The effectiveness of enteral therapeutic measures in treatment of patients with AIO from the main group shows a significant reduction in the number of postoperative (primarily specific for this disease) complications and mortality.

So, postoperative complications were observed in 8 (12.7 %) patients in the study group. The mortality rate was — 3.2 % (2 patients died).

Conclusion

The complete set of traditional therapeutic interventions, with intra- and postoperative BD, IL and enterosorption is an important step in breaking the chain of pathogenetic IFS patients AIO. It contributes not only to the prevention of the IFS, and reduction of endogenous intoxication, restoration of bowel function, as well as create conditions for the early activation of patients and reimbursement of energy costs and the need for plastic materials of the body naturally — enteral route. Timely and adequate conduct of enteral treatment measures: intra- and postoperative BD, IL, and enterosorption, represents an important stage of complex treatment of patients with AIO (especially when complicated with peritonitis) and prevention of IFS, reduces postoperative complications from 33.9 % to 12.7 % and mortality from 7.1 % to 3.2 %.

References:


Assessment of the quality of life of patients with age-related macular degeneration

Abstract: This article is dedicated to the study of the quality of life of patients with the help of an adapted questionnaire VFQ-25 in Uzbek language and assessment of complex treatment of early and late manifestations of age-related macular degeneration.

Keywords: age-related macular degeneration, anti-VEGF therapy, medotilin, quality of life, questionnaire VFQ-25.

Relevance. Over the last years, there has been a significant growth of interest in the notion «quality of life» (QL) by the representatives of various spheres of medicine, including ophthalmologists, and an increase in the number of publications on this problem [1, 263; 2, 26–29]. A special importance is given to the study of the QL of patients with age-related macular degeneration (AMD) in Europe and the USA. A steady growth of the number of AMD patients in the world, slow progressive course of disease leading to partial sight and blindness in people over 55 years old certify about medical-social importance of this problem [2, 26–29; 3, 199–201].
The quality of life is an integral indicator of physical, psychological and social state of a patient based on their own sensations [6, 323–334]. To study the QL, a survey among the patients is conducted with the help of general and specialized questionnaires. The QL assessment allows differentially determining the impact of the disease and treatment on the state of the patient taking into consideration factors related and non-related to the disease [7, 2878–2884; 8, 3354–3359]. With the help of the questionnaires, one can assess not only the sensations of the patient with regard to different aspects of everyday life, but also the results of conducted treatment. The questionnaires intended for the patients with eye diseases are used simultaneously with one of the common methods of QL assessment because a universal ophthalmological questionnaire hasn’t been created yet. The NEI–VFQ questionnaire is widely used in ophthalmology.

The NEI–VFQ (National Eye Institute Visual Function Questionnaire) questionnaire was developed in mid 90s of the last century by the scientists of the National Eye Institute in the USA to measure the subjective assessment of visual function by the patient. NEI–VFQ consists of 51 questions, which assess the state according to 13 different indicators. Since the answers to a big number of questions require significant efforts, a shortened variant consisting of 25 questions (VFQ-25) was proposed. Currently, a vast experience of application of the given questionnaire during the study of the patients with AMD, proliferative diabetic retinopathy, retinitis of different etiology, glaucoma, cataract etc. has been accumulated [2, 26–29; 3, 199–201; 9, 718–732]. It has been proved that VFQ-25 is sensitive to the changes of acuity of vision as well as ensures precise assessment of changes of the quality of life through time [1, 263; 2, 26–29; 7, 2878–2884].

It is obvious that the orientation to the local population is required when questionnaires are used in different countries. Since the English version of VFQ-25 cannot be used in local conditions, it is a big obstacle for the implementation of the questionnaire in the ophthalmological practice in our Republic.

**Aim.** To assess the quality of life of patients with age-related macular degeneration with the help of an adapted Uzbek version of VFQ-25 questionnaire taking into account the results of the conducted treatment.

