

Metina Ksenia Ivanovna (Metina K. I.)
Student FGAOU VPO "Far Eastern
Federal University," School of Biomedicine,
4 year, Pharmacy.

Student of "Far Eastern Federal University",
School of Biomedicine, 4 year,
Pharmacy

E-mail: metina.k@mail.ru.

Sakharova Olga (Sakharova O.B.),
MD, PhD, Department of Public Health

and Preventive medicine, School of Biomedicine,
Far Eastern Federal University.

PhD, associate Professor of the Department
of public health and preventive medicine,
School of Biomedicine, Far Eastern Federal
University.

E-mail: sob194@yandex.ru>

Kiku Pavel Fedorovich (Kiku P.F.), MD,
PhD, Professor, Head of the Department
of Public Health and Preventive Medicine,

School of Biomedical, Far Eastern Federal
University.

E-mail: lme@list.ru.

FGAOU IN "Far Eastern Federal University"
(Far Eastern Federal University),
School of Biomedical, 690950, Vladivostok,
ul. Sukhanov, 8. Tel. / Fax (432) 2406634.

POINT OF VIEW

A. K. Iordanishvili, V. A. Guk

PERIODONTAL DISEASE IN THE PILOTS OF CIVIL AVIATION

ABSTRACT

During clinical inspection of 117 men, aged from 25 up to 55 years, which are aircrew of civil aviation of the Russian Federation, the frequency of occurrence and feature of clinical course of parodontitis is studied. It is established that with a satisfactory individual hygiene of an oral cavity, the frequency of occurrence of gingivitis, periodontitis and parodontosis by the aircrew is respectively, 47,5%, 29,2% and 2,5%. 26,7% of pilots needed dental treatment, but the USP index about 56,3% corresponded the normal stomatologic treatment of an aircrew. It is emphasized that during planned profound surveys or medical and flight examination of an aircrew of civil aviation, it is necessary to make a prophylaxes of early loss of natural teeth, to tap the persons having clinical signs of diseases of parodont by studying the parodontal status and refer them to the prevention facilities for performing specialized treatment.

Keywords: diseases of parodont, gingivitis, periodontitis, parodontosis, aircrew, civil aviation, bruxism, hygiene of oral cavity.

INTRODUCTION

Dental health of the pilots is given insufficient attention, as the diseases of the teeth, periodontal and oral mucosa usually do not lead to the unsuitable for flight work condition of the body of the pilot [1, 3]. More often the loss of natural teeth, and also chronic inflammatory processes of maxillufacial localization, conducts to professional uselessness of flying composition of civil aviation [4, 10]. In literature, there is single information about stomatological pathology at flying composition, including to the civil aviation [2, 11]. At the same time, in the domestic and foreign literature there is no information on the incidence and features of the clinical course of periodontal diseases, which are often accompanied by a chronic inflammatory or dystrophic process in the peri-toothed tissues, often leading to premature loss of natural teeth [8], and often accompanied by bruxism leading to the emergence of a generalized form of increased abrasion of teeth, which significantly complicates the elimination of defects in the dentition with dentures, including in flight, since the availability of removable dentures is usually a contraindication to performing flight activities [6, 8].

Research aim - to study the features

of clinical flow of diseases of parodontium at flying composition of civil aviation of Russia.

Material and research methods

A stomatological inspection is conducted 117 men in age from 25 55 to, being flying composition of civil aviation (except a helicopter aviation) of Russian Federation. Duration of professional activity of pilots was 15 from 4 to, the clock of raid made from 1125 to 5125. Frequency of met and needs patients in treatment and prosthodontics was estimated in percents. For the estimation of individual hygiene of cavity of mouth used the index of Y.A. Fedorova - V.V. Volodkinoi, for the objective estimation of the state of fabrics parodontium determined the iodic number of Svrakova and used the complex periodontitis index of P.A. Leiyasa [13]. The level of stomatological help was estimated on the index of YSP in percents [4].

The digital material got as a result of research treats on PC with the use of the specialized package for a statistical analysis - "Statistica for Windows v. 6.0". Distinctions between the compared groups were considered reliable at $p \leq 0,05$. Cases, when values of probability of index of "p" were in a range from 0,05 to 0,10 - considered as a "presence of ten-

dency".

