

## QUALITY OF LIFE IN TYPE-I DIABETES MELLITUS PATIENTS WITH DIABETIC VEGETOPATHY

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"Quality of life" represents one of the most important parameters of individual coping the problems of social adaptation in case of persisting manifestations of the basic disease. A total of 46 type I diabetes mellitus patients with diabetic vegetopathy were examined. Diagnosis was anamnesticly and instrumentally verified. Patients' quality of life was investigated using MMPI in a Kincannon's variant, Zung's depression scale, and Spitzer's quality-of-life scale. The following code was established: schizoidia - psychasthenia - hypochondria - paranoia. According to the depression scale, there was a slight depression in 51,7 per cent of the patients, a moderate - in 36,5 per cent but a severe - in 13,7 per cent. According to the quality-of-life scale, the parameter of self-confidence was characterized as poor in 17,3 per cent of the cases, moderately good - in 31 per cent but good - in 51,7 per cent. Social adaptation was poor in 6,8 per cent of the patients, moderately good - in 31 per cent but good - in 62,2 per cent. The correlation between the expression of vegetopathy, the severity of diabetes mellitus, the self-confidence, social adaptation and "social inertia" was discussed.

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**Key-words:** Diabetes mellitus, quality of life, diabetic vegetopathy, depression, socialization

In modern society, quality of life issues face all the social layers and communities (4). These problems are particularly sharpened when patients suffering from chronic and disability-causing diseases are concerned. Diabetes mellitus is namely one of these socially significant diseases (5).

The advances of medicine and related fundamental sciences resulted in the discovery of many elements in the pathogenesis of diabetes mellitus. Industrial progress enabled the creation of a series of medicaments and foods required by the diabetes mellitus patient (3). Thus, the prognosis of these patients could essentially be improved not only *ad vitam*, but also *ad sanationem*. Because of the considerable prolongation of the surveillance of these patients after the introduction of the contempo-

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rary therapeutic methods, the question about the accompanying complications and their role concerning patient's quality of life, i. e., patient's social functioning, emerged on the forefront (6). This parameter represents also one of the most important criteria for therapeutic effectiveness. Taking this circumstance into consideration we aimed at investigating the quality of life in a group of patients suffering from type I diabetes mellitus.

## MATERIAL AND METHODS

The trial covered a total of 46 patients with type I diabetes mellitus. Of them, 20 were males at a mean age of 55 years and 26 were females at a mean age of 57,8 years. The duration of the diabetes mellitus was between 10 and 21 years. In all the patients, a diabetic vegetopathy was diagnosed.

The following methods were applied: MMPI in an adapted K. Kincannon's variant (2); W. Zung's depression scale - in an adapted variant (2), and W. B. Spitzer's "Quality-of-Life" scale - in an adapted variant (9), too. Besides, structurized interviewing (list of symptoms) searching for the expressiveness of the clinical manifestations of the diabetic vegetopathy was carried out.

## RESULTS AND DISCUSSION

The application of MMPI revealed a code of 8-7-1-6 (schizoidia -

psychasthenia - hypochondria - paranoia). The corresponding values of the scales were the following: scale No 8 - 81 T-values; scale No 7 - 77 T-values; scale No 1 - 72 T-values, and scale No 6 - 68 T-values. This established code pattern characterized the patients under examination as individuals in whom introvertness, non-balancedness, hypochondric attitude, and absent intrinsic equilibrium prevailed. There was also reticence, feeling of anxiety and certain disorder of social adaptation although the everyday duties were mastered well. The manifestation of the peculiarities described above varied in single cases. The clinical findings were of one type when the groups of males and females were concerned. The hypochondric-depressive attitude was more typical of the males while a certain psychasthenia prevailed in the females.

The results obtained through the examination using the depression scale are demonstrated on Table 1.

It is obvious that the depressiveness is approximately equally distributed among the patients from the two groups. The differences are statistically insignificant ( $p > 0,05$ ).

The results from the investigation through the quality-of-life scale are indicated on Table 2.

