

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Interventional procedures consultation document

Cyanoacrylate glue occlusion for varicose veins

Varicose veins are enlarged veins, usually in the legs. They develop when small valves inside a vein stop working properly, allowing blood to collect in the vein. This can cause discomfort and lead to skin problems such as discolouration, inflammation and ulceration. In this procedure, medical glue (cyanoacrylate) is injected into a vein. This closes the vein (occlusion) and stops it filling with blood, aiming to improve symptoms.

NICE is looking at cyanoacrylate glue occlusion for varicose veins. This is a review of NICE's interventional procedures guidance on [cyanoacrylate glue occlusion for varicose veins](#).

NICE's interventional procedures advisory committee met to consider the evidence and the opinions of specialist advisers, who are consultants with knowledge of the procedure.

This document contains the draft guidance for [consultation](#). Your views are welcome, particularly:

- comments on the draft recommendations
- information about factual inaccuracies
- additional relevant evidence, with references if possible.

NICE is committed to promoting equality of opportunity, eliminating unlawful discrimination and fostering good relations between people with particular protected characteristics and others.

This is not NICE's final guidance on this procedure. The draft guidance may change after this consultation.

After consultation ends, the committee will:

- meet again to consider the consultation comments, review the evidence and make appropriate changes to the draft guidance

- prepare a second draft, which will go through a [resolution](#) process before the final guidance is agreed.

Please note that we reserve the right to summarise and edit comments received during consultation or not to publish them at all if, in the reasonable opinion of NICE, there are a lot of comments or if publishing the comments would be unlawful or otherwise inappropriate.

Closing date for comments: 21 November 2019

Target date for publication of guidance: February 2020

1 Draft recommendations

- 1.1 Evidence on the safety and efficacy of cyanoacrylate glue occlusion for varicose veins is adequate to support the use of this procedure provided that [standard arrangements](#) are in place for clinical governance, consent and audit.
- 1.2 The procedure should only be done by clinicians with appropriate training in this procedure and experience in the use of venous ultrasound.

2 The condition, current treatments and procedure

The condition

- 2.1 Varicose veins are a sign of underlying venous insufficiency. Primary valvular incompetence is the most common underlying cause of varicose veins. The saphenous veins are the most frequently affected vessels. Most people with varicose veins have no symptoms, but venous insufficiency may cause fatigue, heaviness, aching, throbbing, itching and cramps in the legs. Chronic venous insufficiency can lead to skin discoloration, inflammatory dermatitis and ulceration.

Current treatments

- 2.2 NICE's clinical guideline describes the [diagnosis and management of varicose veins](#). Interventional treatment options include endothermal ablation (such as radiofrequency ablation and endovenous laser ablation therapy), foam sclerotherapy, mechanochemical ablation, and surgery (usually stripping and ligation of the great and small saphenous veins, and phlebectomies).

The procedure

- 2.3 Cyanoacrylate glue occlusion for varicose veins aims to close the veins by adherence then fibrosis of the lumen, without the need for tumescent anaesthesia and with reduced need for postoperative compression therapy.
- 2.4 The procedure is done using local anaesthesia. An introducer sheath is inserted into the distal great saphenous vein and, using ultrasound guidance, a delivery catheter is advanced into position before the saphenofemoral junction. The proximal vein is compressed and medical glue is delivered in measured doses through the tip of the catheter to seal the vein.
- 2.5 This is repeated at different positions as the catheter is withdrawn, using ultrasound imaging to monitor the procedure. The procedure may also be done in a similar way for the small saphenous vein.

3 Committee considerations

The evidence

- 3.1 NICE did a rapid review of the published literature on the efficacy and safety of this procedure. This comprised a comprehensive literature search and detailed review of the evidence from 12 sources, which was discussed by the committee. The evidence included 2 systematic reviews, 2 randomised controlled trials,

3 non-randomised comparative studies, 4 case series and 1 case report. It is presented in table 2 of the [interventional procedures overview](#). Other relevant literature is in the appendix of the overview.

- 3.2 The specialist advisers and the committee considered the key efficacy outcomes to be: saphenous vein occlusion rate, recanalisation, symptom relief, and quality of life.
- 3.3 The specialist advisers and the committee considered the key safety outcomes to be: hypersensitivity, granuloma formation, thromboembolism, and nerve injury or paraesthesia.
- 3.4 Three commentaries from patients who have had this procedure were discussed by the committee.

Committee comments

- 3.5 The committee were informed that the incidence of hypersensitivity reactions was reported to be about 7%.
- 3.6 The committee were informed that there are different products available for this procedure.

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Chair, interventional procedures advisory committee

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