

dontic anomalies : primary compression -43,6%, open bite - 11,0%, closed bite -8,5%, progenia complex -5,7%, cross bite -3,5%, diastema media - 0,0%, short frenulum linguae - 41,5%, gothic palate -25,2% and the following percentages of articulatory impairments: sigmatism - 64,9%, rhotacism - 36,5% and lambdacism - 39,9%. 78% of the subjects had orthodontic anomalies and 72% had articulatory impairments while 52% had combined orthodontic and articulatory impairments and only 9% were eugathic subjects with normal articulatory status. It was also show that all three categories of articulatory impairments are mostly combined with primary compression (approximately 30%) accompanied by short frenulum linguae (approximately 30%) and gothic palate (approximately 15 to 20%). It is also obvious that there are 19% of subjects with orthodontic anomalies who have normal articulatory status, meaning that they developed efficient compensatory mechanisms in articulation and also that there are 13% of eugathic subjects who have articulatory impairments, consequently, caused by some other reasons and not by the orthodontic status. Although there is a strong connection between orthodontic and articulatory characteristics it can be concluded that the relationship between them is not straight forward and that other psycholinguistic, developmental, neurogenic and other parameters should be taken into consideration in further explication of that relationship.

Udaljenost između papile incizive i foveola palatina za određivanje dužine gornjih središnjih inciziva

Ibrahimagić-Šeper L¹, Čelebić A², Selimović E¹

¹Dom Zdravlja Zenica, Zenica, Bosna i Hercegovina

²Stomatološki fakultet Zagreb, Zagreb, Hrvatska

Svrha je rada ispitati mogućnost primjene pravila za određivanje dužine gornjih središnjih inciziva po kojemu se dužina umjetnoga medijalnoga gornjeg inciziva izračuna tako da se udaljenost od sredine papillae incisivae do foveolae palatinae podijeli s faktorom 4.

Mjerenja su napravljena na 115 modela ozubljenih ispitanika i 105 modela bezubih ispitanika odljevenih iz tvrdoga gipsa, a koji su imali zadovoljavajuće proteze.

Nije utvrđena znatna razlika ($p > 0,05$) ni za dužinu središnjih gornjih inciziva ni za udaljenost između papillae

incisivae i foveolae palatinae između ozubljenih i bezubih ispitanika, premda je razlika između ozubljenih i bezubih ispitanika bila veća za dužinu zuba ($t = 1,1$) nego za udaljenost između papillae incisivae i foveolae palatinae ($t = 0,16$). Glavni razlog tomu je u činjenici da se udaljenost između papillae incisivae i foveolae palatinae ne smanjuje zbog starenja ili ekstrakcije zuba (taj dio gornje čeljusti nije podložan resorpciji), dok je veća dužina umjetnih središnjih inciziva, izmjerena u ovome istraživanju, pripisana produženju gornje usne i smanjenju prednje visine lica zbog resorpcije alveolarnih grebena u bezubih pacijenata.

Djelitelj je izračunan tako da se je udaljenost između papile incizive i foveola palatina podijelila s visinom središnjega gornjeg inciziva, na osnovi navedenih mjerenja za našu bezubu populaciju bio je 4,34, a razlika od preporučenoga djelitelja 4 bila je statistički znatna ($p < 0,05$). No ako se uzme u obzir da je razlika u dužini zuba bila samo 0,7 mm, upotrebljavajući bilo jedan ili drugi djelitelj, možemo preporučiti upotrebu faktora 4 jer je jednostavniji. Ova metoda može biti pomoćna za studente i mlađe terapeute jer daje realne numeričke vrijednosti za dužinu zuba.

Ključne riječi: dužina nepca, dužina inciziva.

The Length Between Incisive Papilla and Foveola Palatina for Determination of the Length of the Central Upper Artificial Incisors

Ibrahimagić-Šeper L¹, Čelebić A², Selimović E¹

¹Health Centre Zenica, Zenica, Bosnia and Herzegovina

²School of Dental Medicine, Faculty of Dentistry, University of Zagreb, Zagreb, Croatia

This study was intended to check the opportunity of applying the rule according to which the length of the upper artificial central incisors can be determined by dividing the distance from the center of the incisive papillae to foveola palatina by factor 4, in our population.