**Materials and methods**

60 patients with different AMD forms were examined. There were 20 patients (40 eyes) with initial presentation of AMD (drusen, migration and defects of the retinal pigment epithelium) and 40 patients (80 eyes) with later presentation (geographic atrophy of fovea (20 patients, 40 eyes) and choroidal neovascularization (20 patients, 40 eyes)). The median age of the examined was 68.4 ± 5.6 years. There were 28 men and 32 women. The trial groups were contrasted according to age and sex. The control group consisted of 20 patients of both groups were prescribed medotilin in the dosage of 4 ml. intramuscularly once a day for 10 days.

Medotilin is a nootropic drug and a cholinomimetic of central mode of action containing an active substance — choline alfoscerate. After administration, choline alfoscerate splits into choline and glycerophosphate. Choline takes part in the synthesis of acetylcholine, which is the main neurotransmitter ensuring the realization of cognitive functions. Glycerophosphate is the predecessor of phosphatidylcholine, one of the main phospholipids of cell membranes and myelin, thus, it improves membranous flexibility [4, 151], receptor function and synaptic transmission; activates the structures of reticular formation of the brain. Moreover, choline alfoscerate improves mood, contributes to elimination of emotional instability, irritability and apathy. It possesses clear nootropic, neuro-protective effect, improves receptor function and synaptic transmission, cerebral blood flow, enhances metabolic processes in the CNS. The efficiency of choline alfoscerate was proved in several big trials. Open multi-center clinical study by G. Barbagallo and co-authors [5, 253–269], which included 2044 patients, showed significant improvement of cognitive functions in 71% of patients after a stroke. The indications for medotilin do not specify the possibility of its use in ophthalmological practice. Nevertheless, the bioethics committee of the Republic of Uzbekistan (order № 6 as of 25.08.2012) approved the conduct of a clinical trial of medotilin on a limited cohort of patients with degenerative and dystrophic eye diseases.

Apart from general ophthalmological examinations, all patients underwent additional QL research on the basis of the adapted Uzbek variant of VFQ-25. As it can be seen in the name, VFQ-25 questionnaire includes 25 questions divided into 12 main sections: general state of health, general assessment of sight, eye pain, visual function of close activity, visual function of distance activity, social functioning, psychical health, role difficulties, dependence on physical assistance, driving, color vision, peripheral vision. All questions of VFQ-25 in the interview format required 10 minutes, at average. Likert scale was used for answers. The obtained figures in every scale were from 0 to 100 points and reflected percentage ratio to maximally possible result. The more points in the questionnaire scale one gets, the better the quality of life is. Based on separate results in all sections, except for general state of health, a total indicator of the test corresponding to the VFQ-25 indicator was calculated. The trials were conducted before and after treatment, after 3 month.

Among co-existent diseases, arterial hypertension prevailed in 50 (83.3 %) patients; obesity was observed in 14 (23.3 %) patients; diabetes was detected in 5 (8.3 %) patients; 6 (10 %) patients suffered from myocardial infarction; 4 (6.7 %) patients had strokes in their anamnesis. Among eye pathologies, initial cataract was revealed in 35 % of patients and pseudophakia in 55 % of cases. Thus, lens opacity as a factor reducing eye sight is minimal.

In the group with neovascular AMD, classic choroidal neovascularization was detected in 15 cases; in 12 eyes neovascularization was of occult nature, and of mixed nature in 13 eyes.

**Results and discussion**

The analysis of QL indicators in the control group showed that the points in the scales of VFQ-25 questionnaire fluctuated from 40 to 100, and total indicator was 82.24 ± 0.84. Mainly (75 %), the examined had difficulties in performance of everyday activities during work at close distance, hence, were worried about their eye sight.

In the patients with early manifestations of AMD, the QL scale indicators were decreased in a less degree (61.48 ± 0.84) compared with other researched groups. In 10% of cases, the patients assessed the condition of their eye sight as good, satisfactory in 50 % and bad in 40% of cases. 65% of patients had concerns about the diagnosis and possible deterioration of the eye sight. They mainly...
noted difficulties in sewing, small repairs and decrease in reading activity. However, in this group, the patients had quite an active life style and continued working in 80% of cases.

