



:
 :
 가
 12
 가
 1, 1, 2
 ,
 2
 5
 : 12
 4.5
 12.5 cm
 가 1 ,
 가 1
 12
 11
 가
 12
 11
 , 1
 :

가
 15% 25%
 (1).
 , 가 (1).
 (primary varicose vein)
 (greater saphenous vein)
 (3-7).
 (lesser saphenous vein)
 가
 가 (4).
 (2).

2003 5 2006 5
12 130
가 3 가 9
55 (32 - 74)
가
(CT venography)
가
가 5mm
(3).
0.05% (,)
(tumescent anesthesia)
1%
10 cc
(Fig. 1).
가



Fig. 1. Location of the varicosity was marked on the patient's skin.

11 3 mm
Ramelet
(Venosan North America, North Carolina, U.S.A.) (Fig. 2)
가
(Fig. 3).
가



Fig. 2. The photograph of RAMELET hooks.



Fig. 3. Greater saphenous vein was avulsed through skin incision.

5 cm

가

Abuckle sinus probe (Medtronic Xomed, Jacksonville, FL, U.S.A.)
(dissection)

(Fig. 4).

(Suture strip, Shippert, Centennial CO, US)

(Duomed, Medi Bayreuth, Germany)



Fig. 4. Varicose vein was avulsed and removed through skin incision.

1, 1, 2
,
,
2
5 (, , , ,)

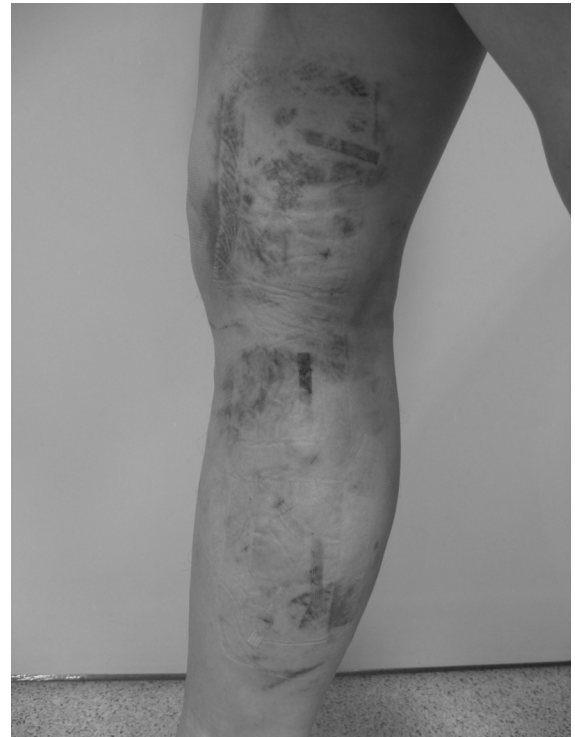


Fig. 5. Multiple bruise and hematomas were seen around skin incision.

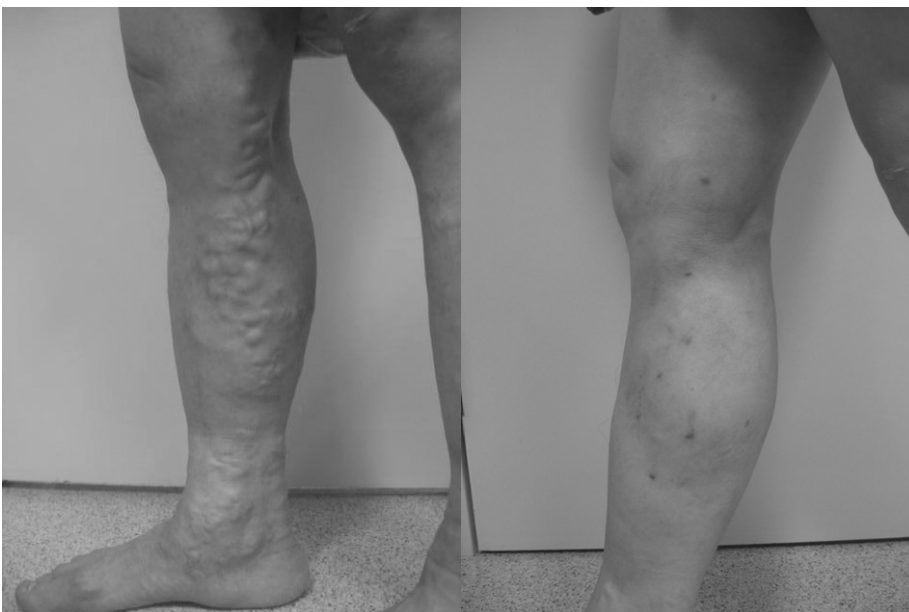


Fig. 6. Photographs obtained before and after ambulatory phlebectomy.

