

PROGRESSION AND RECURRENCE OF VEIN DISEASE IN PATIENTS TREATED WITH ENDOVENOUS LASER ABLATION: ONE YEAR EXPERIENCE

The physicians of Vein Clinics of America recently presented the following abstract at the 21st Annual Congress of the American College of Phlebology. This study was selected as the gold abstract for being one of the three most outstanding pieces of original research presented at the Congress.

AIMS: Although there is abundant data regarding the incidence of recurrence of reflux at the SFJ and SPJ after endovenous laser treatment (ELT), there is little data concerning tracts of recurrent flow, other than at the junctions, that occur in veins that have been treated with laser.

METHODS: This is a retrospective analysis of 96 cases (112 veins) treated with ELT (980 nm: 60 and 1320 nm: 48). Complete Duplex ultrasound scanning was done at 1, 3, 6, and 12 months and any reflux (>0.5 sec.) was noted. New vein disease (progression), recurrent or continued flow through a segment of previously lased vein (recurrence), and continued or new branch vein reflux seen on ultrasound at any follow-up evaluation was treated with ultrasound-guided foam sclerotherapy.

RESULTS:

Recurrence				
	1 mo.	3 mo.	6 mo.	12 mo.
IP1	7	8	5	3
IP2	7	13	4	2
SFJ	14	13	6	4
SPJ	1	2	1	1
B F	38	24	12	6

Progression				
	1 mo.	3 mo.	6 mo.	12 mo.
IP1	0	1	0	0
IP2	5	4	1	0
SFJ	0	0	0	0
SPJ	1	4	1	0
B F	2	4	1	0

IP1 = incompetent perforator in the thigh
 IP2 = incompetent perforator in the calf
 BF = branch feeder

CONCLUSIONS: In the first year after endovenous laser ablation, recurrence of reflux in treated veins occurs far more commonly than progression of new disease (171:23); the incidence of both decreases over time. New incompetent perforators in the thigh and calf *and* new SFJ incompetence accounted for all of the progression of new vein disease seen in previously untreated veins. Progression of new disease was seen more commonly at three months of follow-up than at any other time. Incompetent perforators in the thigh (13.5%) and calf (15.2%) and antegrade-flowing branch (feeder) veins (46.8%) are a greater source of recurrence in previously lased veins than failure to close or reopening of the SFJ (21.6%) or SPJ (2.9%). Assurance of long lasting treatment success will depend on careful Duplex ultrasound follow-up, especially at three months, looking for incompetent perforators and feeders along the course of the treated veins, as well as evaluation of the treated junctions.