In the group with neo-vascular AMD, the values of the QL scales were decreased to 45.12 ± 1.41. According to the results of the questionnaire, regardless the initial acuity of sight, all patients characterized the condition of their health as satisfactory (10%) or bad (90%) and were anxious about further forecast (90%). The next part of questions was about limitations in habitual activity of the patients at different distances. During work at close distance with maximal correction (reading, sewing, small repairs), 60% noted significant difficulties; 25% called it quite difficult; 10% had to give up work at close distance, and only 5% of cases shows insignificant difficulties. At medium distance, 40% noted significant difficulties; 30% called the activity quite difficult; 20% had to give up work at medium distance, and only 10% of patients noted insignificant difficulties in the performance of this activity. At far distance (reading of street signs and boards), 55% called this activity quite difficult; 25% noted significant difficulties; 20% of patients noted insignificant difficulties in performing this activity and 5% had to give it up. VFQ-25 allows assessing the degree of participation of the patients in social life (visiting people, cinema, theaters). In this case, the majority of the examined noted some difficulties; however, their participation in social events was not limited. In the final part of the questionnaire, the degree of psychical assistance as a consequence of eye sight problem was determined: 30% sometimes experience dependence; 30% — often; 25% — rarely; 10% are completely independent and 5% constantly depend on help.

In the group with geographic atrophy of fovea, the values of the QL scales were decreased in a greater degree (20.34 ± 0.91). Regardless the initial acuity of sight, 95% of patients characterized their sight as very bad and as bad in 5% of cases. All patients were anxious about their sight; 40% informed about moderate, dull pain around eyes; possibly, it had something to do with chronic ocular ischemic syndrome. During the work at close distance, 65% of patients stopped work because of eye sight; 35% of patients noted extreme difficulties. During the work at medium and far distance, 15% of patients called this activity quite difficult; 35% noted significant difficulties and 50% had to give up work that required this kind of activity. 20% constantly needed the help of others; 55% — often, and 25% never had dependence. Assessing the results of the questionnaire, it becomes obvious that low acuity of sight leads to low indicators of the quality of life.

A comparative analysis of monitoring of the QL indicator and condition of sight before and after treatment in AMD patients is presented in Tables 1, 2, 3.

The data in Table 1 shows that the median value of the total QL indicator in patients with initial manifestation of AMD after treatment accounted for 67.09 ± 0.75 (p < 0.01). Almost all patients noted mood enhancement, subjective improvement of acuity of sight and clarity of what they see as well as increase in physical activity. By the end of the 3rd months of observation, they assessed their state as good in 45% of cases, satisfactory in 45% of cases and excellent in 10% of cases. The number of patients with anxiety with regard to further forecast of sight reduced to 15% compared with 65% before treatment. In the section «difficulties in performing everyday activities» related to the ability to see closely and far, the median value of the total score was 62.38 ± 1.59 (p > 0.05) compared with 56.63 ± 1.76 before treatment. Apparently, it is determined by the improvement of acuity of sight and light sensitivity after treatment.

### Table 1. – QL indicators in patients with early manifestation of AMD

<table>
<thead>
<tr>
<th>Sections of the questionnaire</th>
<th>Median value in points (M ± m)</th>
<th>Before treatment</th>
<th>After treatment</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Condition of sight and health in general</td>
<td>65.69 ± 2.38</td>
<td>75.44 ± 2.05**</td>
<td>69.44 ± 1.85</td>
<td></td>
</tr>
<tr>
<td>2 Difficulties in performing everyday activities</td>
<td>56.63 ± 1.76</td>
<td>62.38 ± 1.59*</td>
<td>84.88 ± 2.04</td>
<td></td>
</tr>
<tr>
<td>3 Consequences of sight problems</td>
<td>65.0 ± 1.33</td>
<td>68.61 ± 1.15*</td>
<td>85.0 ± 1.19</td>
<td></td>
</tr>
<tr>
<td>Total score</td>
<td>61.48 ± 0.84*</td>
<td>67.09 ± 0.75**</td>
<td>82.24 ± 0.84</td>
<td></td>
</tr>
</tbody>
</table>

Note: * — differences are significant compared with the period before treatment (p < 0.05); ** — differences are significant compared with the period before treatment (p < 0.01); # — differences are significant compared with the data of the control group (p < 0.05).

