Effects Of Truncal Ablation On Pregnancy

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- Nothing to declare

- Pregnancy is a contributory factor to CVD

increasing the frequency:
↑ telangiectasias
reticular veins
VVs
recurrent reflux after VV surgery

- Leg edema can affect up to 80% of pregnant women, mainly during the third trimester.
- Some women develop vulvar VVs, which tend to be exacerbated with each subsequent pregnancy
- increasing severity with progressive numbers of pregnancies
  - 13% primiparous, 30% secundiparous and 57% multiparous.

(Callam MJ. Epidemiology of varicose veins. Br J Surg 1994; 81: 167–173)

Calif Med. 1957 Dec; 87(6): 365–367. PMCID: PMC1512200 PMID: 13498493

MANAGEMENT OF VARICOSE VEINS DURING PREGNANCY

S. M. Greenstone, E. Craig Harrington, and Theodore B. Massell

Abstract

• The incidence of recurrences after radical venous operations done during pregnancy or where pregnancy has occurred subsequently is much higher than it is in cases in which pregnancy is not a factor. These discouraging results are due to increased venous pressure, obstruction to the venous drainage of the lower extremities and hormonal factors. The management of varicose veins during pregnancy should be by conservative means consisting of proper elastic support, elevation of the extremities at night and during rest periods in the day, avoiding static dependency of the legs, and control of body weight. In event of venous stasis and severe symptoms of varicosis that cannot be controlled by conservative measures, limited surgical intervention is indicated. This should consist of high ligation and division of the involved venous trunk and the immediate tributaries. Radical extirpation of varicose veins should be reserved until further pregnancy is not contemplated.

NICE

NICE guideline

Varicose veins: diagnosis and management

Clinical guideline
Published: 24 July 2013

www.nice.org.uk/guidance/cg168

Non-interventional treatment

1.3.4 Do not offer compression hosiery to treat varicose veins unless interventional treatment is unsuitable.

1.4 Management during pregnancy

1.4.1 Give pregnant women presenting with varicose veins information on the effect of pregnancy on varicose veins.

1.4.2 Do not carry out interventional treatment for varicose veins during pregnancy other than in exceptional circumstances.

1.4.3 Consider compression hosiery for symptom relief of leg swelling associated with varicose veins during pregnancy.

Smyth RMD, Alfirevic N, Barnighaye AA.
Interventions for varicose veins and leg oedema in pregnancy.
Cochrane Database of Systematic Reviews 2015, Issue 10. Art. No.: CD010366.
DOI: 10.1002/14651858.CD010366.pub3.

www.cochranelibrary.com

WILEY

Implications for research

We are unable to provide clear guidance regarding any form of intervention used to relieve the symptoms associated with varicose veins and leg oedema in pregnancy. We have identified that there is a need for large, well-designed multicentre randomised controlled trials with clear allocation concealment, which will allow for robust conclusions to be drawn. It is of note that the largest trial included in this review involved only 69 women.

Clinical Practice Guidelines

Eur J Vasc Endovasc Surg (2022) 63, 184–267

CLINICAL PRACTICE GUIDELINE DOCUMENT

Editor's Choice – European Society for Vascular Surgery (ESVS) 2022 Clinical Practice Guidelines on the Management of Chronic Venous Disease of the Lower Limbs☆

Marianne G. De Maeseneer [*,**], Stavros K. Kakkos [*], Thomas Aherne [*], Niels Baekgaard [*], Stephen Black [*], Lena Blomgren [*], Athanasios Giannoukas [*], Manjit Gohel [*], Rick de Graaf [*], Claudine Hamel-Desnos [*], Arkadiusz Jawien [*], Aleksandra Jeworutzka-Kaczanowska [*], Christopher R. Lattimer [*], Giovanni Mosti [*], Thomas Noppeney [*], Marie Josee van Rijn [*], Gerry Stansby [*]

Recommendation 93 New

For pregnant women presenting with symptoms and/or signs of chronic venous disease, the use of elastic compression hosiery is recommended.

Class	Level	References	ToE
I	B	Thaler *et al.* (2001),[492] Adamczyk *et al.* (2013),[494] Saliba *et al.* (2020)	

Polidocanol Pregnancy Warnings

- is not recommended. Administration of this drug IV injection at doses greater than or equal to 2.5 mg/kg to pregnant rabbits once daily from gestation day 6 to 14 to 18 was associated with increased resorptions, fetal malformations (mainly of the limbs and head) and fetal death.
- Polidocanol which have been taken by a limited number of pregnant women, without an increase in the frequency of malformation or other direct or indirect harmful effects on the human fetus having been observed.

Breastfeeding Warnings

- Use is not recommended unless benefit outweighs risk. This drug and/or its metabolites were found in the milk of lactating rats for at least 48 hours after a single IV dose

Sodium tetradecyl sulfate pregnancy & breastfeeding Warnings

- STS has been assigned to pregnancy category C by the FDA. Animal studies have not been reported. There are no controlled data in human pregnancy. Recommended for use during pregnancy when benefit outweighs risk.
- There are no data on the excretion of sodium tetradecyl sulfate into human milk. The manufacturer recommends that caution be used when administering sodium tetradecyl sulfate to nursing women

Review > Vasa. 2012 Jul;41(4):243-7. doi: 10.1024/0301-1526/a000199.

Sclerotherapy in an undetected pregnancy – a catastrophe?

