

Intraoral Mandibular Distraction: Indications, Technique and Long-term Results

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Abstract

This report describes the experience of the Trousseau Hospital, Paris, France, with distraction osteogenesis of the mandible using an intraoral distraction device. From 1993 to 1998, 26 paediatric patients with mandibular hypoplasia underwent distraction of the mandible using the Leibinger Intraoral Distractor. The majority of the patients had hemifacial microsomia. Distraction was performed at a rate of 1 mm a day following complete osteotomy of the mandible. A mean of 15 mm of distraction was obtained. In conjunction with combined orthodontic management, satisfactory morphologic results were achieved in the majority of patients with good facial symmetry, adequate occlusal relationships and balanced maxillary mandibular relationships. Radiographic evaluation revealed that substantial new bone formation and remodelling was induced by the intraoral distraction along the entire hemimandible on the distracted side and that this contributed significantly to the aesthetically pleasing clinical results.

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