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Nekroza gingive zbog neodgovarajuće zubne proteze

Gingival Necrosis Caused by an Ill-Fitting Denture

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Sažetak

U ovom prikazu opisali smo slučaj 80-godišnjeg pacijenta koji je bio upućen u Zavod za oralnu medicinu Stomatološkog fakulteta u Zagrebu zbog gingivalnog ulkusa prisutnog osam dana. Na kliničkom pregledu uočena je eksponirana kost na bezubom alveolarnom grebenu u području molar-a s desne strane mandibule veličine 0,8 cm u promjeru. Inače, pacijent je svakodnevno uzimao doksazosin jer je imao teškoća s urinarnim traktom te ipatropij-bromid zbog respiratornih tegoba. Donju djelomičnu protezu nije promijenio već šest godina. Na početku je, točnije prva tri dana, bio liječen parodontnim zavojem (Resopack, HagenWerken, Njemačka) uz preporuku da ne nosi protezu, no nakon tri dana klinički pregled nije pokazao poboljšanje stanja. Zato smo se odlučili na liječenje topikalnim kortikosteroidom (betametazon) i oralnim antiseptikom (klorheksidin-diglukonat) tri puta na dan. Nakon tri tjedna lezija je zacijelila. Naveden je popis mogućih čimbenika koji mogu rezultirati nastankom ulkusa gingive.

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Uvod

Zna se da gingivalne ulceracije mogu nastati kod pacijenata s akutnim ulcerativnim gingivitisom i kao posljedica imunodeficiencije, posebice u slučaju leukemije i neutropenije te infekcije humanim virusom imunodeficiencije (HIV). Gingivalni ulkusi mogu se vrlo često pojaviti zbog virusnih infekcija kao što su herpes – simpleks i zoster, zatim bolesti šaka, stopala i usta, infekcije citomegalovirusom itd. Neki lijekovi također mogu prouzročiti ulceracije u usnoj šupljini, poput citotoksičnih lijekova, antihipertenziva, nesteroидnih protuupalnih analgetika, antidepresiva i drugih. (1). Nekim pacijentima lezije nastaju zbog samoozljeđivanja (2). Ipak, gingivalni ulkusi najčešće se povezuju s mehaničkom, kemijskom ili toplinskom traumom. U ovom prikazu opisana je gingivalna nekroza s eksponicijom kosti nastala zbog mehaničke traume, odnosno neodgovarajuće proteze.

Introduction

It is well known that gingival ulceration might develop in patients suffering from acute ulcerative gingivitis and as a result of immunodeficiency, especially in leukemic, neutropenic patients and human immunodeficiency virus (HIV) infection. Quite often gingival ulcers may develop due to the viral infections such as herpes simplex, herpes zoster, hand, foot and mouth disease, cytomegalovirus infection, etc. Some medications such as cytotoxics, antihypertensives, non-steroidal anti-inflammatory analgesics, antidepressants, etc., might also cause ulcers in the oral cavity (1). In some patients the lesions may be self-inflicted (2). However, most often, gingival ulcers result from mechanical, chemical and thermal trauma. In this case we report on a mechanically induced gingival necrosis with bone exposure due to the ill-fitting denture.

Prikaz slučaja

Osamdesetogodišnji muškarac bio je primljen na pregled s eksponiranom kosti u području 46 na bezubom alveolarnom grebenu veličine 0,8 cm u promjeru. Područje eksponirane kosti je bilo žute boje i bolno (slika 1.). Radiološka slika nije pokazala patološke promjene na kosti. Inače, pacijent je uzimao doksazosin zbog urinarnih teškoća i ipatropij-bromid jer je patio od respiratornih tegoba. Istu protezu nosio je već šest godina (slika 2.). Po zanimanju je bio veterinar i naveo je da si nije sam potaknuo traume, niti nije bio kod

Case report

An eighty-year-old male patient presented with exposed bone in the area 46 on the toothless alveolar ridge of 0.8 cm in diameter and it was of yellowish colour and painful (Figure 1). Radiological findings failed to show any sign of bone pathology. Apart from that, the patient was taking doxazosin due to urinary problems and ipatropium bromide due to respiratory problems. He wore a 6 years old faulty partial lower denture (Figure 2). The patient was a doctor of veterinary medicine and denied local trauma, dental treatments



Slika 1. Gingivalna nekroza u području desnoga mandibularnog molara
Figure 1 Gingival necrosis in the area of mandibular right molar

Slika 2. Neodgovarajuća donja djelomična proteza
Figure 2 Ill-fitting partial lower denture

Slika 3. Zacijeljeno područje nakon tri tjedna
Figure 3 Healed area after three weeks

stomatologa u posljednja tri mjeseca. Na početku je prva tri dana bio liječen samo parodontnim zavojem (Resopack, HagenWerken, Njemačka) s preporukom da ne nosi proteze, ali nije bilo poboljšanja. Zato mu je propisano liječenje lokalnim kortikosteroidom (betametazon) i oralnim antiseptikom (klorheksidin-diglukonat) tri puta na dan. Nakon tri tjedna lezija je zacijelila (slika 3.).