The analysis of monitoring of the QL indicator in patients with neo-vascular AMD before and after treatment (Table 2) also revealed a significant improvement in all sections of the questionnaire. Total median value of the QL indicator was 53.30 ± 1.18 (p > 0.01). The condition of sight was assessed as satisfactory by 20% of patients compared with 10% before treatment; also, the number of patients assessing their sight as very bad reduced to 40% compared with 55% before treatment. The number of patients with anxiety with regard to their sight reduced to 35%. After treatment, the participation in social life improved to different extent in all patients at the expense of improvement of the acuity of sight and clearness of what they see, due to which the median score of the questionnaire for the first and second sections reached 45.25 ± 3.78 and 52.88 ± 2.52 (p < 0.05), respectively. It should be noted that the number of patients who need the help of others due to their sight problems reduced to 20%, whereas this indicator was 35% before treatment. The feeling of dissatisfaction and irritability of the patients was shown in a lesser degree after treatment. In this respect, the median value of the QL indicator for the third section also increased to 57.36 ± 1.69 (p > 0.05).

### Table 2. – QL indicators in patients with neo-vascular AMD

<table>
<thead>
<tr>
<th>Sections of the questionnaire</th>
<th>Median value in points (M ± m)</th>
<th>Before treatment</th>
<th>After treatment</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Condition of sight and health in general</td>
<td>33.38 ± 4.49#</td>
<td>45.25 ± 3.78*</td>
<td>69.44 ± 1.85</td>
<td></td>
</tr>
<tr>
<td>2 Difficulties in performing everyday activities</td>
<td>44.5 ± 3.01#</td>
<td>52.88 ± 2.52*</td>
<td>84.88 ± 2.04</td>
<td></td>
</tr>
<tr>
<td>3 Consequences of sight problems</td>
<td>51.25 ± 2.0#</td>
<td>57.36 ± 1.69*</td>
<td>85.0 ± 1.19</td>
<td></td>
</tr>
<tr>
<td>Total score</td>
<td>45.21 ± 1.41#</td>
<td>53.30 ± 1.18**</td>
<td>82.24 ± 0.84</td>
<td></td>
</tr>
</tbody>
</table>

Note: * — differences are significant compared with the period before treatment (p < 0.05); ** — differences are significant compared with the period before treatment (p < 0.01); # — differences are significant compared with the data of the control group (p < 0.05).

In the group with geographic atrophy of fovea, the patients didn’t show significant differences in value of the QL score for different sections of the questionnaire after treatment, but there were
significantly high values in the total indicator compared with the period before treatment. Despite the absence of statistical significance of the indicators of visometry in this group, the subjective improvement of the acuity of sight according to the questionnaire data should be explained by their positive psychological state of mind due to medotilin intake. Unfavorable forecast of the deterioration of sight in the later stage of AMD is often accompanied by the changes in psychological state of the patients. At this stage, they always start being concerned about quality of life experiencing fear, anxiety and frustration developing into depression. In our opinion, even a short intake of medotilin reduces depression in patients and improves their general well-being.

We used the criterion of acuity of sight and light sensitivity as the main component of the assessment of state and function of an eye, because these indicators have direct impact on the patient’s QL. Assessing the results of the treatment for 3 months, it should be noted that in the group of patients with early manifestations of AMD, the median indicator of acuity of sight with correction increased by 1.4 times and light sensitivity by 1.3 times compared with the initial level; in the group of patients with neo-vascular AMD, these indicators increased by 2 (p > 0.05) and 1.3 times (p > 0.05), respectively, after treatment. The patients with geographic atrophy of fovea showed insignificant increase of functional indicators and changes were statistically insignificant (Table 4).

**Table 3. – QL indicators in patients with geographic atrophy of fovea**

<table>
<thead>
<tr>
<th>Sections of the questionnaire</th>
<th>Median value in points (M ± m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before treatment</td>
<td>After treatment</td>
</tr>
<tr>
<td>1 Condition of sight and health in general</td>
<td>29.94 ± 2.72#</td>
</tr>
<tr>
<td>2 Difficulties in performing everyday activities</td>
<td>13.25 ± 1.68#</td>
</tr>
<tr>
<td>3 Consequences of sight problems</td>
<td>26.25 ± 1.25#</td>
</tr>
<tr>
<td><strong>Total score</strong></td>
<td>21.24 ± 0.89#</td>
</tr>
</tbody>
</table>

Note: * — differences are significant compared with the period before treatment (p < 0.05); ** — differences are significant compared with the period before treatment (p < 0.01); # — differences are significant compared with the data of the control group (p < 0.05).

