

Quality of Life Evaluation and Chronic Venous Disease:

How to carry this out during our daily practice?

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Faculty Disclosure

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I have **no financial relationships** to disclose.

Each situation Each disease

has different perspectives

Physicians' Perspective

(Prescription decision, compliance, eficacy...)

Society's Perspective

(Payers, Ministry of Health, pharmacoeconomic studies...)



Patients' Perspective

(**Quality of life**, satisfaction score, symptons relief...)

Patient's Perspective



PRO – Instruments that measures perceived health outcomes or endpoints assessed by patients reports (questionnaires)

- Type of instruments:
 - Preference about care received
 - Health behaviours
 - Subjective symptoms
 - Patient satisfaction



Quality of Life (QoL)



WHO definition

"The product of the interplay between social, health, economic and environmental conditions which affect human and social development"

- Multidimensional concept, including:
 - Physical
 - Psychological
 - Social
- Patient perception about disease (subjective state of health)
- Information burden illness

Quality of Life (QoL)



Evaluation:

- Generic instruments:
- → Nottingham Health Profile (NHP)
- → Short Form 36 Health Survey (SF-36)

- Disease-specific instruments
- → Charing Cross Venous Ulceration Questionnaire (CXVUQ)
- → Aberdeen Varicose Vein Questionnaire (AVVQ)
- → Venous Insufficiency Epidemiological and Economic Study (VEINES)
- → Chronic Venous Insufficiency Questionnaire (CIVIQ)

CIVIQ questionnaire



- 1996 Prof. Robert Launois (France)
- Adopted in 18 countries (incl. Portugal)
- Disease-specific instruments (20 items)
- 4 dimensions studied:
 - → Physical (4 items)

→ Social (3 items)

→ Psychological (9 items)

- → Pain (4 items)
- According with WHO QoL group recommendations
- Properties validated:
 - Relevance