Measurements were made on 115 stone casts of dentulous and 105 casts of edentulous individuals with satisfactory trial dentures.

No significant differences were found, either for the tooth length or for the distance between the incisive papilla and foveola palatina between the dentulous and edentulous group ($p > 0.05$). Although both differences were not significant, t value was higher for the length of the upper central incisor ($t = 1.1$) than for the distance from the incisal papilla to foveola palatina ($t = 0.16$). The main reason for this fact is that the distance from the incisive papilla to foveola palatina does not change with age or teeth extraction, while the bigger length of artificial teeth, obtained in this study, can be attributed to elongation of the upper lip and reduced anterior face height in the edentulous patient.

The divider calculated by dividing the distance from the incisive papilla to foveola palatina by the length of the upper central incisor, for our edentulous population was 4.34 and the difference from the proposed one (4) was significant ($p < 0.05$). However, as the difference in the tooth length would only be 0.7 mm if we used the proposed divider 4, we can recommend the use of this factor as it does not cause discomfort and artificial teeth must be grinded and reduced while setting. This method could be helpful for students and practitioners, since it gives some real numerical values for teeth length.

Key words: incisive length, palatal length

TMD liječenje s kompozitnim inlayima izrađenim u ordinaciji

Illeš D, Alajbeg IŽ, Valentić-Peruzović M.

Zavod za stomatološku protetiku, Stomatološki fakultet Sveučilišta u Zagrebu, Zagreb, Hrvatska

U pojedinim slučajevima kod posteriornih zuba teško destruiranih karijesnim lezijama nije moguć adekvatan i potpuno estetski tretman. Kao alternativa nameću se kompozitni inlay, onlay i overlay, izrađeni neposredno u ordinaciji.

Takvi radovi mogu biti izrađeni u specijalnim parcijalnim artikulatima (npr. Easy Croc, Girrbaach Dental GmbH, Njemačka) što ih čini visokovrtnim funkcijskim nadomjeskom koji je moguće upotrijebiti i u tretmanu TMD-a. Otiske uzimamo posebnom bimaksilarnom žlicom i izravno izlijevamo u supertvrdoj sadri u artikulatru. Uobičajeni kompozitni materijal modelira se u artikulatru uzimajući u obzir okluzalnu morfologiju susjednih zuba i gnatološka načela izradbe okluzalne plohe.

Modeliran nadomjestak moguće je polimerizirati izvan usta jednokratnim osvjetljavanjem, što eliminira nastanak učinka kontrakcijskoga stresa zbog polimerizacije u ustima i povećava stupanj polimerizacije samoga materijala.

Gotov rad isprobamo i uskladimo u ustima te cementiramo kemijski i svjetlosno polimerizirajućim kompozitnim cementom. Takvi nadomjesci koje je moguće izraditi i u ordinaciji povećavaju strukturni integritet ekstenzivno oštećenih posteriornih zuba i predstavljaju adekvatan konačan tretman nekih oblika TMD-a.

TMD Therapy With Chair-Side Composite Inlays

Illeš D, Alajbeg IŽ, Valentić-Peruzović M.

Department of Prosthodontic, School of Dental Medicine, University of Zagreb, Zagreb, Croatia

In some cases of heavily damaged posterior teeth, especially those on which endodontic treatment was performed, there is no possibility for full prosthodontic treatment. An alternative is chair side made composite inlay, onlay and overlay.

These fillings can be made in the special partial articulator (Easy Croc, Girrbaach Dental GmbH, Germany) which makes them suitable for final treatment of temporomandibular dysfunctions. Impressions are taken by a special a bimaxillary tray which is then poured into stone type IV gypsum and at the same time mounted in an articulator. Standard composite resin is modelled according to similar occlusal morphology of neighbouring teeth and gnathological rules. Occlusion is then adjusted in the articulator and programmed to a chosen occlusal scheme. Complete work is finally polymerized outside the mouth which eliminates shrinking stress and increases polymerization ratio. After try in, such work finally cemented using composite dual luting cements and then polished. Such chair side made prosthodontic devices increases the structural integrity of heavily damaged posterior teeth and can provide adequate treatment for the TMD patient.