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combined Profile and “step-back” technique. Working length of the root canal was verified using electronic device Endometer ES-03. Root canals were filled using thermoplastic technique and the control X-rays were made after the endodontic treatment. Finally, the crown was esthetically reconstructed with composite resin. Follow through after one, three and six months revealed a reduction of the pathological process as well as disappearance of clinical symptoms.

## Estetska rekonstrukcija incizijskoga brida središnjih gornjih sjekutića

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Oštećeni incizijski bridovi središnjih gornjih sjekutića smatraju se značajnim i razmerno složenim problemom u restorativnoj stomatologiji zbog minimalnoga stupnja oštećenja, složenih estetskih zahtjeva te zbog osiguravanja dugotrajnosti provedene rekonstrukcije. Za opskrbu incizijskih defekata postoji niz tehnika. Među njima je najmanje invazivna izravna tehnika kompozitnim smolama. Svrha rad bila je prikazati jednu od mogućnosti rekonstrukcije traumom oštećenog incizijskoga brida. Pacijent K.R., u dobi od 22 godine, imao je nakon udarca tvrdim predmetom frakture cakline i dijela dentina na incizijskome bridu. Prijašnji restorativni zahvat nije bio odgovarajući pa se proveo nov postupak uporabom Artemis (Vivadent, Schaan, Liechtenstein) mikrohibridnoga kompozitnoga materijala s paletom estetskih nijansi za stimuliranje cakline, dentina i posebnih efekata. Opakne nijanse boja stimulirale su izgubljeni dentin, prozirne caklinske boje caklinu, a mamegonske i jasne transparentne boje posebne efekte. Rekonstrukcija je provedena u slojevitoj tehnici uz uporabu instrumenata za plasticiranje i odgovarajućih kistova uz polimerizaciju svakoga sloja posebno.

## Esthetic Reconstruction of the Incisal Edge of Upper Central Incisors

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Damaged incisal edges of the upper central incisors are considered to be an important as well as a relatively complex problem in restorative dentistry because the degree of damage is minimal yet esthetical demand provision of long-lasting reconstruction complex. There are several techniques for provision of incisal defects, the least invasive being direct technique with composite resins. The purpose of this study was to present one of the possibilities for reconstruction of trauma damaged incisal edge. A 22 year old patient after being struck by a hard object, sustained fractures of enamel and part of the dentin on the incisal edge. Previously performed restorative treatment was not satisfactory, so a new procedure was undertaken, using Artemis (Vivadent, Schaan, Liechtenstein) microhybrid composite material with a wide spectrum of shades for enamel and dentin simulation as well as special effects. Opaque shades of colours simulated lost dentin, transparent enamel shades enamel, and mammelon and clear transparent shades special effects. Reconstruction was performed in layer technique with the use of instruments for plasticizing including responding brushes and polymerization of each layer separately.

## Utjecaj pušenja na parodontalni stastus adolescenata

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Mnoga su istraživanja potvrdila da je pušenje jedan od najvažnijih čimbenika rizika za nastanak, progresiju i uspe-

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šnu terapiju parodontalne bolesti. No samo je nekoliko istraživanja provedeno da bi se utvrdio utjecaj pušenja na mlađu populaciju. Poznato je da je težina parodontalne bolesti izravno povezana s dnevnom količinom cigareta, ali i s godinama pušenja. Potrebno je prepoznati prve znakove negativna utjecaja kako bi se moglo djelovati.

Svrha ovoga istraživanja bila je odrediti postotak pušača među učenicima, utvrditi ima li razlike u parodontalnom statusu pušača i nepušača, te ustanoviti utjecaj pušenja na gubitak pričvrstka.

Istraživanje je provedeno na 517 srednjoškolskih učenika. Uzimani su podaci o dobi, mjestu stanovanja, socijalnom statustu, navici pušenja, navici pušenja roditelja, navikama oralne higijene i posjeta stomatologu. Parodontalni se je status prikupljao s pomoću CPI i LA indeksa. 34,6% ispitanika bili su redoviti pušači. Dob u kojoj srednjoškolci počinju pušiti sve je niža. Oni koji sada imaju 16 godina počeli su pušiti s 14, ali oni koji sada imaju 14 i 15 godina počeli su pušiti s 12. Djeca kojima roditelji puše imaju dvostruko veću vjerojatnost da i sami postanu pušači, u usporedbi s onom djecom kojoj roditelji ne puše. Krvarenje je češće u pušača (4,61) nego nepušača (4,19) ( $p=0,001$ ). Pušači imaju znatno više sekstanata s kamenjem (1,47) nego nepušači (0,88) ( $p<0,001$ ). Gubitak pričvrstka znatno je veći u pušača (1,68) nego nepušača (1,59) ( $p<0,001$ ). Količina popušenih cigareta ima velik utjecaj na gubitak pričvtstka. Godišnji gubitak pričvrstka u redovitim i jakih pušača iznosi 0,07 mm. Navike oralne higijene ne razlikuju se između pušača i nepušača, ali učenici s lošom oralnom higijenom imaju veći gubitak pričvrstka. Pušenje utječe na parodontalnu bolest, čak i u mladoj populaciji. Zato je prijeko potrebno obavijestiti mlade pušače o negativnim posljedicama te navike.

## Influence of Smoking on the Periodontal Status of Adolescents

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Different studies have proven that smoking is one of the most important risk factors for the occurrence, pro-

gression and successful therapy of periodontal disease. However, only few studies have been conducted to prove the influence of smoking in a younger population. As we know that the severity of periodontal disease is directly associated with the amount of daily smoked cigarettes and also with the duration of smoking, it is important to find out when the first signs of negative influence appear so that we can act appropriately.

The aim of this study was to determine if the periodontal status of smokers and non-smokers has differences, and to establish the influence of smoking habits on loss of attachment. The study was conducted on 517 high-school students. For each examinee data was taken concerning their age, place of residence, social status, smoking habits, smoking habits of their parents, oral hygiene habits and attendance to a dentist. The periodontal status was measured by the CPI and LA indices. Among the examinees 34.6% were regular smokers. Students who are now 16 started to smoke when they were 14, but students who are now 14 and 15 started at age of 12. Children whose parents smoke had a two-fold increase of becoming smokers themselves, compared to children whose parents did not smoke. Bleeding was more frequent in non-smokers (4.61), than in smokers (4.19) ( $p=0,001$ ). Smokers had significantly more sextants with calculus (1.47) than non-smokers (0.88) ( $p<0,001$ ). Loss of attachment was significantly greater in smokers (1.68) than in non-smokers (1.59) ( $p<0,001$ ). The amount of smoked cigarettes had a great influence on loss of attachment. The annual loss of attachment in regular and intensive smokers measured 0.07 mm. Oral hygiene habits did not differ between smokers and non-smokers, but students with poor oral hygiene habits had greater attachment loss.

Smoking has an influence on periodontal health even in this young age population, therefore it is necessary to inform young smokers about the negative consequences that smoking has.