가 , ,
 , 1 (Table 1). 12
 2 5 - cm ,
 10 10 cm .
 4.5 (2 - 9) 12.5
 cm (5 - 18.5 cm)
 8.9 mm (4 - 12.5 mm) .
 1 40 (40 - 175)
 가 12 1 (Fig. 5) ,
 가 1 .
 가 7 , 7 ,
 가 2 ,
 . 12 2
 12 11

Table 1. Symptoms and Signs of Patients with Varicose Vein

	Befor Treatment	After Treatment
Mulsle spasm	7	0
Timgling	2	0
Paralysis	1	0
Edema	6	0
Ardor	1	0
Pain	2	0
Discomfort	11	0

pulling technique)

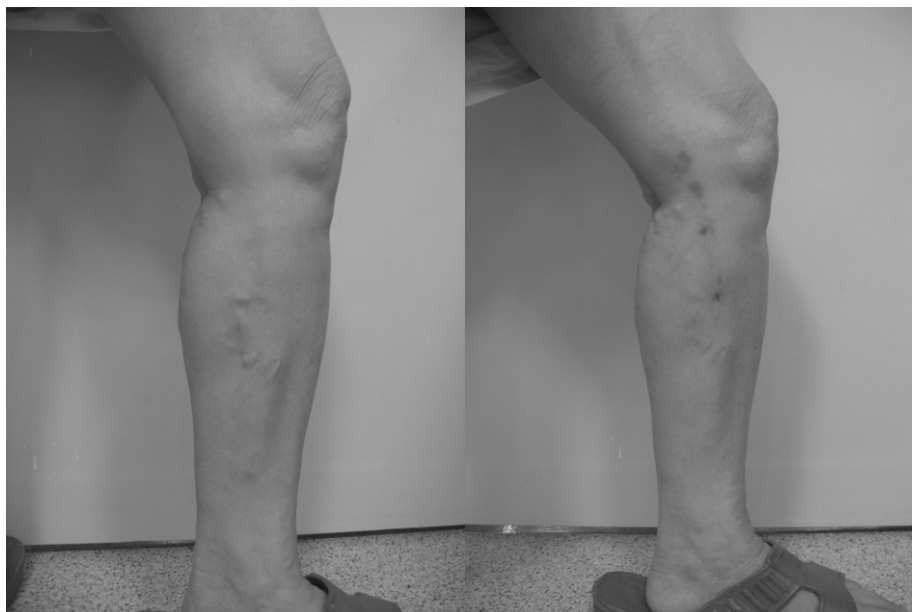


Fig. 7. Small segment of varicose vein remained after ambulatory phlebectomy.

(4). Sadick (3) multi -
focal pull through technique
가 가

, 가
5 cm 3 mm

. Multi - focal pull through technique
가
가 (3). 12
1

, 가 , ,

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Ambulatory Phlebectomy at Radiologic Outpatient Clinic¹

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Purpose: To evaluate safety, efficacy, and patient's satisfaction of an ambulatory phlebectomy, performed at a radiology outpatient clinic.

Materials and Methods: Between 2003 and 2006, an ambulatory phlebectomy was performed in 12 patients. Endovenous radiofrequency ablation was performed through a venotomy. The venotomy was ligated after RF ablation, and the ambulatory phlebectomy was performed. The patients visited the radiology outpatient clinic one day, one week, and 2 months after the procedure. The improvement in the clinical symptoms, cosmetic change in varicosity, and the procedure related complications were evaluated. The patient's satisfaction was evaluated using a 5-grade scale.

Results: RF ablation through a venotomy was performed successfully in all 12 patients. On average, 4.5 incisions were made, and 12.5 cm of varicosity had been removed. The mean procedure time was one hour and forty minutes. The complications of the ambulatory phlebectomy were bruising in one patient, and skin pigmentation in another. The complications associated with RF ablation were a hard palpable vein in 7 patients, numbness in 7 patients, and skin pigmentation along the vein in 2 patients. Follow-up duplex sonography was performed at 2 months after the procedure, showed complete occlusion in all 12 patients. The clinical symptoms had improved in 11 patients, and the varicosity disappeared cosmetically in 11 patients.

Conclusion: An ambulatory phlebectomy, combined with RF ablation of the greater saphenous vein, can be performed safely and effectively at a radiology outpatient clinic.

Index words : Veins, extremities

Veins, transluminal angioplasty

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