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EVALUATION OF QUALITY OF LIFE İN THE PATIENTS WITH TELANGIECTASIA AND RETICULAR VEINS

TELENJİEKTAZİ VE RETİKÜLER VARİSLİ HASTALARDA YAŞAM KALİTESİNİN DEĞERLENDİRİLMESİ

Ibrahim UYAR

Tepecik Education and Research Hospital, Department of Cardiovascular Surgery, Izmir

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SUMMARY

Introduction: *Venous insufficiency is a disease that negatively affects the quality of life of people with physical or psychological effects at every stage. To evaluate the quality of life for venous insufficiency, the Epidemiological and Economic Work-Quality of Life / Symptom Scale (VEINES-QoL / Sym scale) in Venous Insufficiency has been developed. In this article, the quality of life results of CEAP stage 1 and 2 patients after transcutaneous radiofrequency treatment were investigated.*

Material and Methods: *Patients, who received transcutaneous radiofrequency treatment for telangiectatic varicose veins in our hospital from May 2019 to January 2020, were retrospectively analyzed. Patients, whose quality of life after treatment was evaluated using the VEINES-QoL / Sym scale, were included in the study. Patients who did not fill out the questionnaire voluntarily or were under the age of 18 years old were excluded from the study.*

Results: *In the study period, 291 patients had been treated for telangiectasia, and 91 patients with CEAP stage 1 and 2 lesions, and answered the VEINES-QOL / Sym scale were included in the study. Almost 2/3 of the patients had reticular varicose veins in addition to telangiectasia. Symptoms were developed at the end of the day in more than half of the patients. In the comparison of the symptoms with one year ago, complaints were reduced in approximately 40% of the patients. In the last 4 weeks, 13% had severe leg pain.*

Conclusion: *Venous insufficiency negatively affects the quality of life with physical and psychological factors. Interventional treatments for CEAP stage 1 and 2 diseases, might improve the quality of life.*

ÖZ

Giriş: *Venöz yetmezlik her aşamada fiziksel ya da psikolojik etkilerle kişilerin yaşam kalitesini olumsuz etkileyen bir hastalıkdır. Venöz yetmezliğe özgü yaşam kalitesini değerlendirilmek için Venöz Yetmezlikte Epidemiyolojik ve Ekonomik Çalışma-Yaşam Kalitesi/Semptom Ölçeği (VEINES-QoL/Sym scale) geliştirilmiştir. Bu makalede CEAP evre 1 ve 2 hastaların transkutan radyofrekans tedavi sonrası yaşam kalitesi sonuçları araştırılmıştır.*

Gereç ve Yöntem: *Hastanemizde Mayıs 2019-Ocak 2020 tarihleri arasında telenjiektazik varisleri için transkutan radyofrekans tedavisi uygulanan hastalar retrospektif olarak tarandı. Tedavi sonrası yaşam kalitesi VEINES-QoL/Sym skalası kullanılarak değerlendirilen hastalar çalışmaya dahil edildi. Kendi isteği ile anketi doldurmayan ya da 18 yaş altındaki hastalar çalışma dışı bırakıldı.*

Bulgular: *Çalışma periyodunda hastanemizde 291 hastaya telenjiektazi nedeniyle transkutan radyofrekans tedavisi uygulandı. Bu hastalardan KEAP evre 1 ve 2 lezyonu ve VEINES-QOL / Sym ölçeğini dolduran 91 hasta çalışmaya dahil edildi. Hastaların yaklaşık 2 / 3'ünde telenjiektaziye ek olarak retiküler varisler vardı. Hastaların yarısından fazlasında semptomlar günün sonunda gelişiyordu. Belirtilerin bir yıl önceki ile karşılaştırılmasında hastaların yaklaşık% 40'ı şikayetlerinin azaldığını belirtti. Sadece % 13'ünde son 4 hafta içinde şiddetli bacak ağrısı gelişmişti.*

Sonuç: *Venöz yetmezlik fiziksel ve psikolojik faktörlerle yaşam kalitesini olumsuz etkiler. KEAP evre 1 ve 2 yapılacak girişimsel tedaviler yaşam kalitesinin iyileştirilmesine katkı sağlayabilir.*

INTRODUCTION

Chronic venous insufficiency is a disease that occurs in half of the population over 50 years old (1). The rates of chronic venous insufficiency were 25-33% for women, 10-20% for men in western countries, and in 20-25% for women, and 10-15% for men in Turkey (2, 3).

