

How do we assess quality of life after venous interventions? Patient reported outcomes for venous insufficiency

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Many techniques to treat superficial venous disease.....

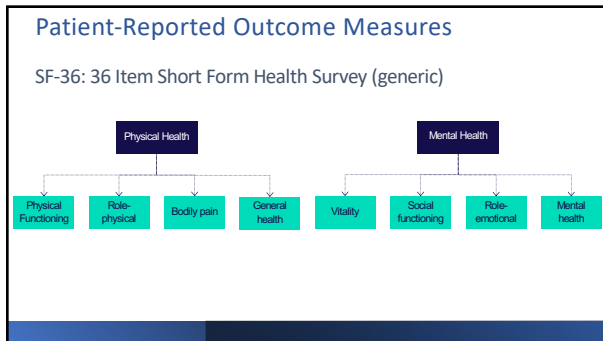
How does the voice of the patient fit in?

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Patient-Reported Outcome Measures

PROM	Generic	Vein Related Symptoms / Pain	Vein Physical Function	Vein: Psychosocial Function	Intra- and Post- Procedural Pain	Post Treatment Satisfaction
SF-36	✓					
EQ-5D	✓					
VVSymQ		✓				
VEINES-QOLSym		✓	✓	✓		
CIVIQ 20		✓	✓	✓		
AVAQ		✓	✓	✓		

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Patient-Reported Outcome Measures

EQ-5D: EuroQol Five Dimensions^{1,2}

Five Different Domains:

- Mobility
- Self care
- Usual activities
- Pain/discomfort
- Anxiety/depression

Revised in 2005 to include 5 responses instead of 3:

- No, slight, moderate, severe, extreme

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Patient-Reported Outcome Measures

VVSymQ - Assessment of FIVE Symptoms¹

"Since this morning, has your treated leg bothered you?" This question was asked for each of the following: heaviness, aching, swelling, throbbing, itching. Response:

Response	Scoring
"Never"	0
"Rarely"	1
"Some"	2
"Often"	3
"Usually"	4
"Always"	5

1. Hays RD, Langer DA, Dale CA, Wright JJ. The VVSymQ: validation of a new patient-reported outcome measure for assessment of varicose vein symptoms. *Phlebology*. 2016 Aug;31(7):49-54. doi: 10.1177/0891522216658185. Epub 2016 Jul 14. PMID: 26938888. PMCID: PMC4928252.


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Patient-Reported Outcome Measures

VEINES-QoL/Sym: Venous insufficiency Epidemiological and Economic Study Instrument¹

How would you rate yourself?

	0	1	2	3	4	5
Physical Functioning (10 items)						
Physical Role Limitations (4 items)						
Bodily Pain (2 items)						
General Health Perceptions (5 items)						
Energy/Vitality (4 items)						
Social Functioning (2 items)						
Emotional Role Limitations (3 items)						



1. Langer DA, Langer DA, Dale CA, et al. VEINES-QoL/Sym questionnaire was reliable and valid disease-specific quality-of-life measure for deep venous thrombosis (DVT) and varicose veins (V). *Phlebology*. 2016 Aug;31(7):49-54. doi: 10.1177/0891522216658185. Epub 2016 Jul 14. PMID: 26938888. PMCID: PMC4928252.


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Patient-Reported Outcome Measures

CIVIQ 20: Chronic Venous Insufficiency Quality of Life Questionnaire¹

How would you rate yourself?

	0	1	2	3	4	5
Pain						
Physical						
Psychological						
Social						



1. Lanas A, Mendez A, Jorri G. International psychometric validation of the Chronic Venous Insufficiency Quality of Life Questionnaire (CIVIQ-20). *Surf Clin Tribology Eng*. 2016;4(2):78-79. doi: 10.1016/j.sct.2016.03.001.

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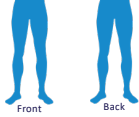
Patient-Reported Outcome Measures

AVVQ: Aberdeen Varicose Veins Questionnaire¹

How would you rate the following?

