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IMAGING IN INTENSIVE CARE MEDICINE

Congenital hemangioma causing heart failure

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A full-term female neonate was admitted with a large violaceous soft-tissue mass on the left shoulder surrounded by draining vessels. On examination, the lesion was 6.5 × 5.5 × 2 cm and warm to the touch (Fig. 1a). Computed tomography (CT) revealed a complex arterial supply, including left subclavian artery and posterior suboccipital arteries (Fig. 1b, yellow arrow shows left subclavian artery). The mass was diagnosed as a congenital hemangioma (CH) and oral propranolol was administrated. Echocardiogram showed severe pulmonary hypertension and patent ductus arteriosus (PDA) (right-to-left shunt). The infant presented with tachypnea soon after birth, necessitating respiratory support. She then developed shock and heart failure after 5 days although treated with diuresis, sildenafil, and nitric oxide. CHs are uncommon vascular tumors fully formed at birth. CH accompanied by heart failure is rare, and the treatment regimen is not well defined. A consensus was reached in our interdisciplinary vascular anomalies team to proceed with surgical intervention. Ligation of the feeding arteries and PDA were performed via thoracotomy. The hemangioma decreased in size (Fig. 1c). She was hemodynamically stable. Repeated CT revealed disappearance of the feeding blood flow (Fig. 1d, yellow arrow shows ligation of the feeding arteries). She was discharged home 11 days after surgery.

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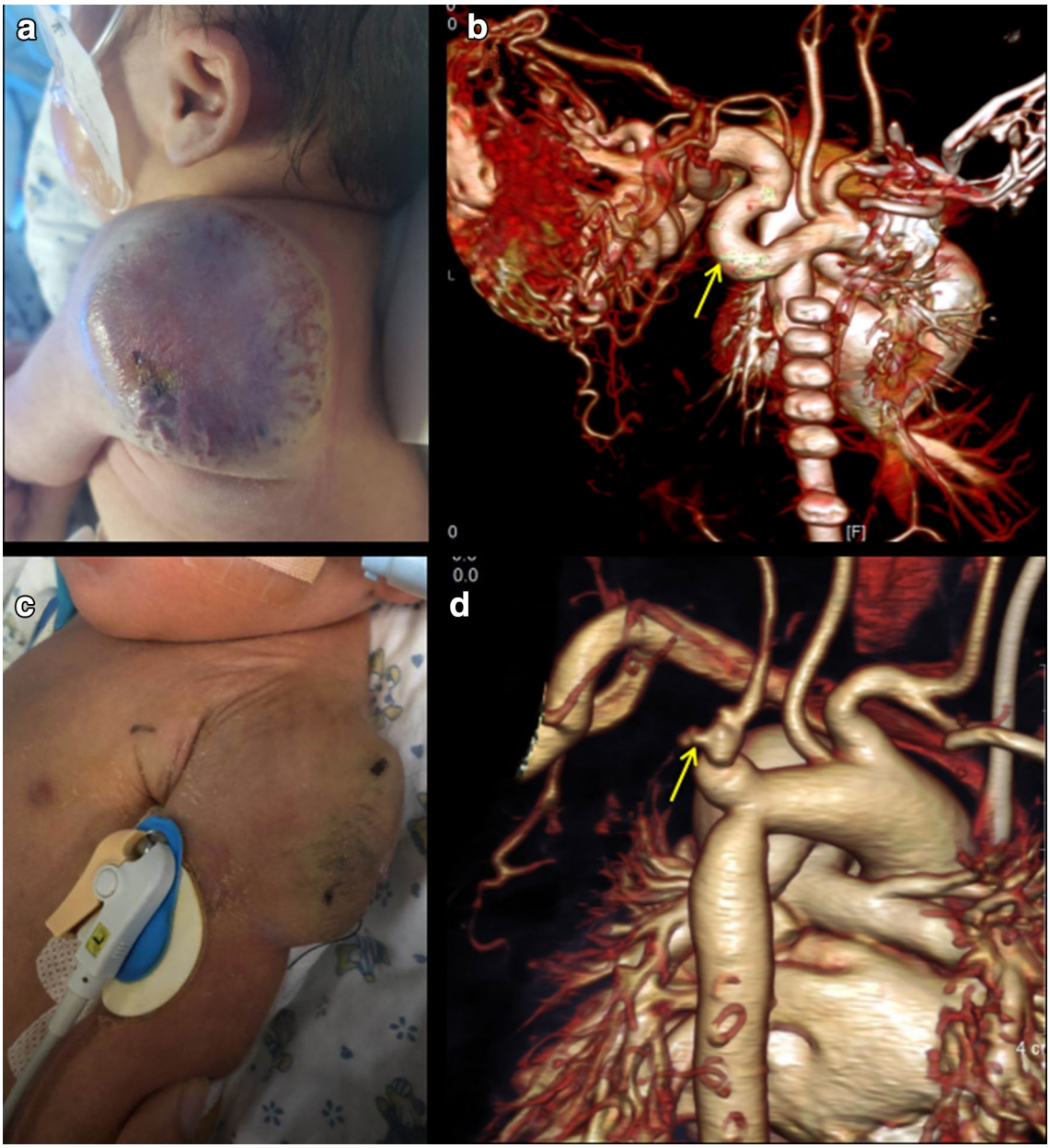

Fig. 1 **a** A large violaceous soft-tissue mass on shoulder. **b** CT scan showed a complex arterial supply (yellow arrow shows left subclavian artery). **c** The hemangioma decreased in size after surgery. **d** CT after surgery showed disappearance of the feeding blood flow (yellow arrow shows ligation of the feeding arteries)

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