Chronic venous insufficiency (CVI) presents with telangiectasia, reticular veins, and varicose veins. Spider veins are seen in 80% of the population (4). Complaints such as pain, edema, itching, night cramps, burning, increase in temperature, sense of heaviness caused by venous insufficiency adversely affect daily performance and impair quality of life (1, 3). The disease can reduce the quality of life of patients due to both the symptoms and the cosmetic stress it creates.

Quality of life may be ignored in the clinical evaluation and treatment of venous insufficiency (3). However, success in the treatment of non-vital diseases is related to its contribution to the quality of life (5). Regulation of the treatment only according to the vessel diameter and reflux determined in Doppler ultrasonography might cause the treatment of reticular veins to be overlooked. Untreated reticular varicose veins might impair quality of life due to cosmetic concerns.

Due to the insufficiency of general test scales for the assessment of the quality of life in venous insufficiency, specific quality of life scales for the venous system has been investigated. Recently, the Epidemiological and Economic Work-Quality of Life / Symptom Scale (VEINES-QoL / Sym scale) in Venous Insufficiency has been developed for venous diseases (3, 6). In this study, the results of the VEINES-QoL / Sym scale were reported in patients who received transcutaneous radiofrequency treatment for telangiectasia.

MATERIALS AND METHODS

Patients who received transcutaneous radiofrequency treatment for telangiectasia in our hospital between May 2019 and January 2020 were retrospectively analyzed. Patients, whose quality of life was evaluated in the first month after the treatment, were included in the study. Patients who did not complete the scale and were under the age of 18 years old were excluded from the study. VEINES-QoL / Sym scale was used to evaluate the quality of life. Institutional Review Board approval was obtained from the Tepecik Education and Training Hospital Hospital Ethical Committee.

Patients with CEAP stage 1 and 2 lesions were included in the study. The effects of the treatment of lesions, which are thought to cause mostly cosmetic problems, on the physical symptoms of the patients as well as on the quality of daily work life were investigated.

The VEINES-QOL / Sym scale is developed in English in 2005 to measure the quality of life in chronic venous insufficiency and has four different language versions (1). The validity and reliability study of the Turkish version for venous insufficiency was conducted in 2011 (3, 6). Turkish validity and reliability analysis for deep vein thrombosis were performed in 2013 (7).

VEINES-QOL / Sym scale has consisted of 26 items and two parts (6). It is practical and easy to apply. It questions symptoms, limitations in daily activities, when complaints intensify, compares complaints with a year ago, and psychological impact. Answers are assessed by Likert scoring. The question of when the problems in the legs are most intense includes descriptive information and is not included in the scoring. Two scores are obtained on the scale. While the VEINES-QOL total score shows the effect of complaints on the quality of life, VEINES-Sym total score provides

information about the severity of venous symptoms. Quality of life increases with a higher score.

Statistical analyzes were performed using the SPSS 24.0 (SPSS Inc, Chicago, IL) system. Categorical variables are as numbers and percentages; continuous variables were evaluated with mean ± standard deviation.

RESULTS

During the study period, 291 patients had treated with transcutaneous radiofrequency for telangiectasia. Ninety-one patients with CEAP stage 1 and 2 lesions, filled the VEINES-QOL / Sym score one month after the procedure were included in the study. All of the patients were female and 1/3 of them were smoking. In 2/3 of the patients, telangiectasia was accompanied by reticular varicose veins (Table 1).

The most common complaint in patients is pain, and 1/3 of the patients stated that they complain of pain every day. Itching, night cramps, and tingling were the least reported symptoms (Table 2). More than half of the symptoms occurred at the end of the day. Compared to the complaints a year ago, complaints were reduced in approximately 40% of the patients. Complaints were mostly developed at the end of the day (Table 3). While 41% of the patients stated that they had problems in completing their work due to their complaints, 56% had problems sitting for a long time such as traveling and cinema (Table 4). In the last 4 weeks, 2/3 of the patients did not have a condition that limited their daily activities and only 13% had severe leg pain (Table 5-7). The 10% of the patients thought that their family and friends were burdened due to their complaints and approximately half were worried about the image (Table 8).