RESULTS AND DISCUSSION

The analysis of stomatological health showed that an individual hygiene of cavity of mouth flying composition had by satisfactory, value of index of individual hygiene of cavity of mouth on Y.A. Fedorova - V.V. Volodkinoi made $1,89 \pm 0,12$ un.. Frequency of gingivitis at flying composition met of 47,5%, and needs in the removal of sedimentations of odontolith - 54,2%. The degenerative defeats of parodontium fabrics were diagnosed for 2,5% pilots, and needs in treatment of periodontitis made among them 29,2% (pic.1). Thus a value of iodic number of Svrakova was $2,07 \pm 0,19$ c.u. and a value of index of KPI was $3,2 \pm 0,21$ c. u. (pic.2), that testified to the middle degree to weight of flow for them to inflammatory pathology of parodontium.

In a prosthodontics needed 26,7% pilots (pic. 3), here the value of level stomatological help was made (index of YSP) by 56,3%, that corresponded satisfactory I will drop providing of stomatological help to flying composition of civil aviation.

Conclusion. The diseases of parodontium at flying composition of civil aviation meet often enough (in 79,2% cases), among that the forms of periodontitis

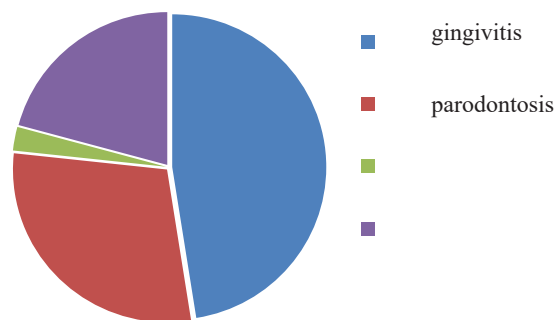


Fig. 1. Frequency of occurrence of periodontal diseases in the flight crew of civil aviation of the Russian Federation

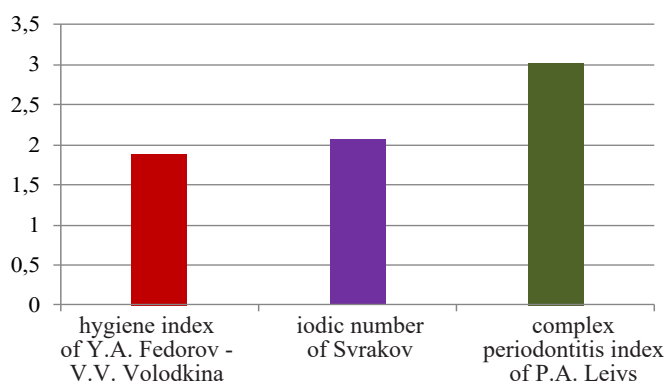


Fig. 2. Average indices of oral hygiene in the flight crew of civil aviation of the Russian Federation, cu

(29,5%), gingivitis (47,5%), rarer - degenerative pathology of fabrics of paradontium (2,5% cases) come to light more often. During deep examinations or medical - flying examination of flying composition of civil aviation it is necessary to expose pilots having clinical signs of diseases of paradontium, and to direct them in medical and preventive establishments for clarification of diagnosis and degree of weight of flow of this pathology, and also realization of the specialized treatment. dentists, during realization of deep examinations or medical-flying examination of flying composition of civil aviation, it is expedient to conduct the deep study of paradontium status. It, at the minimum expenses of time, efficiency of exposure for the pilots of diseases of paradontium will allow substantially to promote, and also in good time to conduct medical and preventive events for the prophylaxis of early loss of natural teeth because of inflammatory or degenerative pathology of fabrics, because 26,7% pilots on the real moment need stomatological orthopaedic treatment in connection with the partial loss of teeth.

