

: 616.314.17-008.1:616-001.34]-036-092-084-08

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» (0112U002382; 2012-2014 .)

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[9-11, 14].

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[5, 8, 10].

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[2, 11, 17].

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[10, 16].

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[11, 15, 18].

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[7, 11].

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[12].

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[3, 4].

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[10, 11].

(n₀=129)

(n₁=129)

(- ¹n₁=63

- ²n₁=66

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. . (. 57512,)

(PMA),

(-S),

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(. 1)

(0,05)

(- 82,2± 4,4%)

(

- 17,8±4,4%).

(0,05)

; ,

(73,0±5,6)%,

– (90,9±3,5)%;
 (27,0±5,6)% (9,1±3,5)%, 0,05).

| | | n ₀ =129 | | n ₁ =63 | | n ₂ =66 | | n ₁ =129 | |
|-------|--|---------------------|----------|--------------------|----------|--------------------|----------|---------------------|----------|
| | | | ±m,% | | ±m,% | | ±m,% | | ±m,% |
| | | | | | | | | | |
| 29 | | 3 | 2,3±1,3 | 3 | 4,8±2,7 | - | - | 3 | 2,3±1,3 |
| | | 2 | 1,6±1,1 | 2 | 3,2±2,2 | - | - | 2 | 1,6±1,1 |
| | | 1 | 0,8±0,8 | 1 | 1,6±1,6 | - | - | 1 | 0,8±0,8 |
| 30-39 | | 45 | 34,9±4,2 | 29 | 46,8±6,3 | 16 | 24,2±5,3 | 45 | 34,9±4,2 |
| | | 34 | 26,4±3,9 | 20 | 31,7±5,9 | 14 | 21,2±5,0 | 34 | 26,4±3,9 |
| | | 11 | 8,5±2,5 | 9 | 14,3±4,4 | 2 | 3,0±2,1 | 11 | 8,5±2,5 |
| 40-49 | | 53 | 41,1±4,3 | 22 | 34,9±6,0 | 31 | 48,4±6,2 | 53 | 41,1±4,3 |
| | | 44 | 34,1±4,2 | 16 | 25,4±5,5 | 28 | 42,4±6,1 | 44 | 34,1±4,2 |
| | | 9 | 7,0±2,2 | 6 | 9,5±3,7 | 3 | 4,5±2,6 | 9 | 7,0±2,2 |
| 50 | | 28 | 21,7±3,6 | 9 | 14,3±4,4 | 19 | 28,8±5,6 | 28 | 21,7±3,6 |
| | | 26 | 20,2±3,5 | 8 | 12,7±4,2 | 18 | 27,3±5,5 | 26 | 20,2±3,5 |
| | | 2 | 1,6±1,1 | 1 | 1,6±1,6 | 1 | 1,5±1,5 | 2 | 1,6±1,1 |
| | | 129 | 100,0 | 63 | 100,0 | 66 | 100,0 | 129 | 100,0 |
| | | 106 | 82,2±4,4 | 46 | 73,0±5,6 | 60 | 90,9±3,5 | 106 | 82,2±4,4 |
| | | 23 | 17,8±4,4 | 17 | 27,0±5,6 | 6 | 9,1±3,5 | 23 | 17,8±4,4 |

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0,05; –

, 0,05

(41,1±4,3)%

40-49 . 30-39 . – (34,9±4,2)%,

30-39 . (46,8±6,3)%,

– (0,05) – (24,2±5,3)% . 40-49 . , :
 . (0,05) , . ((48,4±6,2)% (34,9±6,0)%). ,
 50 . (21,7±3,6)% , ,
 (0,05) . ,
 ((28,8±5,6)% (14,3±4,4)%).
 - - -
 (. 2) , . ,
 (0,05) -
 (; , (3,9±1,7)%
 (23,3±3,7)% . ,
 (83,7±3,3)% - -
 .

