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ORAL SURGERY; BEHAVIOURAL SCIENCE

Quality of life in patients undergoing segmental mandibular resection and staged reconstruction with nonvascularized bone grafts

Young CW, Pogrel MA *et al.* *J Oral Maxillofac Surg* 2007; **65**: 706–712

The greater the time from resection to reconstruction, and the more advanced the level of reconstruction, the better the resulting quality of life (QoL).

In this study, 26 patients who had undergone segmental resection for benign but aggressive mandibular lesions were interviewed or sent questionnaires on QoL, after they had reached their final reconstructed condition. Treatment involved resection and reconstruction with a plate, bone grafting, removal of plate, skin graft vestibuloplasty, implant procedures and prosthesis.

Patients underwent 122 operations up to stage II implant procedure. In 7 cases, treatment was completed with an implant-supported prosthesis, and in 6 cases, surgery ended with plate removal. Appearance concerns were reported by 3/4 of patients, and chewing concerns by 42%. Males had significantly higher QoL scores than females; resections involving the angle were considered significantly less aesthetic, and resections involving the parasymphysis and symphysis were rated as having significantly worse QoL than before surgery. Reaching a higher reconstruction stage was significantly associated with higher QoL, as was the time since first surgery.

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OCCCLUSION

An investigation of overeruption of posterior teeth with partial occlusal contact

Craddock HL *J Oral Rehabil* 2007; **34**: 246–250

Partial tooth contact did not always prevent overeruption.

Partial occlusal contact has been viewed as adequate to prevent overeruption, but there is evidence suggesting the contrary. In this study, dental casts were made for 91 consecutive adult patients with a tooth either unopposed ($n = 50$) or partially so (41). Documentary evidence was required that the tooth had to be in that condition at least 5 yrs, and otherwise free to move.

Mean overeruption of unopposed and partially opposed teeth were respectively 1.7 mm and 1.6 mm (NS). Respective mean tipping was less for the former (3.3° v. 8.8°). Partial contact also correlated with the degree of tipping ($r_s = 0.66$; $P < 0.01$). The author discusses occlusal stability and its maintenance.

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DEVELOPMENTAL DISORDERS

Central nervous malformations in presence of clefts reflect developmental interplay

Mueller AA, Sader R *et al.* *Int J Oral Maxillofac Surg* 2007; **36**: 289–295

Cleft lip and/or palate (CLP) is frequently associated with other developmental conditions.

Prevalence of additional malformations in CLP patients has been reported at levels as diverse as 4.5% and 63%. This study investigated clinical records of 245 CLP patients born in a German referral population of almost 900,000 from 1978–1999. The incidence of CLP was 1 in 700 live births.

An additional major malformation or minor anomaly was present in 21% of patients. Recognised syndromes were identified in 1/3 of these. Major malformations without recognised syndromes were considerably more frequent than in the general population, with CNS lesions 13 times higher, and ocular and craniofacial lesions each 7 times higher.

The authors discuss improvements in diagnosis since the earliest births considered and relate the CNS lesions to developmental anatomical proximity to the craniofacial tissues.

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ORTHODONTICS; ENDODONTICS

Orthodontic root resorption of endodontically treated teeth

Esteves T, Ramos AL *et al.* *J Endod* 2007; **33**: 119–122

Root-treated teeth had similar resorption to vital teeth.

There is little evidence on whether orthodontic apical resorption is greater in non-vital teeth, though some opinions have been expressed to this effect. From records of orthodontic treatment of 2,500 patients, 16 were identified who had maxillary central incisors, one of which was vital with the other root-treated at least 1 yr prior to orthodontics lasting at least 20 months.

Radiographs taken before and after orthodontic treatment were compared, and mean apical resorption was measured from both the CEJ and the incisal edge (crowned teeth were excluded). Vital teeth had a mean 1.04 mm resorption, and root-treated teeth, 0.82 mm (NS). The authors note a recent meta-analysis suggesting apical resorption is related to the distance the apex moves and the time taken to move it.

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