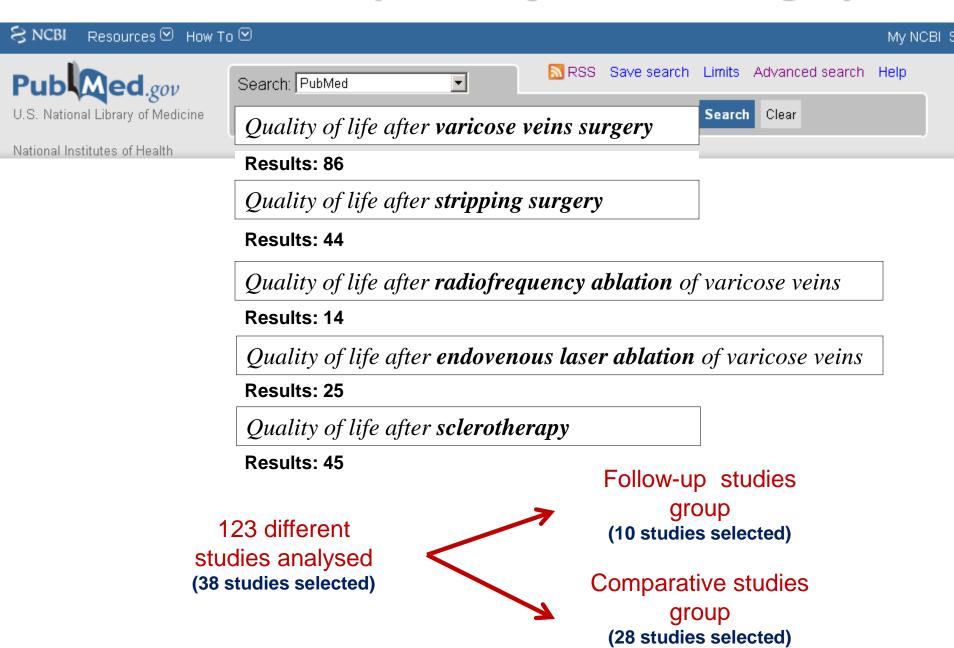
Construct validity

Acceptability

Sensitivity

- Reliability
- Specific evaluation for CVD patients

Assessment of patient QoL after a surgery



Follow-up studies

Author, year	Dimension	Procedure	Follow-up	QoL questionnaire	Conclusion
Grosse Frie K, 2012	539 patients	Not specified	Not specified	AVVQ + EuroQol5D	Improvements in patients' satisfaction after surgery are significantly more correlated with changes in disease-specific measures than in generic measures.
Chan CY, 2011	74 patients	EVF and CHIVA	Before treatment and month 1, 3, 6 and 12	AVVQ + RAND-36	Both groups benefited significantly from surgery in disease-specific perceptions.
Darvall KA, 2010	296 patients	UGFS for GSV and SSV	1 week before treatment and month 1, 6 and 12	SF-12 + AVVSS	UGFS improves QOL at least 12 months after treatment (generic and disease-specific questionnaires)
Darvall KA, 2009	86 patients (92 legs)	UGFS for SSV	1 week before treatment and month 1, 6 and 12	AVVSS	UGFS improves QOL at least 12 months after treatment
Sundukov IV, 2009	74 patients (79 legs)	ELP AVVQ	Week 12	SF36 + AVVQ	Endovenous laser photocoagulation improves general and specific QoL
Yin HH, 2007	82 patients (105 legs)	EVLA + TIPP	Months 3, 6 and 12	AVVQ	Disease specific QoL was greatly improved after surgery
Michaels JA, 2006	246 patients	Lifestyle <i>vs.</i> Conventional Surgery	Year 2	SF36 + EuroQol5D	Surgery improves QoL
Subramonia S, 2005	62 patients (63 legs)	LSV stripping	Before treatment and day 47 after treatment	AVVQ	Improvement in short-term QOL in postoperative phase
MacKenzie RK, 2002	102 patients	LSV stripping	Before treatment and week 4, month 6, year 2	SF36 + AVVSS	LSV surgery significantly improves disease-specific QoL for at least 2 years. In patients without DVR, stripping has additional benefits.
Smith JJ, 1999	137 patients	Not specified	Before treatment and week 6	SF36 + AVVSS	Both questionnaires showed a highly significant improvement in QoL after surgery

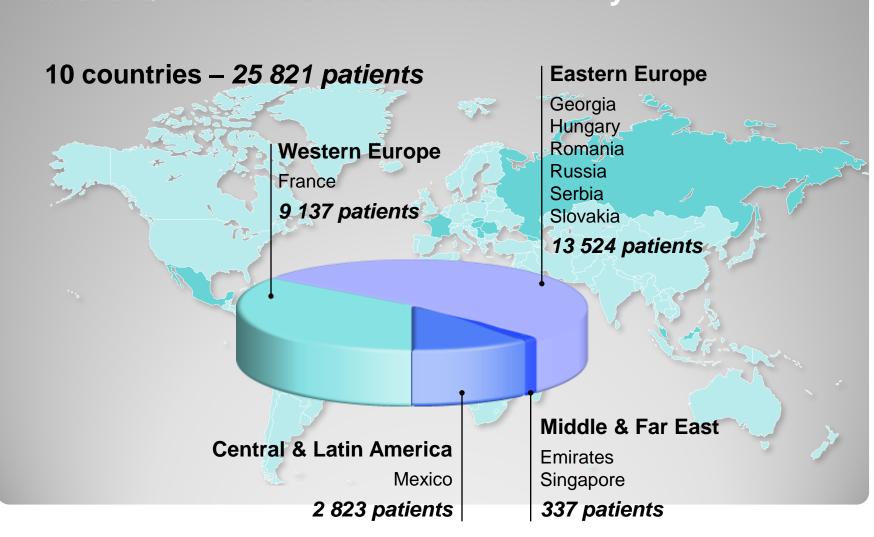
Comparative studies (1/2)

