Dermoid cyst… with an unexpected twist: a case report

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Aim: To report a rare case of a dermoid cyst and venous malformation appearing in the periocular region in a 16-month-old patient. Case report: A 16-month-old girl presented with a swelling in the medial angle of the left eye, under the medial third of the left eyebrow arch. An ophthalmologic exam revealed an oval, partially moveable soft tissue mass, 3 × 6 mm in size. Findings were consistent with a dermoid cyst so a follow-up was recommended. Eighteen months later, a brain CT confirmed the presence of a subcutaneous oval lesion, 7 × 19 × 15 mm in size, consistent with a dermoid cyst. During subsequent follow-up visits, a macroscopic increase in lesion size was noticed and a follow-up brain CT was indicated. The brain CT showed no change in the dimensions of the lesion, but revealed newly formed microcalcifications in the ventral part of the lesion, as well as the fact that the lesion was reaching the proximal part of the nasolacrimal canal. An extirpation of the lesion was performed and histopathological analysis confirmed the specimen was a completely removed dermoid cyst. At the 6-week postoperative appointment, an induration was noticed in the place of the removed dermoid cyst, and an ultrasound examination was scheduled. Results: Sonography revealed a new lesion, 16 × 7 mm in size, suggesting the diagnosis of a hemangioma, and a follow-up ultrasound examination performed one month later confirmed the lesion was a vascular structure. Magnetic resonance angiography of the brain further characterized the lesion as a vascular structure consistent with a slow-flow venous malformation. Treatment consisted of Bleomycin instillation into the vascular structure. Operative and postoperative courses were uneventful. Conclusion: In the process of diagnosing soft tissue masses of the periocular region, dermoid cysts and venous malformations, among others, come into consideration as differential diagnosis. Multiple cases of clinical and radiological characteristics of one of these lesions mimicking the other have previously been described. However, this Case Report does not involve a misdiagnosis, but rather a possible simultaneous appearance of both of these lesions. In this case, it is presumed that the venous malformation presented only after the removal of the dermoid cyst, owing to the pressure previously applied to it.

Key words: dermoid cyst, vascular malformation, medial periocular region