**Table 4. – Dynamics of indicators of acuity of sight and light sensitivity in patients with AMD**

<table>
<thead>
<tr>
<th>Groups of research</th>
<th>Indicators of acuity of sight</th>
<th>Indicators of light sensitivity (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before treatment</td>
<td>After treatment</td>
</tr>
<tr>
<td>AMD with early manifestations</td>
<td>0.62 ± 0.03</td>
<td>0.71 ± 0.03*</td>
</tr>
<tr>
<td>Neo-vascular AMD</td>
<td>0.28 ± 0.04</td>
<td>0.48 ± 0.03*</td>
</tr>
<tr>
<td>Geographic atrophy of fovea</td>
<td>0.15 ± 0.03</td>
<td>0.19 ± 0.03</td>
</tr>
</tbody>
</table>

Note: * — differences are significant compared with the period before treatment (p < 0.05).

**Correlation analysis shown in Fig. 1 revealed the presence of a strong direct (positive) relation between the QL indicators and acuity of sight of patients with AMD (R² = 0.9167).**

**Discussing obtained data, it should be emphasized that the presented results certify demonstratively about the reduction of medical-psychological status of the patient in the case of expressed degenerative changes of macular zone of the retina. Undoubtedly, the presented data can be the subject of many discussions from the point of possible multi-factor impact on the psychological status of the patient. At the same time, expressed, statistically significant differences of the assessed indicators in the researched groups compared with the control group ensure, from our point of view, required correctness and significance of the obtained results. It is especially important to note that, according to the results**
of individual interviews, the complaints typical for AMD appeared during the work at close distance (96% patients) and professional activity (68%), which is explained by patho-morphological changes of central sections of the retina typical for this pathology. In the majority of cases, the indicators of social adaptation (increased irritability, emotional lability and desire to stay at home) were reduced significantly. Realization of own dependence on others, a feeling of helplessness, according to the assessment of the patients, reduces QL significantly, and the analysis of this indicator allows detecting the way how the disease and its treatment influence all components of normal existence of the man. From our point of view, the expressiveness of complaints typical for AMD consistently reflects significant deterioration of the patient’s medical-psychological status and QL in the whole.

Conclusions

1. Reduction of the QL of the patients with AMD revealed by us is in direct dependence on the indicators of visual functions.
2. Use of medotilin in a complex AMD treatment allows stabilizing socio-psychical health of the patients with significant increase of their QL in combination with significant improvement of clinical-functional indicators of the eye.
3. It is reasonable to include medotilin in a complex treatment of patients with initial and later manifestations of AMD in order to increase their QL.
4. Conducted statistical analysis showed that VFQ-25 questionnaire (in Uzbek language) is valid and reliable, and can be recommended for the purpose of clinical application in ophthalmological practice in the Republic of Uzbekistan to assess the QL of patients with AMD.

References:

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Analysis of contributing factors and prevent the spread of drug abuse among female contingent population

Abstract: The study of the socio-demographic, clinical and biological characteristics of the 82 drug-dependent women in Tashkent, registered municipal narcological dispensary for early 2015. The study identified factors that promote and prevent the spread of drug addiction among the female segment of the population.

Keywords: addiction, female contingent of the population, socio-demographic factors.

The urgency of the problem. Considering drug addiction as a disease of complex etiology, with the participation of numerous social, psychological, and biological factors, the researchers emphasize the existence of gender differences in the degree of their influence [5]. Among the causes of drug addiction dominant women called life and family problems [4; 6], the influence of microsocial groups [2], personal characteristics, such as the desire for risk and thrill of [3]. Among the biological factors emphasize the role of genetic predisposition [1], as well as purchased on premorbid stage organic disease of the central nervous system.

Compared with other countries, in the Republic of Uzbekistan the share of women among the total number of drug users has always