

Quality of life in patients with and without diabetic foot ulcers assessed by NeuroQol.

Komelyagina E.U., Antsiferov M.B.* , Uvarova O.M.** *- Moscow State Institution of Public Health “Endocrinological Dispensary” ** - High School of Economical Research; Moscow, Russia.

The aim of this study was to compare the Quality of life (QL) of severe neuropathy diabetic patients with and without foot ulcers and to reveal predictors of poor QL in both groups. **Materials.** 312 diabetic patients (41 (13%) type 1) with mean age 60.3 ± 10.5 years and known diabetes duration as for 13.3 ± 9.1 years took part in this study. All patients had the signs of severe peripheral neuropathy: VPT= 35.5 ± 14.7 V and NDS = 11.6 ± 5.5 scores (M \pm SD). 172 (55%) patients were without diabetic foot ulcers -group 1 (G1), 139 patients (45%) had current diabetic foot ulceration-group 2 (G2). Patients with the signs of leg ischemia (ankle/brachial index ≤ 0.8 , history of vascular surgery) were not included into the study. **Methods.** Neuropathy- and foot ulcer-specific quality of life instrument- NeuroQol - was used to measure the physical and mental components of quality of life. Two principal components factor analysis of NeuroQol (one for physical symptoms and another for mental ones) with varimax rotation were performed separately for G1 and G 2. The identification of QL predictors for both groups was made using multiple lineal regression analysis. **Results.** There was no difference between groups in overall QL ($p=0.7$). The resulting factors of psychometric analyses were similar in both groups: 3 factors for physical symptoms ((1) pain; (2) numbness or reduced feeling; (3) weakness and instability) and 5 factors for mental status ((1) disruption of daily activity and relationship; (2) foot problems embarrass me; (3) emotional burden; (4) affected self-confidence; (5) unfairness). The multiple regression analysis revealed different predictors of poor QL in G1 and G2. In group of patients without foot ulcers only consequences of emotional burden were significantly associated with poor QL. In group of patients with foot ulcers such factors as “disruption of daily activity and relationship”, “emotional burden” and “unfairness” were predictors of poor QL. There were no factors of physical symptoms affecting the QL of patients in both groups. **Conclusion.** This data represents the first experience of disease-specific instrument assessing quality of life in patients with severe neuropathy. According to the results obtained current foot ulcers have no influence on overall quality of life in patients with severe neuropathy. The impact of severe neuropathy with or without foot ulceration on quality of life does not depend on physical symptoms of neuropathy. Only restricted social life and psychological characteristics of the patients affected their quality of life. Clinicians should turn the behavioral interventions in accordance with the mental peculiarities of this kind of patients.