(PMA)

| - | n ₀ =129 | | - | | | | | |
|-------------|---------------------|----------|--|----------|--|----------|---------------------|----------|
| | | | - . , ¹ n ₁ =63 | | - , ² n ₁ =66 | | n ₁ =129 | |
| | . | ±m,% | . | ±m,% | . | ±m,% | . | ±m,% |
| 1,0 () | 21 | 16,3±3,3 | 10 | 15,9±4,6 | 3 | 4,5±2,6 | 13 | 10,1±2,7 |
| 1,1÷2,0 () | 103 | 79,8±3,5 | 44 | 69,8±5,8 | 42 | 63,6±5,9 | 86 | 66,7±4,2 |
| 2,1÷3,0 () | 5 | 3,9±1,7 | 9 | 14,3±4,4 | 21 | 31,8±5,7 | 30 | 23,3±3,7 |

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0,05; -

., 0,05

(0,05) , . () ,

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(15,9±4,6)% (4,5±2,6)%).

(0,05)

(0,7÷1,6) ∴ - (55,0±4,4) %, - (79,1±3,6)%.

, - .. ((37,9±6,0)%

(57,1±6,2)%, 0,05).

(1,7÷2,5) ∴ ,

(13,2±3,0)%,

(32,6±4,1)%,

(28,6±5,7)%, - . - (51,5±6,2)%, 0,05).

(2,6 .) 10

(0,8±0,8)% (7,8±2,4)%, 0,05).

(- . - (6,3±3,1)%, - . - (9,1±3,5)%, 0,05).

(-S)

| | n ₀ =129 | | n ₁ =63 | | n ₁ =66 | | n ₁ =129 | |
|-----------|---------------------|----------|--------------------|----------|--------------------|----------|---------------------|----------|
| | . | ±m,% | . | ±m,% | . | ±m,% | . | ±m,% |
| 0,6 . | 9 | 7,0±2,2 | 5 | 7,9±3,4 | 1 | 1,5±1,5 | 6 | 4,7±1,9 |
| 0,7÷1,6 . | 102 | 79,1±3,6 | 36 | 57,1±6,2 | 25 | 37,9±6,0 | 71 | 55,0±4,4 |
| 1,7÷2,5 . | 17 | 13,2±3,0 | 18 | 28,6±5,7 | 34 | 51,5±6,2 | 42 | 32,6±4,1 |
| 2,6 . | 1 | 0,8±0,8 | 4 | 6,3±3,1 | 6 | 9,1±3,5 | 10 | 7,8±2,4 |

∴ -

0,05; -

∴ 0,05

1. $0,6$ -S -
 , $0,6$ -
 , ($4,7 \pm 1,9$ -
 $7,0 \pm 2,2$, $0,05$); -

- . ($7,9 \pm 3,4$) $(1,5 \pm 1,5)$, $0,05$). -
 2. -
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3. .
 , ($0,05$) -
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- .2009.- 2.- .1-3. -
2. -1999.- 2.- .1-4. -
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3. / -
- // .-2000.- 4 (20).- .16-18. /
4. // .2002. — 1-
- 2.- .55-59. -
5. / , // -
- .-2005.- 4-5.- .24-28. -
6. / -
- // .2004.— 4.— .35-37. /
7. -
- / , , - :
- ,2008.- 420 . -
8. / // , -
- 2001.- 4.- .17-20. -
9. / ,- .: ,2003.- 147 . -
10. , : -
- : .14.01.02 —« »/- ,1999.- 33 . -
11. / // -
- .-1998.- .4, 4.- .24-26. -
12. / , // -
- .-1997.- .3, 2.- .231-240. -
13. /// . -
- 2004.- 9 (77). .24-26. -
14. : , , / ,- .: -
- , ,1971.- .122-237. -
15. / , // . -
- .-2008.- 11.- .20-25. -
16. / , // -
- .-1998.- 4.- .27-28. -
17. / -
- // .-1999.- 3.- .68-71. -
18. / // -
- ' .- 1.-1999.- .2-9. -

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 -S
 , 0,6
 (4,7±1,9 7,0±2,2 , 0,05);
 . ((7,9±3,4) (1,5±1,5) , 0,05).
 :

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 () -
 -S , 0,6
 (4,7±1,9 7,0±2,2 , 0,05);
 .. ((7,9±3,4) (1,5±1,5) , 0,05).
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PERIODONTAL STATUS NEEDS AMONG SUBJECTS EXPOSED TO OCCUPATIONAL VIBRATION

Sokolova I.I., Ashaba . . .

