induction of 2'5'-oligosynthetase which degrades viral RNA. Both mechanisms omit healthy cells in their inhibitory actions. Furthermore, antiviral effect is achieved also by the increased expression of histocompatibility antigens and stimulation of the immune response. Interferons are now produced in the recombinant form, what enhanced their broader use. They are offered for treatment of adult patients and children with a chronic hepatitis. However, IFN- $\alpha$  is most widely used for the treatment of chronic viral hepatitis B and C.

We report results of treatment of 184 children, mostly with chronic aggressive type B hepatitis, HBsAg and HBeAg positive. Treatment consisted of 3 weekly, doses of 3 MU recombinant IFN-a, mean: 4.51 MU/m2 for 16 weeks (ca. 3 months). In the evaluation one year post IFN: 12% of children proved to be complete responders [HBsAg(-), eAg(-)], 53% of children partial responders [HBsAg(+), but eAg(-)], and 35% - nonresponders [HBsAg(+), eAg(+)]. The treatment was quite well tolerated; but such side effects as fever, loss of appetite, headaches, muscle and joint aches were noted in over 10% of children. The reference (unrelated) group consisted of 77 children (53 boys and 24 girls). During the same period, 2.6% of them became complete responders, 22.1% - partial responders and 75.3% remained nonresponders.

Moreover, in part of the treated children (n-23) we have determined pretreatment prognostic factors, by measuring HBeAg, HBsAg and HBV-DNA quantitatively, in addition to ALT and clinical chemistry. We have found differences between arithmetic means of these parameters, but because of big range of results, the statistically significant differences were obtained only in relation to age of children and HBeAg concentrations. We have shown, that low initial level of HBeAg, HBsAg, low level of HBV-DNA, as well as relatively high ALT value, together with rather low age of children were connected with the good prognosis for response. With regard to chronic hepatitis C - female gender, lower level of HVC-RNA, and lower age, but elevated baseline ALT were associated with good prognosis for response to INF- $\alpha$  therapy.

However, monotherapy with INF-α would give sustained response (persistent normalization of transaminases and negative HCV-RNA) in only ca. 20% of patients after 2 years of follow-

up. In adults, interferon combined with ribavirin may raise the effectiveness about 2 times. Our current project in children concentrates on the inhibition of metabolites of arachidonic acid formed during the INF therapy. These metabolites, including prostaglandins (PGE2) and tromboxanes could be suppressed by inhibiting cycloxygenase with indomethacin.

The article is admitted to the International Scientific Conference "Priorities of Science and Technology Development: Educational Technologies "; Greece (Athens – Argolida - Delphi – Meteora – Athens), 2007, March 23-30; came to the editorial office on 13.03.07

## MAJOR FACTORS, INFLUENCING QUALITY OF LIFE IN RUSSIAN PATIENTS WITH DIABETIC FOOT SYNDROME

Pavlov Y. I., Kholopov A.A., Anfimova I.A. Chelyabinsk State Medical Academy Chelyabinsk, Russia

Quality of life (QoL) as one of the basic criteria of treatment efficiency, received worldwide circulation in last years. Many authors (Dedov I., 1998; Ashford R., 2000) mark, that the purpose of therapy of chronic diseases is not in treatment itself, but in improvement of patient's life as a result of severity decreasing or restriction of illness progressing.

The augmentation of life expectancy in patients with diabetes results in annual increase of late complications, one of which is the diabetic foot syndrome (DFS) – the condition, combining neuropathic and vascular disorders of the lower extremities. It conducts to occurrence of foot ulcers and other severe complications, such as diabetic gangrene. DFS is recorded in 30-80 % patients with diabetes (Reiber G., 2001).

However, there is a paucity of research into the specific effects of foot ulceration on the QoL of patients (Ashford R., 2000). Further, although studies have reported psychosocial concerns experienced by patients with diabetes and the complications of lower extremity ulcers, there is little qualitative research which outlines patients' perspectives of living with foot ulceration.

The purpose of our work was researching the major factors influencing quality of life in patients with DFS. Research was carried out on the base of Chelyabinsk Diabetes Center, which contains podiatry department. 145 patients with diabetes type II in the age from 40 till 70 years were included in survey. According to the program we have generated two groups: study group of 100 patients with of neuropathic DFS (DFS group) and control group of 45 persons with the risk of purulent DFS complications.

Measuring of OoL in patients with DFS is not a simple task. General measures such as the SF-36 are extremely useful for comparisons of function across diseases, but they do not capture specific problems posed by diabetic peripheral neuropathy and are less useful for framing clinical interventions (Vileikyte L et al., 2003). So the study was carried out with MOS SF-36 modified questionnaire which contained the set of special questions for the given pathology. To a standard SF-36 questionnaire we added 13 items, concerning specific reaction of the patient on problems, connected with DFS. The questionnaire has been tested in earlier pilot research.

Measurement of QoL parameters was performed at outpatient reception in Diabetes Center and in surgical infections department of Chelyabinsk City Hospital.

According to SF-36, in DFS group the majority of QoL parameters appeared significantly lower than in control group. Estimation of physical fitness (PH) was 31,8 points versus 42,5 (decrease on 25%, p<0.05), role physical (RP) - 28,7 versus 41.2 (decrease on 30%, p<0.05), bodily pain (BP) – 30,8 versus 44,5 (decrease on 31%, p<0.05), general health (GH) - 33,3 versus 35,8 (decrease on 8%, p>0.05), vitality (VT) - 38,5 versus 46,9 (decrease on 18%, p >0.05), social functioning (SF) - 39,5 versus 44,6 (decrease on 12%, p >0.05), role emotional activity (RE) -32.3 versus 40,5 (decrease on 20%, p<0.05), mental health (MH) - 34,2 versus 40,4 (decrease on 15%, p >0.05). The same tendency goes to such integral scales as physical component summary (PCS) – 31,2 versus 42,3 (decrease on 26%, p<0.05) and mental component summary (MCS) - 38.0 versus 42,6 (decrease on 11%, p>0.05).

In that way, values of all QoL parameters, except for GH, VT and SF are significantly lower

(p<0.05) in DFS group. The greatest problems in patients with DFS were associated with bodily pain and restriction physical activity

According to WHO recommendations, criteria of QoL should be studied in five directions - physical, psychological, adaptive, social and environmental factors. In each specified sphere we have revealed the major factors influencing on QoL and their comparative weight in researched groups. Due to selfestimation of patients in the physical sphere greatest weight has such factor, as foot care skills - 19% in DFS group versus 10% in control group. In the psychological sphere of life greatest weight has such factor, as mode of life changing – 19% versus 35%, in social and adaptive spheres of life the main factor is welfare - 43% versus 20%, and among the environmental factors patients value the support from their family and community - 33% in DFS group versus 50% in control group.

From the submitted material follows, that the level of knowledge and possession of a foot care skills is considered more important in group of DFS complications. At the same time patients with DFS suffer from restrictions of a habitual way of life more and attach to this the greater value. We have noted, that restriction of wellbeing in group of risk is more expressed, than at patients with DFS. The most authentic explanation is presence at patients with DFS not only moral, but also material support from family and society. Also research has shown, that patients with DFS are better adapted to a changed condition, both in psychological, and in the social plan. This implies, that DFS patients appreciate support of the family, community and the state, they own more effective forms of interaction with any structures, whence can receive the help.

Thus, we count, that QoL estimation should be included into standards of help to the patients with DFS and may be in the competence of specialized nurses.

The article is admitted to the III All-Russia Congress "Practicing Physician",", Sochi, 10-12 April 2007r.; came to the editorial office on 03.03.07