Table 1. Demographics of the patients

Variables	n (%)
Age	42,0±8,6 (range 24 – 66)
Sex (Female)	91 (100)
Diagnoses	
Telangiectasia	31 (34.1)
Reticular veins + Telangiectasia	60 (65.9)
CEAP 1	24 (26.4)
CEAP 2	67 (73.6)
BSA	1.74±0.12 (range 1.47 – 2.04)
BMI	24.7±3.9 (range 17.7 -36.3)
Hypertension	5 (5.5)
Diabetes Mellitus	4 (4.4)
Smoking	31 (34.1)
Oral Contraceptive Usage	6 (6.6)
VSM intervention	5 (5.5)
RF Session	3.2±2.0 (range 1 -15)

BMI: Body mass index; BSA: Body surface area; CEAP: Clinical, etiology, anatomy, pathology; RF: Radiofrequency; VSM: Vena saphena magna

Table 2. Distrubution of the symptoms of patients

Frequency of symptoms over the past 4 weeks					
	Everyday	Severel times a week	Once a week	Once every few weeks	None
Fullness in the legs	14.3	22	16.5	20.9	26.4
Aching legs	30.8	25.3	12.1	14.3	17.6
Swelling	20.9	18.7	11	22	27.5
Night Cramps	5.5	13.2	3.3	28.6	49.5
Heat or burning sensation	18.7	22	8.8	13.2	37.4
Restless Legs	15.4	25.3	11	16.5	31.9
Throbbing	7.7	14.3	8.8	19.8	49.5
Itching	3.3	9.9	4.4	23.1	59.3
Tingling sensation	5.5	15.4	7.7	19.8	51.6

Table 3. Time of the symptoms and its comparison to a year ago

What time of the day are the problems most severe?						
	Wake up	Noon	End of the day	During the night	Any time of the day	Never
Timing	2,2	2,2	53,8	16,5	15,4	9,9
Compared to 1 year ago, how would you rate your leg problem?						
	Much better	Better	Same	A little worse	Much worser	I didn't have any leg problem
Comparison	13,2	30,8	26,4	25,3	4,4	-

Table 4. Effects of the symptoms on daily life

Do problems in your leg interfere with your activities? / How much?				
	Not working	Yes it restricts too much	Yes it restricts a little	No it does not restrict
Daily activities at work	13,2	15,4	41,8	29,7
Daily activities at home	3,3	12,1	46,2	38,5
Standing for long periods	-	34,1	44,0	22,0
Sitting for long periods	-	9,9	56,0	34,1

Table 5. Experience of leg problems past 4 weeks

In the last 4 weeks, have you had any of the following problems with leg during work or other normal daily activities?		
	Yes	No
Cut down the time spent on work	31,9	68,1
Accomplished less	31,9	68,1
Limited in kind of work	34,1	65,9
Difficulty performing work	50,5	49,5

Table 6. Restriction of social life

Interference with normal social in the past 4 weeks, Activities					
	None	Some	Moderate	A lot	Extreme
	59,3	20,9	11,0	8,8	-

Table 7. Degree of the leg pain past four weeks

Intensity of leg pain past 4 weeks?						
	None	So little	Little	Moderate	Severe	Very Severe
	15,4	14,3	12,1	44,0	13,2	1,1

Table 8. Personal thoughts of the patients

How you feel and thoughts due to your leg issues during the last 4 weeks?						
	Always	Mostly	Quite	Sometimes	Rarely	Never
Concerned about its appearance in leg/legs	48,4	17,6	9,9	12,1	6,6	5,5
Felt irritable	12,1	18,7	14,3	24,2	18,7	12,1
Felt a burden	2,2	2,2	2,2	5,5	8,8	79,1
Worried about bumping into things	4,4	5,5	7,7	6,6	14,3	61,5
Are you worried about the lumps on your leg?	20,9	20,9	2,2	5,5	7,7	42,9

DISCUSSION

Venous insufficiency is a disease that impairs the quality of life of people (8). Quality of life impairs as the CEAP stage increases in venous insufficiency. It has been reported that mental quality of life is affected in women even in the initial stage (only telangiectasia or only the presence of symptoms) of the disease (2).

Before the 2000s, since there is no specific test to evaluate the quality of life for venous diseases, the general quality of life tests have been used to obtain an idea. For this purpose, questionnaires assessing the general quality of life such as Short Form-36 (SF-36), Nottingham Health Profile (NSP), and European quality of life questionnaire (EuroQol) were used. Beresford et al. (5) were used Aberdeen Varicose Vein Questionnaire (AVVQ) for symptoms and SF-36 tests for quality of life to evaluate the quality of life in primary and recurrent varicose veins. It is difficult to say that general quality of life scales might be used in venous diseases without psychometric evidence. Based on this, VEINES-QoL / Sym scale has been developed (6). This scale is a venous system-specific scale that evaluates both symptoms and quality of life in venous insufficiency. Survey results give very detailed information along with clinical results. VEINES-QoL scale gives more scientific and reliable results in evaluating the treatment methods of venous insufficiency from the perspective of the patient (3). In different studies, its effectiveness in evaluating the quality of life for deep vein thrombosis has also been demonstrated (7, 9). In our study, we prefer to use the VEINES-QoL / Sym scale, which is specific for venous diseases.