Author, year	Dimension	Procedure	Follow-up	QoL questionnaire	Conclusion
Shadid N, 2012	430 patients	UGFS vs. HL/S	Baseline, month 3, year 1 and 2	EQ-5D	At year 2 follow-up, UGFS was not inferior to surgery.
Rass K, 2012	400 patients	EVLA vs. HL/S	Year 2	CIVIQ	Both EVLT and HLS are comparably safe and effective procedures to treat GSV incompetence.
Nordon IM, 2011	159 patients	EVLA vs. RFA	Pre-operative and month 3	AVVQ+ EQ-5D	Changes in the AVVQ and EQ-5D at 3 months were similar in both groups.
Liu X, 2011	60 patients	UGFS + SFJ ligation vs. conventional stripping	Month 3 and 6	AVVQ	-
Rasmussen LH, 2011	500 patients (580 legs)	EVLA vs. RFA vs. UGFS vs. Stripping	Pre-operative, day 3, month 1 and year 1	EQ-5D +SF36	Disease-specific quality-of-life and SF-36 scores had improved in all groups by 1 year follow-up.
Disselhoff BC, 2011	120 patients	EVLA vs. Cryostripping	Year 5	AVVSS	AVVSS improved significantly after treatment in both groups, with no significant difference between them.
Chan CY,2011	82 patients	EVLA vs. CHIVA	Week 1 and month 1, 3, 6 and 12	AVVQ	Both groups benefited significantly from surgery in disease-specific perceptions.
Jia X, 2011	60 patients	Foam sclerotherapy + SFJ ligation vs. conventional stripping	Months 3 and 6	-	Foam sclerotherapy + SFJ ligation involves a less postoperative discomfort
Blomgren L, 2011	227 patients	Preoperative duplex examination + Surgery vs. Only surgery	Year 7 (late follow-up study)	SF36	QoL was similar in both groups, but routine preoperative duplex imaging improved the results of surgery for primary varicose veins for at least 7 year
Schul MW, 2011	58 patients	Sclerotherapy vs. Stocking (crossover to sclerotherapy)	T0, after compression trial, after sclerotherapy and month 3 and 12 after sclerotherapy,	AVVQ	Sclerotherapy offers a statistically superior broad spectrum relief of symptoms.
Carradice D, 2011	280 patients	EVLA vs. Surgery*	Week 1, 6, 12 and 52	AVVQ	Clinical recurrence was associated with worse AVVQ scores
Carradice D, 2011	280 patients	EVLA vs. Surgery*	-	AVVQ + SF36	EVLA had a less negative impact on early postintervention QoL
Christenson JT, 2010	204 legs	EVLA vs. HL/S	Day 12, year 1, year 2	AVVSS + SF36	Similar QoL improvement after HL/S and EVLA

Comparative studies (2/2)

Author, year	Dimension Procedure		Follow-up	QoL questionnaire	Conclusion
Shepherd AC, 2010	131 patients	EVLA <i>vs.</i> RFA	Week 6	AVVQ + SF12	Similar QoL improvement after 6 weeks of treatment
Rasmussen LH, 2010	121 patients (137 legs)	EVLA vs. Conventional stripping	Year 2	AVVSS + SF36	Similar QoL improvement after both treatments.
Subramonia S, 2010	88 patients	RFA <i>vs.</i> Conventional stripping	Week1, week 5	-	QoL improvement significantly favored RFA
Hamel-Desnos CM, 2010	60 patients	UGFS with compression vs. EGFS without compression	Day 28	-	No difference between compression and control groups was found
Shepherd AC, 2010	131 patients	EVLA <i>vs.</i> RFA	Week 6	AVVQ + SF12	Similar QoL improvement after 6 weeks of treatment
Carradice, 2009	50 patients	EVLT vs. EVLTAP	Week 6, month 3 and year 1	SF36 + EQ5D + AVVQ	EVLTAP significantly improve QoL after 3 month. At 1 year there are no difference in AVVQ score
Lin SM, 2009	150 patients (150 legs)	RFA + TriVex <i>vs.</i> Conventional stripping + TriVex	Week 4	CIVIQ	QoL were significantly improved in both groups.
Klem TM, 2009	494 patients	Cryostripping <i>vs.</i> Conventional stripping	Week 6 and 26	AVVQ + SF36	SF-36 showed no significant change between the groups. AVVQ showed small but significantly better results for conventional stripping
Kalteis M, 2008	100 patients	EVLA <i>vs.</i> Conventional stripping	Pre-operative phase, week 4, week 16	CIVIQ	No difference registered between EVLA vs stripping
Darwood RJ, 2008	99 patients	EVLA 1, EVLA 2 <i>vs.</i> Conventional Stripping	Month 3	AVVSS	Similar QoL improvement after both EVLA and surgery
Menyhei G, 2008	160 patients	Cryostripping vs. Conventional stripping	Pre-operative phase and month 6	SF36	Significant improvement in QoL after both techniques with no difference between them.
Kern P, 2007	96 patients	LS with compression vs. LS without compression	Pre-operative phase and day 52	SF36	Treatment had no impact on general QoL.
Lorenz D, 2007	200 patients EVS vs. Conventional stripping		-	CIVIQ + SF36	EVS significantly produced superior CIVIQ and SF36 ratings
Lurie F, 2005	110 patients	RFA vs. HL/S	Year 1, year 2	-	RFA increase global QOL score after year 1 and year 2
Lurie F, 2003	rie F, 2003 85 patients (86 legs) RFA <i>vs.</i> HL/S		Hour 72, week 1, week 3, and month 4	CIVIQ	RFA increase global QOL score but difference decreased between week 2 and month 4

