

Previous negative medical experience has significant influence on children's dental anxiety, supporting the Rachmans conditioning theory (Rachman, 1991). Anxious children are more likely to exhibit behaviour problems (aggression) and are more introvert in expressing their judgement regarding the dentist. Both the S - DAI and teh CFSS - DS, which was standardized in the Croatian population sample, showed the highest reliability in assessment of children's dental anxiety.

## Učinak terapijskoga lasera (LLLT) na *Candidu albicans* u dva bolesnika s protetskim stomatitisom

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Protetski stomatitis jedna je od vrlo čestih upala sluznice nepca koja se javlja u nositelja stomatoloških proteza, a povezano s infekcijom gljivicama *Candidom albicans*. Predloženi su različiti terapijski postupci u liječenju protetskoga stomatitisa od kojih ni jedan nije pokazao potpuni ni trajniji terapijski učinak.

Svrha rada bila je ispitati i prikazati učinak terapijskoga lasera na rast gljivice *Candide albicans* i upalu sluznice nepca u dva bolesnika s protetskim stomatitisom.

Dva ispitanika s protetskim stomatitisom kod kojih je dijagnosticirana upala sluznice nepca stupnja II po Newtonu liječeni su niskoenergetskim (terapijskim) poluvodičkim laserom (BTL 2000, Prag, Češka) različitim valnim duljinama (685 nm i 830 nm) tijekom 5 dana uzastopce. Palatalna sluznica i akrilatna baza proteze u oba je bolesnika obasjana terapijskom sondom na udaljenosti od 0,5 cm od površine s različitim vremenom trajanja terapije ovisno o valnoj duljini: tijekom 5 minuta s valnom duljinom 830 nm, (3,0 J/cm<sup>2</sup>, W = 30 mW) i 10 minuta s valnom duljinom 685 nm (3,0 J/cm<sup>2</sup>, W =

30 mW). Prije terapije laserom sa sluznice nepca i proteze uzet je ubrisak za kulturu na *Candidu albicans*. Učinak terapijskog lasera na rast gljivica *in vivo* procijenjen je semikvantitativno po završetku terapije laserom brojem kolonija na agar ploči po Olsenu. Intenzitet upale procijenjen je kliničkim kriterijima.

Nakon terapije laserom zapaženo je da je smanjen broj kolonija na agar pločama, a upale sluznice nije bilo.

Terapijski laser pokazao je dobar klinički učinak u tretmanu protetskoga stomatitisa.

## The Effect of Low Level Laser Therapy on *Candida Albicans* in Patients with Denture Stomatitis - Case Report

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The purpose of this study was to present the effect of low level laser therapy on *Candida albicans* growth and palatal inflammation in two patients with denture stomatitis.

The most common oral mucosal disorder in denture wearers in denture stomatitis, a condition which is usually associated with the presence of the yeast *Candida albicans*. Different treatment methods have been suggested to treat this symptom, none of which is proven to be absolutely effective.

Two denture wearing patients, both with palatal inflammation diagnosed as Newton type II denture stomatitis were treated with low power semiconductor diode laser (BTL-2000, Prague, Czech Republic) with different wavelengths (685 nm and 830 nm) for five days consecutively. In both patients, palatal mucosa an acrylic denture base were irradiated in non-contact mode (probe distance 0.5 cm from irradiated area) with different exposure times, 5 minutes (830 nm, 3.0 J/cm<sup>2</sup>, W = 60 mW) and 10

minutes (685 nm, 3.0 J/cm<sup>2</sup>, W = 30 mW). The effect of laser light on fungal growth *in vivo* was evaluated after the final treatment using the swab method and semi-quantitative estimation of *Candida albicans* colonies growth on agar plates. The severity of inflammation was evaluated using clinical criteria.

After low level laser treatment reduction of yeast colonies in the agar plates occurred and palatal inflammation diminished.

LLLT is effective in treatment of denture stomatitis. Further placebo-controlled studies are in progress.

Key words: laser therapy, candida, denture stomatitis.

## Rak pločastih stanica usne šupljine nastao iz lezija oralnoga lichen planusa - prikaz dvaju slučajeva

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Rizik maligne transformacije oralnoga lichen planusa predmetom je mnogih rasprava i oprečnih stajališta u literaturi. Kronicitet oralnih lezija lichen nosi manji rizik za nastanak oralnoga karcinoma, a rizik za njegov nastanak veći je na već upaljenim, atrofičnim i erozivnim površinama oralnoga lichen. Procjenjuje se da OLP maligno alterira u 0,4 - 2,5% slučajeva, pretežito onih s već prije dokazanom lichenoidnom displazijom. Novije molekularno genetičke studije pokazuju minimalne genetičke promjene u lezijama oralnoga lichen, a veće su promjene zabilježene u epitelnoj displaziji i malignim lezijama.

Ovim radom želimo prikazati dva dobro dokumentirana slučaja oralnoga karcinoma koji se je razvio na bukalnoj sluznici u osoba s dugotrajnim oralnim lichenom.

Prikazani slučajevi dokumentiraju i upozoravaju na prirodnu sklonost oralnoga lichen planusa malignoj alteraciji i ističu nužnost redovitih biopsija: inicijalne biopsije kod prvoga pregleda radi postavljanja dijagnoze i češćih kontrolnih biopsija tijekom kliničkoga praćenja lezija kako bi se pravodobno otkrile promjene koje upozoravaju na displaziju. S obzirom na to da OLP predstavlja rizičnu leziju, potrebne su i genetičke raščlambe određenim markerima.

## Oral Squamous Cell Carcinoma (OSCCA) Arising from an Oral Lichen Planus Lesion - Report of Two Cases

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The risk of malignant transformation of oral lichen planus remains a controversial issue in the literature. Chronicity of oral lesions has been shown to present low risk of oral cancer which has been identified as arising from areas of erythematous atrophic and erosive lichen planus. It is estimated that malignant transformation of OLP occurs in 0.4 - 2.5% of cases, mostly those with lichenoid dysplasia. Recent molecular genetic studies showed minimal genetic deviation in lesions of oral lichen planus, while the epithelial dysplasia and malignant lesions have shown increased genetic alterations.

We report two well-documented cases of long-standing oral lichen planus in which squamous cell carcinoma of the buccal mucosa occurred.

Presented cases document and warn of the propensity of oral lichen planus to undergo malignant transformation and stresses the importance of regular histological follow-