Mandibular Osteodistraction in Temporomandibular Joint Ankylosis

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Abstract

Introduction: Temporo-mandibular joint ankylosis is a common cause of acquired deformity.

Purpose: Surgical correction of the ankylosis only leaves the patient with external facial deformity. This study was done to evaluate the use if distraction osteogenesis in mandibular hypoplasia attributable to TMJ ankylosis and to present our protocol in surgical treatment with this relatively new therapeutic option.

Material and Methods: This study was done on seventeen patient with temporomandibular joint and mandibular deformity. Intra oral unidirectional bone born distractors were used in this study. Patient were categorized into three group; Group I underwent arthroplasty followed by distraction osteogenesis. Group II patients had simultaneous arthroplasty and distraction osteogenesis and Group III patient underwent distraction osteogenesis to relief upper airway obstruction followed by arthroplasty.

Results: All patient had a satisfactory mouth opening on follow-up and satisfactory correction of external facial appearance was achieved in all these patients. Some degree of malocclusion which were managed secondary by orthodontic treatment.

Conclusions: Distraction osteogenesis can be used as treatment to correct facial deformity in patient with temporomandibular joint ankylosis. Long term follow up of these patient is needed to decide wether secondary or even tertiary distraction may be required with further growth.