We present the case of a 17-year-old female patient that came for consultation because of a pulsatile mass in the left lateral side of the neck. The physical examination revealed that she was neurologically intact. An increase of volume confined to the region and a pulsatile mass accompanied by fremitus were felt. Slight exophthalmos could also be seen, with preservation of visual and auditory acuity. The neck angiotomography performed revealed notable dilatation of the left internal jugular and external and anterior jugular veins. There was also destruction of the mastoids and ipsilateral basilar apophysis, along with erosion of the foramen magnum borders. The course of the vessels towards the spinal canal displaced the bulbomedullary junction to the right (Fig. 1). This in turn produced obstruction of the
High flow arteriovenous malformation

Figure 2

fourth ventricle and hydrocephalus. The vessels extended over the tentorial notch and surrounded the midbrain and the thrombosis of the longitudinal inferior sagittal sinus. We also noticed that the subclavian and carotid arteries were dilated, without being able to establish precisely specific communication between the jugular vein and the carotid artery (Figs. 2 and 3). As an anatomical variant, a bovine aortic arch was identified; it emerged from the brachiocephalic trunk and the left primitive carotid artery directly from the arch. The patient was given extensive information on the possibilities of an intravascular and surgical approach to resolve the problem, as well as possible risks of the diagnostic and therapeutic procedures. The patient's family requested her voluntary hospital discharge and decided not to continue with the protocol.

Conflict of Interests

The authors have no conflicts of interest to declare.