN CLINICAL RADIOLOGY



Umbilical artery pseudoaneurysm

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A 5-week-old baby boy was referred to ultrasonography because of a discharging umbilical granuloma (UG) not responding to silver nitrate applications. He had no medical history, birth occurred without complications. Ultrasonography (US) found an anechoic 5 mm umbilical mass (Fig. A). Doppler color (Fig. B, C) revealed a turbulent high velocity flow within the anechoic component. Surgery confirmed the diagnosis of Umbilical Artery Pseudoaneurysm (UPA). The infant was treated with ligation and resection of the lesion. Resected fragments show a fibrous tissue containing an arterial vascular structure which media is thickened and calcified.

Comment

Pseudo-aneurysm is defined as an extravascular hematoma secondary to a traumatic lesion of the vascular wall. The surrounding tissues contain blood. The arterial wall is weakened and hence there is a risk of rupture and of major bleeding. UPA is a rare condition in infant. There is only one case reported in the literature, related to an umbilical artery catheterization (1).

Clinically UPA can be misdiagnosed as umbilical granuloma (UG). UG is a pinkish discharging mass, which corresponds to a residual umbilical cord. Sometimes it contains urachal or intestinal remnants. UG is usually treated by application of silver nitrate stick. In some patients, however, the discharge may not disappear. These cases should be referred to ultrasonography and color-Doppler. In case of an anomaly of the urachus, the omphalomesenteric duct or the vascular component, surgical exploration is mandatory for resection and anatomic-pathological analysis.

Reference

1. Katz M., Perlman J., et al.: Neonatal Umbilical Artery Pseudoaneurysm: sonographic Evaluation – Case Report. *AJR*, 1986, 147: 322-324.

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