The care of patients with varicose veins and

associated chronic venous diseases: Clinical

practice guidelines of the Society for Vascular

Surgery and the American Venous Forum

**Peter Gloviczki, MD,a Anthony J. Comerota, MD,b Michael C. Dalsing, MD,c Bo G. Eklof, MD,d**

**David L. Gillespie, MD,e Monika L. Gloviczki, MD, PhD,f Joann M. Lohr, MD,g Robert B. McLafferty, MD,h**

**Mark H. Meissner, MD,i M. Hassan Murad, MD, MPH,j Frank T. Padberg, MD,k Peter J. Pappas, MD,k**

**Marc A. Passman, MD,l Joseph D. Raffetto, MD,m Michael A. Vasquez, MD, RVT,n** and

**Thomas W. Wakefield, MD,o** *Rochester, Minn; Toledo, Ohio; Indianapolis, Ind; Helsingborg, Sweden; Rochester, NY;*

*Cincinnati, Ohio; Springfield, Ill; Seattle, Wash; Newark, NJ; Birmingham, Ala; West Roxbury, Mass; North Tonawanda,*

*NY; and Ann Arbor, Mich*

***Results with preservation of the saphenous vein.*** *Results*

*with CHIVA.* Two RCTs188,191 compared standard treatment

(compression or high ligation, stripping, and phlebectomy)

with CHIVA approaches with specific anatomic

patterns of reflux (types I and III shunts). For the specific

venous anatomy evaluated in these trials, such techniques

were better than compression in preventing ulcer recurrence188

and were at least equivalent to stripping of varicose

veins.191

In a single-center RCT, Zamboni et al188 used CHIVA

or compression to treat 47 legs with venous ulcers. At a

mean follow-up of 3 years, healing was 100% (median

healing time, 31 days) in the surgical group and 96%

(median healing time, 63 days) in the compression group

(*P* \_ .02). The recurrence rate was 9% in the surgical group

and 38% in the compression group (*P* \_ .05). The study

excluded patients with post-thrombotic syndrome, deep

vein reflux or obstruction, or excessive ulcers (\_12 cm).

In a recent open-label, single-center RCT, Pares et

al192 randomized 501 patients with primary varicose veins

into three arms: CHIVA, stripping with clinic marking, and

stripping with duplex marking. The primary end point was

recurrence within 5 years, assessed clinically by independent

observers. Clinical outcomes in the CHIVA group

were better (44.3% cure, 24.6% improvement, 31.1% failure)

than in the stripping with clinic marking (21.0% cure,

26.3% improvement, 52.7% failure) and stripping with

duplex marking (29.3% cure, 22.8% improvement, 47.9%

failure) groups. The OR between the stripping with clinic

marking and CHIVA groups, of recurrence at 5 years of

follow-up, was 2.64 (95% CI, 1.76-3.97; *P* \_ .001). The

OR of recurrence at 5 years between the stripping with

duplex marking and CHIVA group was 2.01 (95% CI,

1.34-3.00; *P* \_ .001).

Although the first two RCTs focused on a small group

of patients with varicose veins, the trial of Pares et al192

deserves credit for including the full spectrum of patients

with primary varicose veins. CHIVA is a complex approach,

and a high level of training and experience is needed to

attain the results presented in this RCT. However, the

results achieved by a few outstanding interventionists does

not support offering this procedure to all practitioners.

Although CHIVA has called attention to the importance

of directing surgical procedures toward the patient’s

venous anatomy and function, it still requires considerable

education of venous interventionists willing to learn

this approach.

**1-**   **REVIEW**  
**OPTIMAL management of infrainguinal arterial occlusive disease  
Authors: Pennywell DJ, Tan TW, Zhang WW**

**Full text**: available on  [http://www.dovepress.com/article\_18926.t34346121](http://www.dovepress.com/article_18926.t34346121" \t "_blank)

**Extract:**

**Risk factors**

Age is the most important, nonmodifiable risk factor for PAD, with a prevalence of **0.9%** in people under age 50 and **23.2%** in people over the age of 80.1

**Open reconstruction**

The most important determinant of success of an Infrainguinal lower extremity bypass (LEB) is the type and quality of conduit selected.2,17,**52 Autogenous vein is superior to synthetic graft as conduit for LEB,2,53–55 and the great saphenous vein (GSV) is superior to other autologous alternatives.2,55,56**An essential step in preoperative planning is evaluation of the GSV with duplex mapping and identification of alternative vein conduits, if needed. An ideal vein conduit should be soft, compressible, at least 3 mm in diameter, and should not be calcified or sclerotic. If the ipsilateral GSV is unsuitable or unavailable, the contralateral GSV should be used.

**Conclusion**

**Open infrainguinal bypass remains the gold standard for revascularization in CLI**, especially for patients at appropriate surgical risk and with suitable bypass conduit.

**2-**   **GUIDELINES**

**The care of patients with varicose veins and associated chronic venous diseases: Clinical practice guidelines of the Society for Vascular Surgery and the American Venous Forum**

Peter Gloviczki, MD, and al. JVS 2011

**Results with preservation of the saphenous vein.**Results with CHIVA. Two RCTs188,191 compared standard treatment(compression or high ligation, stripping, and phlebectomy) with CHIVA approaches with specific anatomic patterns of reflux (types I and III shunts). For the specific venous anatomy evaluated in these trials, **such techniques were better than compression in preventing ulcer recurrence188 and were at least equivalent to stripping of varicose veins.191** Although the first two RCTs focused on a small group of patients with varicose veins, the trial of Pares et al192 deserves credit for including the full spectrum of patients with primary varicose veins. CHIVA is a complex approach, and **a high level of training and experience is needed to attain the results presented in this RCT**. However, the results achieved by a few outstanding interventionists does not support offering this procedure to all practitioners.Although CHIVA has called attention to the importance of directing surgical procedures toward the patient’s venous anatomy and function**, it still requires considerable education of venous interventionists willing to learn this approach**.