

votinje su žrtvovane 1., 2., 3. i 4. tjedna nakon aplikacije ispitivanoga sredstva. Histološki pripravci eksplantiranih tumora bojeni su hematoksilin-eozinom te imunohistokemijski s anti-CD34 protutijelima radi procjene tumorske neoangiogeneze. U usporedbi s PO skupinom, tumorski rast i angiogeneza bili su sniženi u 1,25-D3 i NAVS skupinama. NAVS vjerojatno smanjuje rast OPCC-a inhibicijom vaskularne proliferacije potrebne za tumorski rast.

### The Effect of Nonaromatic Naphthalene on Mice Oral Planocellular Carcinoma - a Pilot Study

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#### Summary

Nonaromatic naphthalene (NAVS) is a specific fraction of Croatian oil, extremely rich in steranes from which the aromatic system is removed. Steranes are attributed with bioactivity similar to steroid hormones, modulators of tumour growth. Encouraged by the results of earlier *in vitro* and *in vivo* studies on the inhibitory effect of NAVS on the growth of planocellular carcinoma, we carried out a study on its effect on oral planocellular carcinoma (OPCC) in mice.

Aims: 1) To test the validity of the simple experimental model OPCC, 2) to test possible antiproliferative effect of NAVS on the above model by monitoring tumour growth, 3) to test the antineoangiogenic effect of NAVS to explain the possible antiproliferative effect, and to estimate the possibility of crisis reactivity of anti-human immunohistochemical markers with mice tissue. A suspension of 100 µl s 10<sup>5</sup> SCC VII cell was inoculated intraorally under the buccal mucous membrane in 48 syngeneic C3H mice. Seven days after inoculation the animals were divided in six equal groups and the mice, depending on the group, were intratumorously injected with 100 µl of the following substances: paraf-

fin oil (PO) as a negative control, NAVS (in one group 7 days, and in the second group 14 days, after inoculation of the tumour), 1,25 dihydroxyergotamine (1.25-D3) as a positive control, and a combination of NAVS with 1.25-D3 and PO with 1.25-D3. Tumour growth was monitored weekly by measuring with callipers. The animals were sacrificed 1, 2, 3 and 4 week after application of the tested substance. Histological specimens of explanted tumours were stained with hematoxylin-eosine, and immunohistochemically with anti-CD34 antibodies for estimation of tumour neoangiogenesis. Compared with the PO group, tumour growth and angiogenesis were decreased in the 1.25-D3 and NAVS groups. NAVS probably reduced growth by OPCC inhibition of vascular proliferation, needed for tumour growth.

### Mukoepidermoidni karcinom male žlijezde slinovnice

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#### Sažetak

Sluznica usne šupljine prekrivena višeslojnim pločastim epitelom izvorište je benignih i malignih promjena, od jednostavnog fibroma pa do karcinoma usne šupljine. Doktor stomatologije mogu, s obzirom na dostupnost patoloških promjena rutinskom kliničkom pregledu, bez dodatnih dijagnostičkih metoda postaviti dijagnozu i uputiti bolesnika oralnom ili maksilofacijalnom kirurgu. U ranom otkrivanju i liječenju različitih tvorbi najvažnije je bolesnika uputiti pravodobno, kako bi se i manjim kirurškim zahvatima mogao izliječiti.

Na sluznici se manifestiraju i patološki procesi dubljih slojeva. U malim žlijezdama slinovnicama svih dijelova usne šupljine mogu se razviti mukozne ciste, benigni i maligni tumori. Tumori žlijezda slinovnica čine oko 3% svih tumora u tijelu, dakle razmjerno su rijetki. No važno je znati da 10 do 20% svih navedenih tumora nastaje u malim žlijezdama, najčešće na nepcu. Jednako tako važan je podatak da razmjerna čestoća malignih tumora raste kako se veličina žlijezda u kojima se pojavljuje smanjuje.

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### *Prikaz slučaja*

Bolesnik u dobi od 21 godine dolazi na pregled zbog bezbolne izrasline na tvrdome nepcu u visini kutnjaka, promjera 2 cm, široke baze, egzulcerirane površine i zadebljelih rubova. Iz anamneze saznajemo da bez subjektivnih tegoba traje oko 2 godine. Prije šest mjeseci tvorba je egzulcerirala i osjetio je da iz nje izlazi tekućina.

Učinjena biopsija pokazala je da je riječ o mukoepidermoidnom karcinomu, o malignoj neoplazmi male žlijezde slinovnice koja nastaje u svakoj životnoj dobi, no ipak je najčešća u djece. Tumor je odstranjen elektroskalpelom, a patohistološki nalaz potvrdio je dijagnozu te pokazao da je riječ o prvome stupnju malignosti (G-1). Takve vrste tumora rjeđe recidiviraju i metastaziraju, a prema podacima iz literature stupanj izlječenja unutar 5 godina iznosi 90%.

Malignome malih žlijezda slinovnica često je teško klinički međusobno razlikovati, a mogu sličiti i benignom pleomorfnom adenomu. Pravodoban dolazak bolesnika na pregled, pravodobno upućivanje specijalistu te pravodobna biopsija i kirurški zahvat povećavaju izgleda za izlječenje.

### **Mucoepidermoid Carcinoma of the Small Salivary Glands**

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### *Summary*

The mucous membrane of the oral cavity, covered with multilayered squamous epithelium, is a source of benign and malignant lesions, from simple fibroma to carcinoma of the oral cavity. Because of accessibility of the pathological lesions dental practitioners can, by a routine clinical examination, with no additional diagnostic methods, diagnose and refer the patient to an oral or maxillofacial surgeon. For early detection and treatment of different formations it is most important for the patient to be

referred promptly to the surgeon, so that minor surgical procedures can be performed, which can lead to cure. Pathological processes of deeper layers also manifest on the mucous membrane. Mucosal cysts, benign and malignant tumours can develop in the small salivary glands of all parts of the oral cavity. Tumours of the salivary glands comprise around 3% of the tumours in the body. In other words they are relatively rare. However, it is important to realise that 10 to 20% of all the above tumours occur in the small glands, most frequently on the palate. Equally important is the data that the relative incidence of malignant tumours increases, as the size of the glands in which they develop decrease.

### *Case presentation*

A 21-year-old male patient was admitted for examination because of a painless formation on the hard palate, at the level of the molar, 2 cm in diameter, with wide base, exulcerous surface and thickened edges. From the case history it was learnt that he had not had subjective problems for around 2 years. Six weeks prior to admittance the growth/formation exulcerated and he felt fluid coming from it. A biopsy was performed which showed mucoepidermoid carcinoma, a malignant neoplasm of the small salivary glands that can occur at any age, although it is more frequent in children. The tumour was removed with an electro-scalpel, and the histopathological finding confirmed the diagnosis and revealed grade 1 malignancy (G-1). Such types of tumours rarely recur and metastasise, and according to data from the literature the degree of recovery within five years amounts to 90%. Malignomas of the small salivary glands are frequently difficult to clinically mutually differentiate, and they may resemble benign pleomorphic adenomas. Prompt examination and specialist treatment, followed by prompt biopsy and surgical procedure increases the chances of recovery.