REFERENCES

- Abramov D. V. Dental structural materials: a pathophysiological rationale for the optimal use in dental implantation and prosthetics. / D. V. Abramov, A. K., Iordanishvili – SPb.: Nordmedizd, 2011. – 162 p.
- Babich V. V. The organization of diagnosis and treatment of diseases of the temporomandibular joint taking into account adaptive capacity of the organism. / V. V. Babich, A. K., Iordanishvili, M. A. Okunev, N. Udaltsov. – SPb.: Nordmedizd, 2016. – 77. p.
- Iordanishvili A. K. Dental disease in aircrew / A. K. Iordanishvili. – SPb.: Rivi-
era, 1996. – 76 p.
- Iordanishvili A. K. Morphological and functional evaluation of the masticatory apparatus have different categories of flight personnel (clinical-experimental study): author. dis. ... d – RA med. Sciences / A. K. Iordanishvili. – SPb.: Publishing house MMA im. S. M. Kirov, 1998. – 38 p.
- Iordanishvili A. K. Surgical treatment of periodontitis and cysts of the jaw / A. K. Iordanishvili. – SPb.: Nordmedizd, 1996. – 218 p.
- Iordanishvili A. K. Clinical orthopedic dentistry / A. K. Iordanishvili. – M.: Medpress-inform, 2007. – 248 p.
- Iordanishvili A. K. Age-related changes of the masticatory-vocal apparatus / A. K. Iordanishvili. – SPb., Chelovek 2015. – 140 p.
- Iordanishvili, A. K. Treatment of periodontitis in elderly and senile age. / Iordanishvili, A. K., S. V. Soldatov, G. A. Ryzhak, L. N. Soldatova – SPb.: Nordmedizd, 2011. – 128 p.
- Iordanishvili, A. K. Dental health of the nation and the ways of its conservation / A. K. Iordanishvili // Periodontics. – 2015. – № 1 (74). – P. 78-80.
- Kostur B. K. Age indications for the choice of the complex of methods of research of function of the masticatory apparatus / B. K. Kostur. – L.: Medicine, 1978. – 32 p.
- Muzykin, M. I. Periostitis of the jaws and their treatment / I. M. Musakin, A. K., Iordanishvili, G. A. Ryzhak. – SPb.: Chelovek, 2015. – 112 p.
- Orekhova L. Y. The Role of the doctor-periodontist in the diagnosis of somatic disease / L. Y. Orekhov, M. V. Osipov // Periodontics. 2010. – № 4 (57). – Pp. 20-23.
- Orekhova L. Y. Metabolic aspects of the pathogenesis of inflammatory perio-

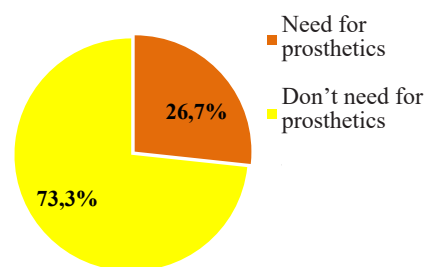


Fig. 3. The need for prosthetics of the flight crew of Russian civil aviation,%

dontal diseases in patients with diabetes mellitus / L. Y. Orekhova // Periodontics. – 2012. – № 3 (64). – S. 7-11.

Tytyk S. J. Dental health in chronic inflammatory bowel diseases. / S. Y. Tutuk, A. K., Iordanishvili – SPb.: Nordmedizd, in 2016. – 144 p.

Filippova E. V. diseases of the mucous membranes of the oral cavity in elderly and senile age / E. V. Filippova, A. K., Iordanishvili, D. A. Liebig // Periodontics. – 2013. – № 1 (66). – P. 60-63.

Farman, A.G. The basics of maxillofacial cone beam computed tomography / A.G. Farman, W.C. Scarfe // Seminars in Orthodontics. – 2009. – Vol. 15, № 1. – P. 2–13.

Yan F. Glicosaminoglycans in gingival crevicular fluid of patients with periodontal class II furcation involvement before and after guided tissue regeneration. A pilot study / F. Yan, R. Marshall, P.M. Bartold // J. Periodontol. – 2000. – Vol. 71. – P. 1-7.

The authors

Iordanishvili Andrej K. – Professor of the Northwestern state medical University. I. I. Mechnikov

Guk Vyacheslav Alekseevich - assistant, Department of maxillofacial surgery and surgical stomatology, Military medical Academy. S. M. Kirov.