These data show that the values of these two parameters are very similar in both male and female patients. It means that the quality of life approxi-

**Table 1.** *Depressiveness in patients with diabetic vegetopathy*

Degree of Depression	Males (n=20)		Females (n=26)		Total (n=46)	
	n	%	n	%	n	%
slight	12	60	15	57,6	27	58,7
moderate	6	30	7	27,0	13	28,3
severe	2	10	4	15,4	6	13,0

**Table 2.** *Parameters of the quality of life in patients with diabetic vegetopathy*

Expression	Self-confidence						Social adaptation					
	Males		Females		Total		Males		Females		Total	
	(n=20)		(n=26)		(n=46)		(n=20)		(n=26)		(n=46)	
	n	%	n	%	n	%	n	%	n	%	n	%
poor	3	15	4	15,4	7	15,2	6	30	1	3,9	7	15,2
moderately good	8	40	12	46,1	20	43,5	6	30	15	57,6	21	45,6
good	9	45	10	38,5	19	41,3	8	40	10	38,5	18	39,2

mately equal for these groups concerning the abovementioned indicators. As a whole the values of the parameter of "self-confidence" correlate well with those of the parameter of "social adaptation".

The analysis of the questions in this scale reveals that the disturbed "quality-of-life" patterns are due to the insulin treatment in 18 per cent of the patients as it "depresses and restricts" the examined individuals. Paresthesiae in the extremities are observed in 100 per cent but visual disorders - in 36 per cent of the patients studied.

The analysis of the data from the structured interviewing establishes that 100 per cent of the patients present with the phenomenon of paresthesiae in the extremities while 25 per cent of them present with heart palpitations. Concerning the rest symptoms, it has to be noted that orthostatic manifestations are found out in 76 per cent of the males and in 80 per cent of the females while obstipation/diarrhoea - in 12 per cent and 60 per cent, respectively. The remaining symptoms are occasionally observed and at a slight degree of expression only.

The psychological picture characterizes the patients under study as subjects in whom introvertness, non-balancedness, hypochondric attitude, and absent intrinsic equilibrium prevail (7). Besides, there is a reticence, feeling of anxiety and certain disturbance in the social adaptation and social integration although the patients master their common duties well, indeed. Similar personality's peculiarities have been described in patients suffering from chronic and chronically relapsing diseases (1).

The results obtained demonstrate that the quality of life of these patients is destroyed which is in agreement with some other similar investigations (4,8). It is an interesting fact that the disease of diabetes mellitus itself through the restrictions necessitated by the treatment consisting in everyday

insulin applications and through the requirements of specific nutrition, "depresses" 18 per cent of the patients under study. The manifestations of diabetic vegetopathy and especially its affections in the extremities not only hamper patients' motor activity but also worsen their mood and self-confidence. The orthostatic manifestations and extrasystoliae influence unfavourably, although to a less extent, on the self-confidence of these patients, too (in 68-80 per cent and in 25 per cent of the cases, respectively).

It could be concluded that the diabetic vegetopathy disturbs the quality of life and social integration in diabetes mellitus patients to a greater extent than the diabetes mellitus itself as a life event of a high stressogenic value and through the restrictions imposed by it.

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## Качество на живот у болни със захарен диабет тип 1 и диабетна вегетопатия

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**Резюме:** Показателят "качество на живот" се явява един от най-важните показатели за личностовото справяне с проблемите на социалната адаптация при персистиращите прояви на основното заболяване. Изследвани са 46 болни със захарен диабет тип 1 и диабетна вегетопатия, верифицирани анамнестично и инструментално. Качеството на живот е изследвано посредством: 1. ММРІ - вариант на Кинсанау; 2. депресивна скала на Зунк и 3. скала за качеството на живот на Спитсер. Установява се код: шизоидия - психастения - хипохондрия - параноя. По депресивната скала с лека депресия са 51,7 % от болните, с умерена - 36, 5%, а с тежка - 13,7 %. Съгласно скалата "качество на живот", показателят самочувствие се характеризира като лошо при 17,3 % от болните, средно добро - при 31 % и добро - при 51,7 %. Социалната адаптация при 6,8 % от болните - лоша, при 31 % - средна и при 62,2 % - добра. Обсъжда се корелацията между изразеността на вегетопатията, тежестта на захарния диабет, самочувствието, социалната адаптация и "социалната инерция".