Dehiscence of the Third Portion of the Facial Nerve

Dehiscencia de la tercera porción del nervio facial

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Dehiscence of the mastoid portion of the facial nerve is extremely rare. According to different authors in the literature reviewed, anatomical alterations of the third portion of the facial nerve (dehiscence, route changes and nerve branching) have an incidence of 7.45%, of which 0.67% are dehiscences. Regarding a casuistry of 1150 patients who underwent cochlear implantation, the percentage corresponded to 1.91% alterations of that portion, of which 0.17% were dehiscences. In our experience of work conducted at our department with 164 patients suffering Bell peripheral facial paralysis studied radiologically, 16.19% presented dehiscence-type alterations in petrosal computed tomography (CT) scans. Out of these, the second portion was affected in 100% of cases and in no case was the third portion of the nerve affected.

Due to their rarity, we present CT images of a patient with right, severe, peripheral facial palsy (electroneurography of 1%) who presented dehiscence of the third portion of the facial nerve up to the jugular bulb in the radiographic study (Figs. 1 and 2).

Figure 1 Axial multiplanar reconstruction (MPR) of 0.2 mm width, showing an absence of bone wall at the level of the facial nerve channel in its third section.

Figure 2 Coronal MPR of 0.2 mm width, showing an absence of bone wall at the level of the mastoid facial nerve channel.