Dental and maxillofacial features of condylo-mandibular dysplasia: a case series of twenty-one patients

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Introduction – Camel hump condylo-mandibulo-dysplasia (CMD) is a specific form of condyle dysostosis. It differs from craniofacial microsomia (CFM) as it entails the absence of soft tissue defects and normal-looking ears. The aim of this descriptive study was to refine the clinical and radiographic phenotype of CMD, and to discuss the therapeutic options.
Materials and Methods – Twenty-one patients with CMD were retrospectively analyzed in terms of the clinical (photographic analysis), the radiographic parameters (panoramic X-rays, CT scan), and the treatment modalities.
Results – The patients exhibited unilateral facial asymmetries that were of mandibular origin, with an elevated commissural line and occlusal cant, and a deviated chin on the side of the deformity. The soft tissues and the ears were always normal in terms of their physical appearance. The radiographic analysis generally revealed a short, curved, and anteriorly displaced condyle, with a high and sharp coronoid process. The CT scans revealed that the glenoid fossa was empty. Twelve patients (57.1%) exhibited dental defects, consisting mainly of dental inclusions affecting the first and/or the second permanent mandibular molars (10 patients). A good response to functional orthopedic treatment was achieved in 8 patients, while 13 patients required a mandibular lengthening procedure.
Conclusion – CMD is a bona fide congenital condyle deformity that has to be recognized and differentiated from CFM in order to be able to provide customized treatments.

Bertin H, Merlet FL, Khonsari RH, Delaire J, Corre P, Mercier J. Dental and maxillofacial features of condylo-mandibular dysplasia: A case series of 21 patients. J Craniomaxillofac Surg. 2020 Oct;48(10):956-961. doi: 10.1016/j.jcms.2020.07.007. Epub 2020 Jul 25. PMID: 32773219.