S Reich-Schupke [1], A Leiste, R Moritz, P Altmeyer, M Stücker

Affiliations + expand

PMID: 22825857 DOI: 10.1024/0301-1526/a000199

Abstract

According to the guidelines and the manufacturer's information, pregnancy is a contraindication for sclerotherapy with Polidocanol. However, in some cases sclerotherapy has been conducted in a period when the pregnancy is not known by the patient. When pregnancy is diagnosed, patients and gynecologists often ask the phlebologist if there is an indication for the interruption of pregnancy. Up to now, there is only rare information on sclerotherapy, polidocanol and pregnancy. Current knowledge is summed up in this article together with case reports. The existing case reports and mainly retrospective case series on intended or accidentally conducted sclerotherapy with common sclerosants and doses show no increased risk for the mother and the unborn child. However, in view of the limited literature data available and the high probability for spontaneous regression of varicose veins postpartum, sclerotherapy should be avoided in pregnancy, if possible. Conservative measures during pregnancy or an elimination of varicose veins before pregnancy should be preferred. In single cases e.g. painful genitoanal varices, the use of sclerotherapy can be helpful even during pregnancy. Thereby, a very thorough clarification of the mother with a final written consent and an implementation according to the guidelines are especially important. According to the current data, there is no reason for an interruption after a sclerotherapy that has been conducted during undetected pregnancy.

Published in final edited form as:

J Vasc Surg Venous Lymphat Disord. 2021 March ; 9(2): 361–368.e3. doi:10.1016/j.jvsv.2020.04.031.

Effect of concomitant deep venous reflux on truncal endovenous ablation outcomes in the Vascular Quality Initiative

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Objective: Few studies have investigated outcomes after truncal endovenous ablation in patients with combined deep and superficial reflux and no studies have evaluated patient-reported outcomes.

Methods: We investigated the short- and long-term clinical and patient-reported outcomes among patients with and without deep venous reflux undergoing truncal endovenous ablation from 2015 to 2019 in the Vascular Quality Initiative. Preprocedural and postprocedural comparisons were performed using the *t*-test, χ^2, or their nonparametric counterpart when appropriate. Multivariable logistic regression models were used to assess for confounding.

Results: A total of 4881 patients were included, of which 2254 (46.2%) had combined deep and superficial reflux. The median follow-up was 336.5 days. Patients with deep reflux were less likely to be female (65.9% vs 69.9%; $P = .003$), more likely to be Caucasian (90.2% vs 86.5%; $P = .003$) and had no difference in BMI (30.6 ± 7.5 vs 30.6 6 7.2; $P = .904$). Additionally, no difference was seen in rates of prior varicose vein treatments, number of pregnancies, or history of deep venous thrombosis; however, patients without deep reflux were more likely to be on anticoagulation at the time of the procedure (10.9% vs 8.1%; $P < .001$). Patients without deep reflux had slightly higher

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Factors influencing recurrent varicose vein formation after radiofrequency thermal ablation for truncal reflux performed in two high-volume venous centers

Domenico Baccellieri, MD,[a] Vincenzo Ardita, PhD, MD,[a] Alfonso Pannone, MD,[a] Ferdinando. B. A. Valente, MD,[a] Rosalba Lembo, MD,[a] Roberto Chiesa, MD,[a] and Germano Melissano, MD,[a] *Milan and Rome, Italy*

2009 - 2019

1568 limbs with incompetent GSV were treated ClosureFast

At 5 years after intervention, 450 patients were available for analysis

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Table VI. Univariate and multivariate analysis results identifying predictors of recurrence

	Univariate		Multivariate	
Variable	OR (95% CI)	*P* value	OR (95% CI)	*P* value
Age >70 years	4.19 (1. 56-15.6)	**<.001**	1.04 (1.01-1.06)	**.014**
DM	2.11 (0.71-5.37)	**.050**	–	NA
BMI >30 kg/m^2	4.06 (0.52-22.72)	**.037**	–	NA
Pregnancies >2	2.75 (0.24-5.71)	**.043**	–	NA
GSV diameter >10 mm	1.34 (0.09-4.35)	**.046**	–	NA
CEAP 4	6.30 (1.16-30.74)	**.002**	13.3 (3.72-46.34)	**.001**
CEAP 5	13.84 (1.64-71.11)	**<.001**	11.11 (3.56-35.04)	**.001**
Perforator reflux	2.34 (1.12-5.23)	**.002**	1.17 (0.65-2.03)	**.018**

BMI, Body mass index; *CEAP*, clinical, etiology, anatomy, pathophysiology; *CI*, confidence interval; *DM*, diabetes mellitus; *GSV*, great saphenous vein; *NA*, not applicable; *OR*, odds ratio.
Boldface *P* values represent statistical significance.

Pre-pregnancy strategy!

- No treatment for C1 if the patients wants baby in a short period
- Treatment of truncal insufficiency above C3
- Case by case decision for C2

Messages

- In pregnant women; treatment of leg edema, VVs, and vulvar VVs is mostly conservative with compression hosiery.
- ECS not only have a beneficial effect on GSV and SSV diameter and reflux, but also improve symptoms and signs of CVD
- In the majority of women, telangiectasias, reticular veins, and VVs subside at least partially within the first postpartum months.
- **Any further treatment should therefore be postponed until three to six months after delivery.**

REMEMBER!

The risk for DVT is generally higher during pregnancy

THANKS