

SENSORY ALTERATIONS AFTER ORTHOGNATHIC SURGERY

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ABSTRACT :

The present study was conducted to evaluate the fate and patient perception of subjective sensory alteration that commonly occurs after orthognathic surgery.

24 patients were included, in whom a total of 28 osteotomies were done as follow, bilateral sagittal split ramus osteotomy (BSSRO, no=9), vertical ramus osteotomy (VRO, no=5), Le Fort I osteotomy (no = 7) and anterior mandibular horizontal osteotomy (AMHO, no = 7). Immediately post-operatively all patients had some degree of sensory alteration, however, most of the patients recovered normal sensation by the 3rd month post surgery. At one year postoperatively, only 4 patients continued to have residual sensory affection. Also results indicated that oral activities were not affected in any patient during the period of sensory alterations.

INTRODUCTION:

Orthognathic surgery has become a recognized and predictable method for treating dentofacial deformities⁽⁸⁾. A variety of surgical techniques are advocated to manage such deformities. The bilateral sagittal split ramus osteotomy (BSSRO) is a versatile method to correct various mandibular deformities including prognathism, retrognathism and facial asymmetry (4, 6, 8, 21, 25). Alternatively the vertical ramus osteotomy (VRO) is advocated by others to correct cases of mandibular prognathism (12,20,26). The Le Fort I osteotomy is a standard technique to correct maxillary deformities (9,11,13). Chin deformities are corrected through anterior mandibular horizontal osteotomy (AMHO) (2,7,10,16,19). All previously mentioned procedures

are performed in close proximity to terminal branches of the trigeminal nerves. It seems inevitably for these osteotomies that they have the potential of producing neurosensory disturbances if these nerves are encountered. Moreover patient behaviour may be affected secondary to these sensory alterations. Most of reports that discussed sensory affection after orthognathic surgery focused mainly on the BSSRO while only few reports discussed other osteotomies^(1,5,17,22,23). Also these reports concerned with the incidence of sensory alterations without addressing the impact of these sensory dysfunction on patient behaviour. The aim of this study is to assess sensory disturbances after four standard orthognathic procedures (BSSRO VRO Le Fort I and AMHO) and also to assess patient reaction to these neurosensory alteration.

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