13. Sumary

An impact of reduction of vascular lesions of face skin of telangiectasia type on quality of life

The contemporary term of quality of life has become more significant and popular. A dynamic increase of an interest in this issue in medical and social sciences is noticeable as well. Until recently, the term referred to as improvement of quality of life has mainly pertained to persons suffering from chronic diseases. At present, the situation changes and successively includes new target groups and issues. So far, quality of life of people with vascular lesions of skin of telangiectasia type has been examined to a small extent. Maybe due to the fact that the problem "at first glance" seemed to be small or insignificant. There is also a shortage of standardized research tools for accurate and reliable assessment and scientific information on such examinations. However, this situation changes owing to the demand for such research projects. This takes place since external appearance has currently become one of the most important criteria on assessment of a human both by ourselves and by the environs, reflecting new expectations and pursuit of better quality of life in its each and every aspect. Non-acceptance of own appearance results in large discomfort on the part of a lot of people and may lead to disorders in general functioning or mental disorders. The scale and significance of the problem itself change too. It commences to be common and suggests, over a quite short period of time, a civilization problem from the scientific and practical perspectives. Therefore, also the need for conducting this type of research and its significance evolve. All these elements support higher concentration on and greater attention to aesthetic problems and, concretely, their reduction. Whereas, the improvement of appearance itself may be a decisive factor contributing to improvement of quality of life of persons concerned in the holistic point of view.

Purpose

The major objective of the work was an assessment of the impact of reduction of vascular lesions of face skin of telangiectasia type on quality of life.

Material and method

The research covered 131 people above 18 years of age among whom telangiectasias located on face skin were diagnosed based on an interview and physical examination. They were persons who due to aesthetic problems and discomfort voluntarily applied to undergo procedures for reduction of these lesions. The examinations were conducted in 2017–2018. Laser procedures were carried out in a laser treatment room which had been determined for this purpose at the stage of designing the examinations.

The research project received a favourable opinion by the Bioethics Committee at the University of Rzeszów on 6 April 2017; resolution No 15/4/2017.

Methodology was worked out based on EBP, technical data of the manufacturer of the devices and own experience. Standardized questionnaires were used for assessment of quality of life upon consent of authors (licence) i.e. DLQI and WHOQOL-BREF. Own research instruments were also devised for the needs of the project: exacerbation scale of symptoms of telangiectasias (description with location of lesions according to face aesthetic units), assessment scale of results and effects of the therapy, general questionnaire, own project based questionnaire pertaining to purposefulness of removing lesions of telangiectasia type on the face and assessment scale of skin phototype according to Fitzpatrick. The researcher has appropriate education, professional practice, has undergone relevant trainings and obtained technical service certificates for the devices used in the project.

Results

Results of the own research show that due to reduction of vascular lesions of telangiectasia type, quality of life of the majority of patients was improved, which was examined and proven by means of DLQI and WHOQOL-BREF questionnaires before and after the procedures.

Most frequently, 2 procedures (68 persons – 52%) were carried out to achieve the therapeutic effect – such an effect was assessed as good. Whereas, least often 1 procedure (10 persons – 8%) – a very good effect, with a satisfactory effect i.e. reduction of the lesions after 3 procedures – the therapy was conducted for 53 persons i.e. for 40%.

The general results from the DLQI questionnaire were subject to interpretation in line with the standards adopted for this device. It was proven that, before the therapy, most patients felt a moderate influence of skin problems on their lives (59 persons – 45.1%), whereas, after the therapy, an influence of skin problems on their lives was usually small (73 persons – 55.7%)

and with regard to 39 patients (29.8%) – none. The differences in assessment of the impact of skin problems among the patients on their lives in the measurement before and after the procedures were significant in statistical terms (p<0.001).

Apart from the general outcome from the DLQI questionnaire, also results forming six sections were presented: symptoms and feelings, daily activities, leisure time, job and school, personal relationships and treatment. Lack of differences significant in statistical terms was recorded as regards the frequency of answers of the patients to the question whether last week their skin problems made it impossible for them to work or learn. Both in the measurement before the procedures and after the procedures, with regard to the majority of the patients - the answer was negative (p=0.1). Answers given by the patients to the other questions differed significantly in statistical terms, taking account of data before the procedures and after the procedures.