Countries and Number of Patients in the QOL and Costs of Disease Analysis

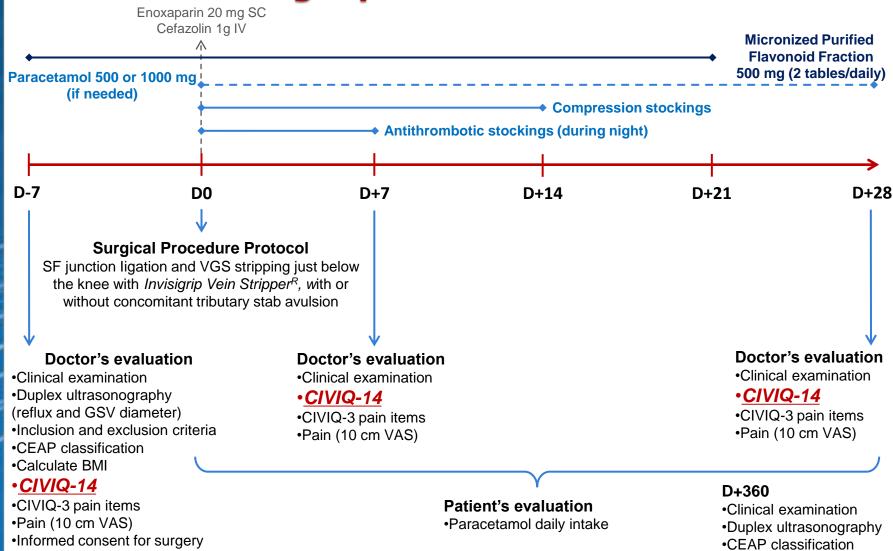


QOL decreases with increasing CEAP



^{*} GIS - Global Index Score

Quality of Life and Varicose Vein Surgery: a single protocol treatment



•CIVIQ-14

Inclusion criteria

- Male/female of any race
- Aged between 20 and 80 years
- C2 class of the CEAP classification and primary varicose veins
- Venous reflux in the GSV confirmed by duplex ultrasonography (reflux time > 0.5 sec and GSV diameter > 3 mm)
- One or two limbs (unilateral or bilateral reflux of the GSV)

Exclusion criteria

- Venoactive drug treatment in the 4 weeks before inclusion (D-7)
- Known history of allergy or intolerance to diosmin or any other venoactive drug
- Predictable poor compliance to treatment
- Participation of the patient in another clinical trial during the previous 3 months
- Previous surgery of GSV
- Secondary or congenital varicose veins
- Presence of significant lower-limb lymphedema
- Arterial disease with ankle-brachial index < 0.9
- Previous DVT or SVT
- Impaired cardiac function
- Blood disorders
- History of alcohol or drug abuse
- Neoplasia
- BMI > 30
- Patient not able to walk, whatever the reason
- Pregnancy expected in the next month after surgery

Discussion

Today, are we really assessing everything what patients need?

Quality of life instruments are valuable indicators of patient perspective, being reliable and appreciated by practitioners;

Specific QoL questionnaires are good tools to evaluate patient's QoL (RELIEF study).

There are any space to improve?

It would be interesting to develop QoL questionnaires that could be applied specifically in the follow-up of surgical procedures.

Conclusion

PRO evaluation, such as QoL, should be performed on a regularly basis in our daily practice?



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How to do this in our daily practice?

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