Internal Carotid Artery Parallel to the Skull Base

Arteria carótida interna paralela a la base del cráneo

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We report the case of a 76-year-old patient who attended consultation due to pain in his left ear of 8 months evolution. He presented an erythematous left ear with pain in the upper third and a small ulcer in the retroauricular sulcus. Biopsy of the lesion led to the diagnosis of squamous cell carcinoma. A computed tomography (CT) scan of the lesion showed no pathological adenopathies and, as an incidental finding, confirmed the presence of the left internal carotid artery in an anomalous position, submucosa at the level of the cavum, medial to the Eustachian tube (Figs. 1 and 2) and with a parallel trajectory to the base of the skull until its entry through the carotid foramen (Fig. 3A and B). The patient underwent surgery for his injury, with
partial removal of the ear, and the defect was covered with a free skin graft. The internal carotid artery has the largest number of possible variations, both in its path and morphology, with multiple reports of anomalous locations, as well as different alterations such as elongations or loops.

In most of the cases, these conditions are asymptomatic. It is important for head and neck surgeons to be aware of such variations in order to avoid injury to the vessel during routine surgical procedures: intraoral resections, adenotonsillectomies, biopsies, etc.