Rasprrava

Gingivalni ulkusi najčešće su posljedica mehaničke, kemijske ili toplinske traume. Do sada su u literaturi opisani različiti slučajevi kemijski uzrokovanih oralnih ulceracija koje se najčešće povezuju s neodgovarajućom primjenom kemijskih u dentalnoj medicini, poput 3-postotnog hidrogen-peroksida, paraformaldehida, formalina, kalcijeva hidroksida, formokrezola, željeznog sulfata, hipoklorita, tetraciklin-hidroklorida itd. (2 – 8). Neke kemijske opekline mogu biti povezane s neodgovarajućom uporabom analgetika koji se stavljuju u kariozne zube te češnjaka (9, 10). Ipak, naš pacijent nije tri mjeseca posjetio stomatologa.

Poznato je da toplinske ozljede u usnoj šupljini mogu biti posljedica elektrokirurških zahvata i ugrijanih *plagera*, a katkad nastaju zbog neodgovarajuće uporabe otisnih materijala (11, 12). Toplinske ozljede u usnoj šupljini mogu nastati i nakon konzumiranja pizze ili hrane podgrijane u mikrovalnoj pećnici (13, 14).

Kad je riječ o mehaničkim ozljedama, u literaturi su opisani slučajevi s ortodontskim napravama koje su uzrokovali različite ozljede oralnih sluznica (10). Nedavno je tako objavljen prikaz teškog oštećenja parodonta uzrokovano ultrazvučnom endodontskom napravom, a posljedica je bila nekroza gingivalne i nosne sluznice (15). I protetski nadomjestci, posebice neodgovarajući, mogu prouzročiti ulkus gingive, što je opisano i u našem prikazu. Kao i kod drugih mehaničkih, kemijskih ili toplinskih ozljeda, najvažnije je odmah isključiti uzročnu traumu. Preporučuje se primjena lokalnih kortikosteroida i antiseptika.

U ovom slučaju pacijentu je bila propisana samo lokalna terapija. Topikalni kortikosteroid i klorheksidin-glukonat, te nenošenje proteze, potaknuli su cijeljenje lezije na gingivi.

in the past three months or self-inflicted cause of the lesion. He was initially treated with a periodontal bandage (Resopack, HagenWerken, Germany) for the first three days and was instructed not to wear the denture; however no benefit could be seen. Therefore, we added a local corticosteroid (betamethasone) and oral antiseptic (chlorhexidine digluconate) applied three times a day. After 3 weeks the lesion healed (Figure 3).

Discussion

Gingival ulcers are most often the result of mechanical, chemical and thermal trauma. Various case reports on chemically induced oral ulcerations have been published, most frequently associated with irregular use of chemicals in dentistry such as 3% hydrogen peroxide, paraformaldehyde, formalin, calcium hydroxide, formocresol, ferric sulphate, hypochlorate, tetracycline hydrochloride, etc. (2-8). Some of the chemical burns might be associated with improper use of analgesics placed in the decayed tooth as well as garlic (9,10). However, our patient did not visit his dentist for a few months.

It is known that thermal injuries in the oral cavity might be a result of electrosurgery, heated plugger and sometimes due to the improper use of impression materials by dentists (11,12). Thermal injuries in the oral cavity are usually seen after eating pizza or microwave-heated food (13, 14).

Regarding mechanical injuries, there have been case reports on orthodontic appliances which have caused various injuries to the oral mucosa (10). A case report on severe periodontal damage induced by an ultrasonic endodontic device was also described and it resulted in the necrosis of gingival and nasal mucosa (15). Also, prosthetic appliances such as dentures especially faulty ones might induce gingival ulcers as it was seen in our case. As with all injuries due to the mechanical, chemical or thermal trauma it is of utmost importance to exclude offending agents. Furthermore, the use of topical steroids and antiseptics is advised.

In our case, only local therapy was provided. Local corticosteroids together with chlorhexidine digluconate and not wearing the denture resulted in gingival ulcer healing.

Abstract

We present a case of an 80-year-old male who was referred to the Department of Oral Medicine, School of Dental Medicine University of Zagreb, Croatia due to gingival ulcer which was present for eight days. Clinical examination has revealed exposed bone on the toothless alveolar ridge in the lower molar region on the right side of 0.8 cm in diameter. Otherwise, the patient was taking doxazosin due to urinary problems and ipatropium bromide due to respiratory problems. The patient wore a 6-year-old partial lower denture. He was initially treated with periodontal bandage (Resopack, HagenWerken, Germany) for the first three days and was instructed not to wear the denture; however, no benefit could be seen. Therefore, we added a local corticosteroid (betamethasone) and an oral antiseptic (chlorhexidine digluconate) applied three times a day. After 3 weeks the lesion healed. A list of possible causative factors regarding gingival ulcers is included.

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Key words

Gingival Diseases; Necrosis; Dental Restoration Failure

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