A neonatal report of iliac artery aneurysm

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Objective. Aneurysmal disease of major arteries represents a life-threatening event with a mortality of up to 30% among newborns. Its occurrence is mostly related to connective tissue disorders, infections, vasculitis, and trauma; idiopathic aneurysms can also be observed. The abdomen is the most common site of aortic aneurysm. Considering the limited number of cases observed in pediatric patients, to date there is no consensus for the management of arterial aneurysm in children. Notably, only twelve cases of isolated congenital iliac artery aneurysms have been reported, with four cases diagnosed in the neonatal period.

Materials and Methods. A 14-day-old boy, after having repeated the neonatal screening for a suspected acetyl-carnitine deficiency, was noted to have slight paleness and anemia. An abdominal mass was detected in the median hypogastric area, which appeared to have a taut-hard consistency, to be poorly mobile, and painful to palpation.

Results. A computerized tomography angiogram revealed a saccular aneurysm originating from the common left iliac artery, with maximum axial dimensions of 5.5 × 6.4 cm, which was promptly and successfully treated with surgical repair.

Conclusions. This case report emphasizes the importance of clinical evaluation in newborns and timeliness in the management of similar life-threating events. Indeed, considering the high mortality associated with this condition, an early diagnosis is fundamental to guarantee prompt treatment. However, the extreme variability of the clinical picture, the rarity of radiological findings, and the peculiar difficulties related to surgical repair in neonates make it a real medical challenge.