Kharkiv National Medical University

Summary. Dental status and periodontal treatment needs were assessed in patients with VD and healthy subjects exposed to occupational vibration. Differences between the patients of control group and patients with VD were identified according to hygienic index values and evident differences according to mouth hygiene indices were determined according to the severity of VD. It was proved that caries intensity in patients with VD is evidently higher than in control group patients and among VD patients it is evidently higher in stage. Investigation of mouth hygiene state according to -S indices showed that values of this index up to 0,6 un. were observed with similar frequency both in patients with VD and in control group subjects (correspondingly 4,7±1,9 un. and 7,0±2,2 un., 0,05); however, there were evidently more patients with these values of mouth hygiene index among patients with VD stage than in VD stage (correspondingly (7,9±3,4) un. and (1,5±1,5)un, 0,05). When investigating the state of oral cavity according to hygienic index values we have determined the differences between the control group patients and patients with VD and identified evident differences according to mouth hygiene index depending on VD severity

Key words: dental status, periodontium, vibration disease.

PERIODONTAL STATUS

NEEDS AMONG SUBJECTS EXPOSED TO OCCUPATIONAL VIBRATION

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Kharkiv National Medical University

The purpose of research is to assess dental status (DS) in different categories of subjects exposed to occupational vibration.

Materials and methods of research. DS assessment was carried out in patients of two groups, which were formed by copy pair method: the first group ($n_0=129$) comprised subjects exposed to occupational vibration, who underwent comprehensive medical examination and its results allowed to exclude vibration disease (VD); the second group ($n_1=129$) comprised patients with VD, who underwent treatment at the specialized department of research and development institute of occupational hygiene and diseases at Kharkov National Medical University of Ministry of Health of Ukraine (the first subgroup - $^1n_1=63$ patients with VD stage and the second group - $^2n_1=66$ patients with stage).

Results and their discussion. Distribution of patients according to gender was characterized by an evident ($0,05$) predominance of male gender in the structure of patients (correspondingly - $82,2\pm 4,4\%$) in comparison with female (correspondingly - $17,8\pm 4,4\%$). According to VD stage the proportion of male gender evidently ($0,05$) increased; thus, in VD stage there were ($73,0\pm 5,6\%$) men, and in VD stage there were ($90,9\pm 3,5\%$) men; the proportion of women was found to decrease, correspondingly (from ($27,0\pm 5,6\%$) to ($9,1\pm 3,5\%$), $0,05$).

Comparison group analysis by age showed that the greater proportion ($41,1\pm 4,3\%$) belonged to patients with VD aged 40-49 years and 30-39 years – ($34,9\pm 4,2\%$), however, in VD stage the proportion of patients aged 30-39 years comprised ($46,8\pm 6,3\%$), and in VD stage it was evidently ($0,05$) less – ($24,2\pm 5,3\%$). And on the contrary, in age group of 40-49 years there were evidently ($0,05$) more patients with VD stage than in VD stage (correspondingly ($48,4\pm 6,2\%$) and ($34,9\pm 6,0\%$)). At the same time, patients with VD included subjects at the age of over 50 years ($21,7\pm 3,6\%$) and according to the stage of disease, in VD II stage there were evidently ($0,05$) more patients of this age group than in VD stage (correspondingly ($28,8\pm 5,6\%$) and ($14,3\pm 4,4\%$)).

Clinical study of papillary-marginal-alveolar indices according to the VD severity stage proved that the groups differed by frequency and evidence of inflammatory process in periodontal tissues. Thus, VD patients were found to have evidently ($0,05$) more frequent cases of severe gingivitis (common impairment of periodontal tissues; correspondingly, in ($3,9\pm 1,7\%$) in the control group and in ($23,3\pm 3,7\%$) VD patients. It is also necessary to mention that the control group comprised ($83,7\pm 3,3\%$) patients who required medical and preventive measures regarding direct treatment and sanitation of periodontal tissues.

