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Congenital Granular Cell Tumor of the Newborn

Tahrir N. Aldelaimi^{1, *} and Afrah A. Khalil²

¹Department of Oral and Maxillofacial Surgery, College of Dentistry, University of Anbar, Ramadi, Anbar, Iraq ²Department of Oral Diagnosis, College of Dentistry, University of Anbar, Ramadi, Anbar, Iraq (Received : 28 December 2022; Accepted : 15 March 2023; First published online: 27 April 2023)

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ne-week-old female infant presented to the Maxillofacial Surgery Department for a diagnosis of a feeding problem due to a left upper alveolus mass. The newborn female had an unremarkable medical history. There was no family history of the same condition. An intra-oral examination revealed a rounded, well-circumscribed mass on the labial surface of the premaxilla at the central incisor region (Panel A). Under local anesthesia, excision of the lesion was performed by a diode laser (980 nm, 1.4 W). The diagnosis of congenital granular cell tumor was confirmed by histopathological examination of the excised mass, which showed benign irregular atrophic stratified squamous epithelia on the surface with the proliferation of large polygonal cells having granular cytoplasm with small central necrosis (Panel B). Neumann was the first to report it in 1871. Congenital granular cell tumor is also known as Neumanns tumor or congenital epulis. It is a unique benign soft tissue tumor in newborns with unknown and uncertain histogenesis. Since its initial report in 2002, there have been 216 documented cases. The tumor size varied from a few millimeters to a few centimeters which may cause respiratory and feeding problems. The tumors occurred more frequently in the maxilla than the mandible (maxilla to mandible ratio 3:1) and may be presented as single or multiple lesions which can be easily diagnosed by clinical characteristics and histopathological features. Laser surgery has well-established tools that reduce post-surgical pain, make the surgeon more comfortable, eliminate intraoperative bleeding, and lower the risk of recurrence. By the end of four weeks, excellent healing had been achieved (Panel C).

^{*} Corresponding author: E-mail: tahrir.aldelaimi@uoanbar.edu.iq This is an open-access article under the CC BY 4.0 license