

# Mandibular condyle repair after partial condylectomy in patients with active condylar hyperplasia [Reparación de cóndilos mandibulares después de condilectomía parcial por hiperplasia condilar activa]

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The different aspects of unilateral condylar hyperplasia have been studied and continue to be controversial; nevertheless, treatment based on condylectomy has been established as part of the working protocol. The aim of this investigation was to identify the bone repair observed in surgically treated condyles after 1 year using cone beam computed tomography (CBCT). Nine subjects were included in this study (6 female and 3 male) with an average age of 18.5 years. They had been diagnosed with active unilateral condylar hyperplasia using SPECT, clinical follow-up of progressive facial asymmetry and CBCT. Patients underwent exclusive condylectomy surgery with a piezoelectric system without disc replacement, orthognatic surgery or any other type of adjunct surgical procedure. Later, they were treated orthodontically for dental compensation or as preparation for orthognatic surgery. A CBCT was performed in the first postoperative month and after 1 year from the surgery to analyze variables. The CBCT at 1 month showed a clear and distinct slice of the condyle without defects or irregularities; the distance from the condylar remnant to the articular fossa reached 8.5 mm in the most extreme case. After 1 year, condylar bone remodeling was observed, with areas of lateral and superior curvature and characteristics of normal condyles, with cortical bone present and a maximum distance of 4.5 mm from the condylar fossa. In conclusion, condylar repair and remodeling can be obtained in these types of surgeries and the morphology of resected condyles after 1 year is quite close to normal macroscopic anatomy. ©

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Bone remodeling

Condylar hyperplasia

Condylectomy