An influence of the lesions of telangiectasia type on the patients' quality of life was by far larger in the measurement conducted before the procedures. The result of the first measurement showed the average of 7.92 points ± 3.94 points in the DLQI questionnaire. In the measurement conducted after the procedures, this impact on quality of life decreased to the average of 2.98 points ± 2.52 points. The recorded change of the general result from the DLQI questionnaire (difference), on average by 5.21 points ± 2.63 points, was significant in statistical terms (p<0.001) and significant in clinical terms. The impact of skin problems on the patients' quality of life was assessed taking account of six categories i.e.: symptoms and feelings, daily activities, leisure time, job and school, personal relationships and treatment. In each category, a larger influence of skin problems on life was recorded in the measurement before the procedures than in the measurement after the procedures. These differences were significant in statistical terms (p<0.001).

There was also conducted an analysis of quality by means of the WHOQOL-BREF questionnaire with reference to each and every aspect having a potential influence on the general quality of life. Results in four domains were obtained based on the scale of quality of life. Quality of life of the examined patients was compared in four domains based on assessments carried out in the measurement before the procedures and after the procedures. Higher results and, ipso facto, better quality of life were obtained by the patients in the measurement after the procedures. These differences were significant in statistical terms. The somatic domain was the weakest one in the analysed material and, before the therapy, it came to 47.9 points ± 8.40, whereas, after the therapy – 50.2 points ± 8.32 points. In the environmental domain, the result obtained before the therapy came to 59.2 points ± 12.9 points,

after the therapy – 63.6 points ± 13.1 points. In the psychological domain, the value before the therapy came to 60.6 points ± 8.67 points, and after the therapy – 65.1 points ± 8.05 points. The social domain was assessed highest, here the best results were obtained and they came to 67.8 points ± 12.3 points and 70.7 points ± 11.9 points, respectively.

In each and every domain, quality of life was improved before the therapy and after the therapy. These differences were significant in statistical terms and they respectively came in the somatic domain to 2.3, in the environmental domain – 4.4, in the psychological domain – 4, whereas in the social domain – 2.9.

Purposefulness of reduction of the lesions of telangiectasia type was assessed and its influence on the respondents' quality of life:

- according to more than a half of the respondents, reduction of telangiectasias had a "very large" influence on:

  improvement of satisfaction with life (50.4%) and improvement of appearance (58.9%)

- according to more than a half of the respondents, reduction of telangiectasias had "a little" influence on:

  performance of daily activities (55.7%), improvement of relationships in family (56.5%), self-esteem (71.7%) and improvement of self-esteem (73.3%).

- according to more than a half of the respondents, reduction of telangiectasias (66.4%) had a positive influence on all the domains (social, physical, mental).

- 84% of the patients expected a considerable influence of reduction of telangiectasias on quality of their lives.

Conclusions

Based on the conducted research, the following conclusions were drawn:

1. Reduction of telangiectasia type lesions of face improved the general quality of life before and after the therapy assessed by means of the WHOQOL-BREF questionnaire, which was particularly significant in the psychological domain.

2. After the procedures including reduction of telangiectasias of face, the values of the averages concerning quality of life decreased in comparison with the period before the procedures assessed by means of the specific DLQI questionnaire, which is evidence of improvement of quality of life in all the assessed categories.

3. The most often indicated reason for purposefulness of reduction of telangiectasias, according to the patients, was the willingness to improve own image and appearance as well as to improve frame of mind, mental discomfort which arose from low self-esteem before the procedures including reduction of the vascular lesions.

4. In the respondents' opinion, reduction of telangiectasias of face has a significant influence on improvement of: frame of mind, satisfaction with life, external appearance through daily activities in their lives. It has a positive influence on social life, personal relationships, family relationships, social relationships - it gives rise to the feeling of self-confidence.

Key words: quality of life, vascular lesions of face, telangiectasias, laser.

Practical implications

The conducted research shall be used by the WHO for scientific and statistical purposes. It may also be used to optimize and work out better treatment procedures, which may contribute to effects and assessment of procedures, tracking of changes taking place during the therapy. It may also serve as an inspiration and a starting point for next research works for other researchers. It is an unused scientific space within the scope of public health providing large research potential taking account of the fact that the scale of the phenomenon intensifies and may point to a "civilization problem" in the future, related to lack of acceptance and self-acceptance in psychological terms.