

Image in cardiology

Pseudoaneurysm in carotid artery after peripheral ECMO

Seudoaneurisma en arteria carótida tras ECMO periférica

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Figure 1.

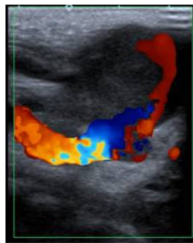


Figure 2.

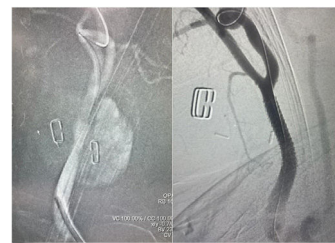


Figure 3.

A 16-month-old girl with palliated pulmonary atresia in the neonatal period required postoperative extracorporeal membrane oxygenation (ECMO) after the Glenn procedure. Peripheral cannulation was applied (2 venous cannulae in the femoral and right jugular veins and a 14-Fr arterial cannula in the right carotid artery). ECMO support was withdrawn at 12 days, and the cervical vessels were surgically closed and repaired. At 13 days after closure, a hard, pulsatile, and rapidly growing (over about a 12-hour period) swelling was detected under the cervical surgical wound of about 3×3 cm in size (figure 1). Doppler ultrasound confirmed the presence of a large unilocular cyst of 25×37 mm, connected to the right internal carotid artery via a 7-mm-diameter neck. The interior of the cyst exhibited swirling flow and yin-yang sign (figure 2, video 1 of the supplementary data), compatible with a pseudoaneurysm. Urgent arteriography was conducted and endovascular treatment was performed via implantation of a covered stent with dilatation at the level of the neck of the pseudoaneurysm (figure 3, video 2 of the supplementary data). Subsequent imaging revealed exclusion of the neck, with good stent permeability and without intracranial complications.

Carotid artery pseudoaneurysms are rare in children and, overall, represent less than 1% of arterial aneurysms. Carotid artery stents are a palliative measure. The clinical course is uncertain and the reported experience is slight. Periodic ultrasound follow-up will be performed to assess the permeability of the vessel and the need for surgical or endovascular reintervention.

FUNDING

None.

ETHICAL CONSIDERATIONS

The work did not undergo an ethics committee review because it is the photographic publication of a clinical case and did not involve any additional intervention for the patient. The management of the unit to which the patient was admitted approved the publication of the case. All images were taken with the written consent of the patient's parents. In this case, due to the publication of a single clinical case, the intent is not to extrapolate the results to a population of the same sex or other.

STATEMENT ON THE USE OF ARTIFICIAL INTELLIGENCE

Artificial intelligence has not been used for this work.

AUTHORS' CONTRIBUTIONS

M.M. Rodríguez Lima: drafting and revision. J. Parrilla Parrilla: supervision and revision. I. Guillén Rodríguez: supervision, revision, and image selection.

CONFLICTS OF INTEREST

There are no conflicts of interest for the current article.

APPENDIX. SUPPLEMENTARY DATA

Supplementary data associated with this article can be found in the online version available at <https://doi.org/10.1016/j.rec.2023.08.013>

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