

cording to the human body systems and mentioned in the TABLE 1.

It's to be underlined that teeth bone destruction of the correspondent teeth and quantity of complications classified by organs and human body systems for patients with odontogenic mediastinitis made 83%.

Conclusions

Results we achieved: 1) confirm the high level of informativity of the system of correspondence of teeth bone destruction to the organs systems; 2) confirm dependence between correspondence of teeth bone destruction to the organs systems; 2) confirm dependence between the bone teeth destruction of the first and second molars of the lower jaw and the complications of odontogenic infection; 3) confirm indirectly not only odontogenic nature of mediostinitis but pathogenetic part too which shows odontogenic infection capacity for focal diffusion.

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LIPID PEROXIDATION OF THE ORAL FLUID FOR PATIENTS WITH ABSCESSSES AND PHLEGMONS OF ODONTOGENIC AETIOLOGY IN MAXILLOFACIAL AREA

A.A.KABANOVA, I.O.POHODENKO-CHUDAKOVA*

BELARUSIAN COLLABORATING CENTRE OF EACMFS,
BELARUSIAN STATE MEDICAL UNIVERSITY, MINSK, BELARUS
*MAILTO: IP-C@YANDEX.RU.

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Introduction

Maxillofacial surgery development allowed achieving very good results in prophylaxis, treatment and rehabilitation for patients with pyoinflammatory diseases in maxillofacial area. Most of achievements deal with complex approaches development for antimicrobial therapy of mentioned above diseases and there complications prophylaxis using immunomodificated agents, improving of the local treatment of wounds, applying physiotherapy procedures [1,2,3]. At the same time quantity of patients with pyoinflammatory diseases has no tendency for decrease in CIS countries as well as in the world. These patients compose 27% - 60% of the total amount of the hospital patients [5]. The great role of pyoinflammatory diseases clinical course and development of all localization including maxillofacial area is given for the microorganism state (total resistance, sufficient adaptative potential) what is characteristic for the local and total immune response, qualitative and quantitative structure and behavior of biological environment of the human body (serum of blood (SB), oral fluid (OF)) [4]. Our days, study of mechanisms of development and oxidative stress (OS) correction while development of acute infectious inflammatory diseases and critical pathological states is an important task of the modern science. There is necessity for interdisciplinary approach in order to find solutions for problems arisen in surgical infectious pathology [6]. Nevertheless, questions regarding the changes of oral cavity homeostasis, ways of its regulation for pyoinflammatory processes in maxillofacial area are not sufficiently studied.

Aim of work

is to study lipid peroxidation (LP) activity in the oral fluid for patients with abscesses and phlegmons of odontogenic etiology in maxillofacial area.

Objects and methods

We examined 42 patients (22 males and 20 females) at the age 21–60 years with abscesses and phlegmons of odontogenic etiology in maxillofacial area. It was the main group for examination.

Patients with pyoinflammatory diseases in maxillofacial area had complex treatment consisted of the primary surgical d-bridement (PSD) of the suppurative focus, antibacterial, disintoxication, antiphlogistic therapy procedures combined with the local treatment of septic wounds. Group of control consisted of 30 healthy peoples (15 males and 15 females) of the same age.

OF sampling performed fasting. This test performed according to the anamnestic data of the menstrual cycle for women. OF sampling after stimulation with sterile elastic mastication done. We tested induced LP activity mixed with H_2O_2 and ferrous chloride during 20 minutes after its sampling (reaction by Fenton). LP activity was rated by light-sum indices (S) registered with biochemiluminometer BHL 06 device. Antioxidant activity of the OF was evaluated by tangent of angle of incidence of light intensity (tg). Specific activity of the antioxidant defense was calculated as correlation between slope and light-sum indices (tg/S). Obtained results were processed statistically with t-criterion by Student-Fischer.