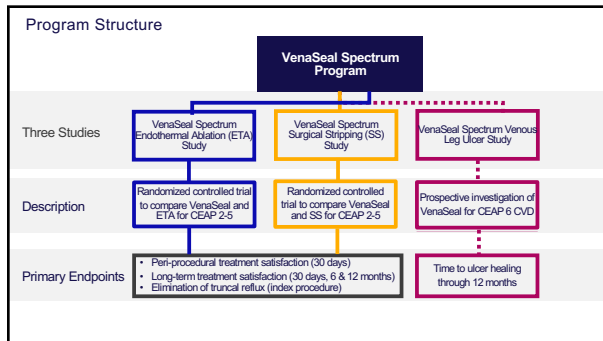
	0	1	2	3	4	5
Varicose vein pain						
Varicose vein appearance						
Swelling						
Compression stocking use						
Varicose vein itching						
Varicose vein discoloration						
Rash or eczema						
Related skin ulcer						
Ability to do things at work, at home, or at play						

Draw your varicose veins from the front and from the back.



1. van Til Spierdik K, Wilton D. Measurement of health-related quality of life with the Dutch translated Aberdeen Varicose Vein Questionnaire before and after treatment. *Surf Clin Tribology Eng*. 2016;4(2):78-79. doi: 10.1016/j.sct.2016.03.001.

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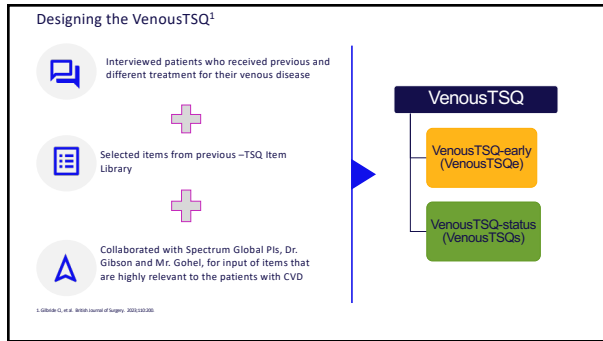
Patient-Reported Outcome Measures

VenousTSQ: Captures Satisfaction with Vein Treatment

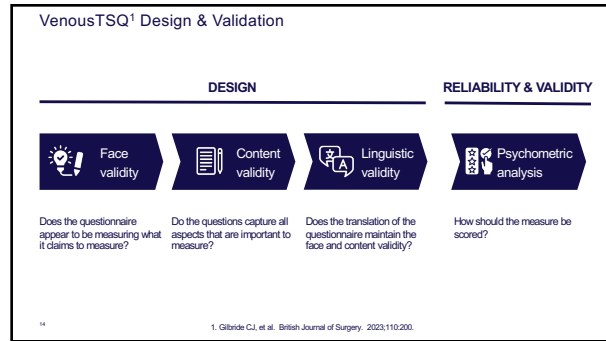
PROM	Generic Health Status or Function	Venous-Specific Symptom Rating or Pain	Venous-Specific Physical Functioning	Venous-Specific Psychosocial Functioning	Peri-procedural Satisfaction with Varicose Vein Treatment (up to 30-days post-procedure)	Satisfaction with Varicose Vein Treatment
EQ-5D	✓	-	-	-	-	-
SF-36	✓	-	-	-	-	-
AVVQ	-	✓	✓	✓	-	-
VEINES QoL/Sym	-	✓	✓	✓	-	-
CIVIQ	-	✓	✓	✓	-	-
VVSymQ	-	✓	-	-	-	-

1. Gilvile CJ, et al. *British Journal of Surgery*. 2023;110:200.

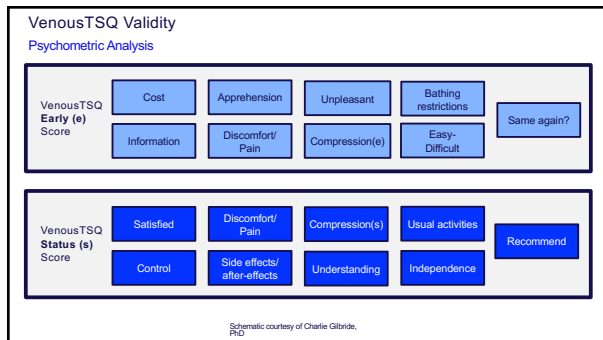
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Conclusion

PROMs

- The voice of the patient is important when evaluating outcomes with superficial venous disease treatment as the “technical” results of all technologies are similar
- Proper PROM development includes patient interviews focusing on items relevant to patients
- The initial reliability and validity of the VenousTSQe and VenousTSQs for the first 100 English-speaking US participants of the VenaSeal Spectrum Program has been established
- While the VenaSeal Spectrum Program reports on standard outcomes (e.g. anatomic closure, return to usual activities, etc.), this research highlights patient-centric evidence.
- Further studies with superficial venous disease treatment should incorporate similar meaningful outcome measures

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