Patients with VD, as compared to the patients of the control group, were found to have evidently ($0,05$) less cases with mouth hygiene index within ($0,7\div 1,6$) un.: patients – ($55,0\pm 4,4\%$) %, control – ($79,1\pm 3,6\%$). In VD stage the proportion of such cases is less than in VD stage. A reverse trend in mouth hygiene indices was found within the interval of its values ($1,7\div 2,5$) un.; thus, in the control group the proportion of these subject comprised ($13,2\pm 3,0\%$) and almost three times as many among the patients with VD

(32,6±4,1)%, which was also determined by VD severity (in VD stage – (28,6±5,7)%, in VD stage – (51,5±6,2)%, $p < 0,05$). Very low (unsatisfactory, 2,6 un.) levels of mouth hygiene were observed ten times as frequent in patients with VD, in comparison with the control group (proportion of patients comprised correspondingly (0,8±0,8)% and (7,8±2,4)%, $p < 0,05$).

Caries intensity analysis was carried out according to CFE index (caries, fillings, extracted teeth) and it showed that patients of the control group and patients with VD did not have differences according to minimal values of this index (< 5); that is, the proportion of subjects with minimal caries intensity was similar among patients of the comparison groups. Caries intensity within the values of CFE index (6÷10) un. was observed evidently more frequent among the subjects of the control group (in the control – (51,9±4,4)%, among patients with VD – (15,5±3,2)%, $p < 0,05$). According to VD stage the proportion of patients with this index scale was evidently higher among patients with VD stage (in stage – in (20,6±5,1)%, in stage – in (10,6±3,8)%, $p < 0,05$).

The proportion of patients with CFE index within (11÷15) un. (in the control – in (31,8±4,1)%, among the patients with VD – in (32,6±4,1)% was determined practically with similar frequency in the comparison groups. It should be noted that in VD stage there were evidently more such patients than in VD stage (correspondingly (41,3±6,2)% and (24,2±5,3)%, $p < 0,05$). The most significant difference according to the proportion of patients with CFE index within (15÷20) un. was observed in the comparison groups. For instance, (11,6±2,8)% of the examined subjects in the control group were found to have such index values, but there were practically four times as many cases of CFE index within 15-20 un. among VD patients (correspondingly (11,6±2,8)% and (34,9±4,2)%, $p < 0,05$); at that, evident differences in caries intensity were detected according to VD stage (in VD stage – (27,0±5,6)%, in VD stage – (42,4±6,1)%, $p < 0,05$). Distribution according to the proportion of subjects with CFE index over 20 un. is even more illustrative; such patients were diagnosed seven times more frequently among patients with VD (in comparison with the control) and, according to the stage of VD, their number prevailed in VD stage (correspondingly (9,5±3,7)% and (21,2±5,0)%, $p < 0,05$).

It was found that only in (65,9±4,2)% patients of the control group of evidently less part (26,4±3,9)% of patients with VD the duration of vacuum test up to the formation of gingival hematoma corresponded to referential values (exceeded 60 s), at that: there were twice as less of such patients among patients with VD stage than in VD stage (correspondingly (18,2±4,7)% and (34,9±6,0)%, $p < 0,05$), which renders it possible to employ this criterion as a differentiated diagnostic one in the system of comprehensive diagnostic of VD stage.

Simplified Oral Hygiene Index (CPITN) analysis according to the group of comparison determined that (31,0±4,1)% of patients with VD (VD – (20,6±5,1)%, VD – (40,9±6,1)% of the examined subjects) and (1,6±1,1)% of control group subjects, $p < 0,05$ require comprehensive therapy (including prosthodontic treatment). (35,7±4,2)% of patients with VD and (36,4±4,2)% of control group subjects require comprehensive therapy with open or closed curettage.