

## SELF-DESCRIPTIVENESS OF DIFFERENT METHODS FOR PREDICTION OF PURULENT-INFLAMMATORY PROCESSES DEVELOPMENT FOR PATIENTS WITH PHLEGMON OF ORAL CAVITY

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### Introduction

Problem of elaborating new and easy to be done, effective, simple in interpretation and wide introducing in clinic practice already known methods of prediction of purulent-inflammatory processes development remain actual. Very often regardless to the adequate surgical treatment of suppurative focus, clinical description and dimensions of oral cavity phlegmons become dangerous and are complicated with mediastinitis which leads to death sometimes [5]. Severity of sick people condition with hard inflammatory processes is determined by syndrome of endogenous intoxication level of what could be specified with integral leucocyte indexes [2, 6]. It is well known that arising and developing diseases in maxillofacial area can provoke dysfunction of human body homeostasis what involves change of oral fluid indexes and its physical property of microcrystallization. Some authors say about positive changes of micricrystallization while treatment of diseases in maxillofacial area [1, 3]. In some works we find information that this test is self-descriptive for prediction of purulent-inflammatory processes development of odontogenous aetiology [4]. In special literature there is no results found about compative appreciation of integral leucocytes indexes application effectiveness and indexes of microcrystallization for prediction of phlegmon of oral cavity development.

**Aim** of the work is to do comparative appreciation of self-descriptiveness of prediction of oral cavity phlegmon development with integral indexes of intoxication and microcrystallization of oral fluid.

### Materials and methods

We examined 36 patients with phlegmon of oral cavity of odontogenous aetiology. Group of control composed of 24 persons. Treatment course for all patients consisted of surgical preprocessing of suppurative focus and conservative therapy postoperatively which included antibacterial, antihistaminic, nonsteroid antiphlogistic preparations application, patients also received polyvitamins, infusion therapy and physiotherapy course. We have taken into consideration that there is possibility of general status of patient and some aspects in oral cavity influence on biophysical properties of the oral fluid while examination. All patients had no systemic diseases and injuries for medical rehabilitation, pathology of mucous tunic of oral cavity, palatine tonsils were also excluded. All patients had high level of caries intensity.

Oral fluid preparation was realized by P.A.Leus [1]. All patients were subjected into the test of leucocyte index of

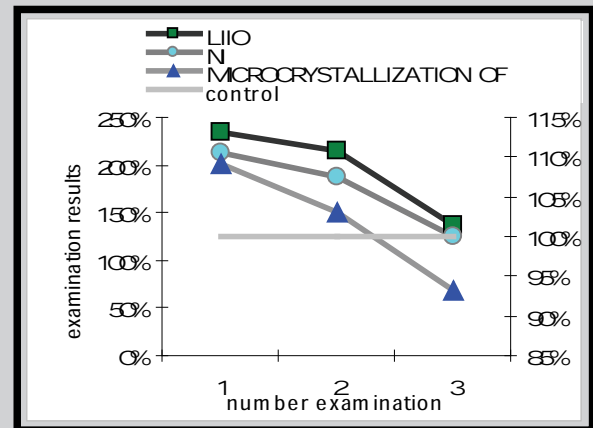


FIG.1. Correlation of integral leucocyte indexes of intoxication dynamics and indices of microcrystallization of oral fluid while complex rehabilitation procedures for patients with phlegmon of oral cavity.

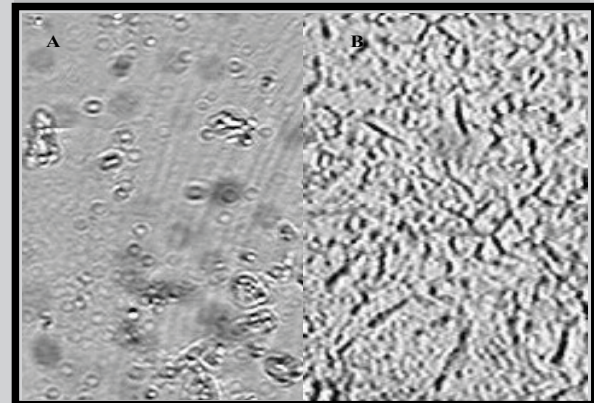


FIG.2. Positive changes of microcrystallization test of oral fluid for patient F with mouth floor phlegmon: A – test results before treatment, B – test results 3 days after primary surgical treatment of suppurative focus.

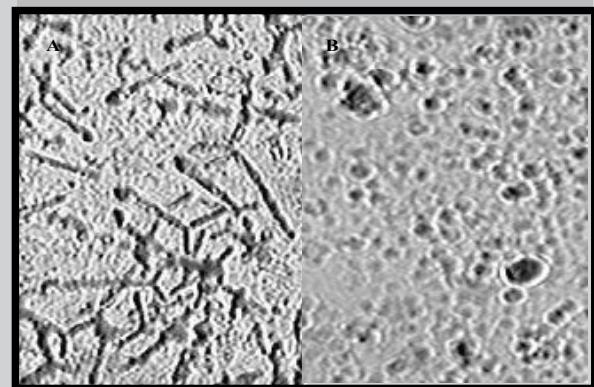


FIG.3. Negative changes of microcrystallization test of oral fluid for patient K with mouth floor phlegmon: A – test results before treatment, B – test results 3 days after primary surgical treatment of suppurative focus.

intoxication by V.K.Ostrovskiy (LIIO) [2] and nuclear index of intoxication (NI) by G.A.Dachtayantz [6]. Examination of these indices was studied in dynamics: 1) when patient

arrived to the doctor first time for treatment, 2) three days after surgical preprocessing of pyoinflammatory focus, 3) at the end of treatment in hospital. Information was gathered in «Microsoft Excel» tables and adapted by method of calculus of variations with PC.

## Results

Indexes of examination showed authentic distinction according to the integral leucocytes indexes, indexes of microcrystallization of oral fluid as regards to the group of control ( $p < 0,001$ ). While treatment course we have seen positive changes of all indices which have had authentic changes in 3-rd experiment LIIO ( $p < 0,001$ ) in comparison with initial indice  $3,53 \pm 0,3$ , also NI in 3-rd experiment  $0,1 \pm 0,006$  ( $p < 0,001$ ) regarding to the initial data  $0,17 \pm 0,02$ . Similar data was received when microcrystallization of oral fluid was studied while 3-rd experiment  $2,42 \pm 0,08$  ( $p < 0,001$ ) in regards to the initial index  $2,84 \pm 0,01$ . In that way, if we compare dynamics of studied indices, we can conclude that there is correlation between results of microcrystallization and indexes of leucocyte indexes of intoxication (FIG.1).

## Conclusion

Test of microcrystallization of oral fluid is highly self-descriptive for prediction of pyoinflammatory process development in maxillofacial area (FIG.2 and FIG.3). This method has its advantages. It is noninvasive, easy for application, it does not need a lot money to spend, it is not necessary to have special knowledge, is reproducible day and night, number of times of reproduction is not limited.

## References

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