Results

When examining LP activity indices of the OF for healthy males, we fixed significant augmentation of the induced LP level when they had inflammatory process ($3,9 \pm 1,7$ for patients, $2,7 \pm 0,9$ – in the group of control, difference is authentic when $p=0,0006$). The same changes of the LP activity were fixed for males and females. Males with pyoinflammatory diseases had LP indices equal to $4,32 \pm 1,92$ comparing with group of control ($-3 \pm 1,1$), difference is authentic when $p=0,02$. Females with pyoinflammatory diseases had $3,4 \pm 1,2$ indices of the LP indices of the OF in respect of the control ($2,66 \pm 0,7$) and is authentic when $p=0,05$. Those indices confirm data about activation of free radical processes during pathological processes. It's to be underlined that sex differences for LP of the OF have more higher indices for healthy and ill males ($3,84 \pm 1,79$) comparing with females of both groups ($3,05 \pm 1,07$, $p=0,02$). Authentic difference of the induced LP activity level was fixed between ill males ($4,32 \pm 1,92$) and ill females ($3,4 \pm 1,2$, $p=0,04$). This difference shows higher level of the LP activity for males comparing with females. Antioxidant activity indices of the OF in the group of control made $-0,11 \pm 0,05$ and $-0,14 \pm 0,04$ for ill people, difference is significant when $p=0,009$. Significant reduction of its antioxidant activity ($p=0,04$) was fixed for ill males ($-0,14 \pm 0,05$) comparing with control group ($-0,1 \pm 0,01$). Information we achieved, confirms body resistance reduction for patients with pyoinflammatory diseases in maxillofacial area. Results of examinations for LP activity and antioxidant activity of the OF in mentioned above groups taking into consideration patients sex shown on the FIGs. 1 and 2.

Conclusion

Difference of final indices confirms possibility to use LP indices of the OF as additional diagnostics tests for patients with abscesses and phlegmons of odontogenic etiology in maxillofacial area.

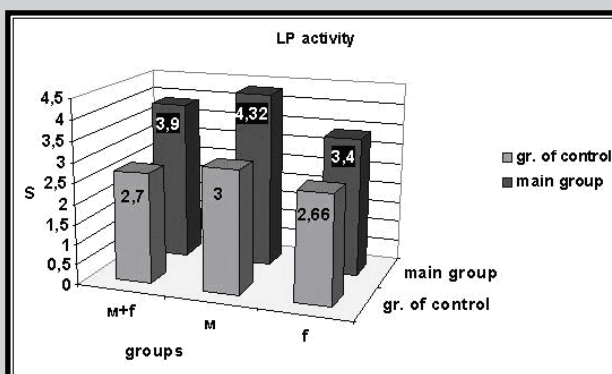


FIG.1. Lipid peroxidation activity.

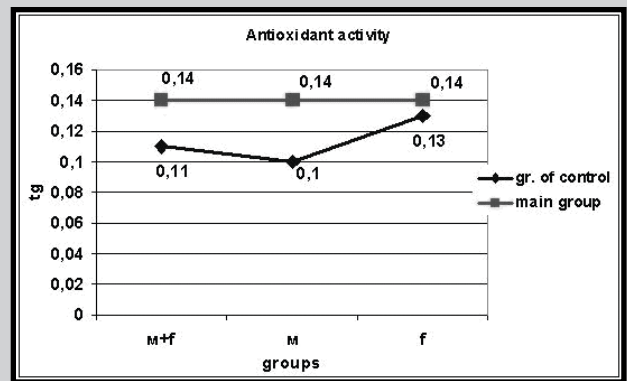


FIG.2. Antioxidant activity.

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ELASTIC MODULUS DETERMINATION ON OSTEOPOROTIC RAT BONES BY THE THREE-POINT BENDING TEST AND NANOINDENTATION

JANA VONDROVA*, JAROSLAV LUKES, RADEK SEDLACEK, PAVEL RUZICKA

CZECH TECHNICAL UNIVERSITY IN PRAGUE,
FACULTY OF MECHANICAL ENGINEERING,
LABORATORY OF BIOMECHANICS,
TECHNICKA 4, 166 07 PRAGUE, CZECH REPUBLIC
*MAILTO: VONDROVA@BIOMED.FSID.CVUT.CZ

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Introduction

Osteoporosis is a generalized systematic skeleton disease that is characterized by retrogression of the mechanical resistance of the bones. This retrogression is a consequence of quantity and quality changes in the bone mass, and it