VEINES-QoL / Sym is a scale that helps to evaluate and compare different treatment methods in different stages of chronic venous insufficiency from C1 to C6 (3, 6). The VEINES-QOL / Sym scale has been developed since the success of treatment in venous diseases is related to the symptoms reported by the patient (10). Although there was no significant relationship between the CEAP stage and general quality of life scales; a significant relationship was found between the CEAP stage and quality of life in the assessment performed with VEINES-QoL / Sym scale (11). Therefore, VEINES-QoL / Sym will be more accurate in evaluating the quality of life due to venous diseases. In a study conducted in Poland, it was reported that VEINES-QoL / Sym scale might be used in the post-procedure evaluation of CEAP stage 2-3 varicose veins (12). In our study, we prefer to perform VEINES-QoL / Sym scale to evaluate the effects of transdermal therapies for CEAP stage 1 and 2 lesions.

Venous insufficiency is a disease that disrupts the quality of life with psychological and physical factors. Therefore, it has been reported that the downward movement of the physical and emotional quality of life scores in patients with symptoms might be used in the indication of surgical approach (10). It is known that the quality of life increases after surgical treatment of venous insufficiency (5). It has been reported that patients' quality of life improved 1 month after the surgery of vena saphenous magna (1). Also, in the treatment of varicose veins with polidocanol, in which 109 patients were examined with the VEINES-QoL / Sym scale, it was reported that the quality of life increased and symptoms decreased (13). In contrast, in an evaluation with the World Health Organization Quality of Life (WHOQoL-BREF) scale, it was reported that the quality of life did not change after the treatment of venous insufficiency (14). This might be since the quality of life scale used was not specific for venous diseases or the treatment of cosmetic problems was ignored during treatment. We found that about half of the patients had complaints of an image even one month after the treatment. In our study, we included patients with only CEAP stage 1 and 2 lesions. All patients were female and this might be associated with cosmetic anxiety which is mostly seen in females. It is also reported that cosmetic problems in venous insufficiency might affect the quality of life and should not be ignored.

Almost 2/3 of the patients with venous insufficiency have complaints such as additional edema, skin change, or ulcer (2). As the stage of the disease progresses, psychological and social problems occur as well as physical problems due to skin lesions and ulcers (3). It was found that the functional limitations and psychological effects of the disease were not affected by the clinical presentation, saphenous vein diameter,

and comorbid diseases (10). In the treatment of venous insufficiency, patients are primarily recommended to change their lifestyle and use compression stockings. Following this, pharmacological and interventional treatments are recommended. By increasing the awareness of the patient about the disease, the progression of the disease might be slowed down and complications might be prevented (1). However, the use of compression stockings continuously and the presence of visual telangiectasia might disrupt the psychology of the patients. Especially patients with telangiectasia and cosmetic concerns might present the clinic more exaggeratedly. In the VEINES-QOL / Sym questionnaire, it was determined that varicose veins have significant functional limitations and psychological effects. Almost 75% of the patients reported their worries about the image and 65% reported that the appearance affected their choice of clothing (10). In these patients, varicose veins might affects the choice of clothes and impair the quality of life. For this reason, it is possible to encounter more positive results than expected with sclerotherapy and transcutaneous treatment in CEAP stages 1 and 2 varicose veins.

The weak point of the study is the absence of a control group. It is also a lack that patients were not evaluated with the VEINES-QoL / Sym scale before the procedure. In the study, the post-procedure scores of other studies that increase the quality of life and the post-procedure scores of our patients were evaluated. Studies evaluating before and after the procedure will be useful in evaluating the effect of transcutaneous radiofrequency treatment on quality of life in telangiectasia. Rather than the physical effects, psychological effects are important for the quality of life scores in the patients with CEAP stage 1 and 2 lesions. Although it is difficult to say that the improvement of the quality of life of patients is due to physical or psychological effects; it is undeniable that sclerotherapy and transdermal treatments improve the quality of life.

CONCLUSION

Venous insufficiency is a pathology that impairs the quality of life at all stages. In the early stage, psychological factors rather than just physical factors might negatively affect the quality of life. Therefore, sclerotherapy and transdermal treatments in the early stage of the disease contribute to improving the quality of life.

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Corresponding Author

Ibrahim UYAR
Tepecik Education and Research Hospital, Department of Cardiovascular Surgery, Izmir Turkey
Phone: +90 533 326 62 32
E-mail: druyar@yahoo.com
ORCID: 0000-0002-7373-8378