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**SAPHENOUS ABLATION USING EVRF RADIO FREQUENCY  
EQUIPMENT AND CATHETER CR45i .  
INITIAL EXPERIENCE IN AMERICA.**

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*The saphenous radiofrequency ablation has been used since 2002 by our group and we currently have performed over 700 procedures.*

*The Belgian team has used EVRF for 13 years for trans-dermal treatment and from last year began its use in Europe for the treatment of saphenous veins. It uses radio frequency at 10 MHz (high frequency) and 25 watts which allows an effective treatment of the vessel wall but with less heat transfer to the peripheral tissues, causing less collateral damage and improving surgery outcomes.*

*Objective: To evaluate the effectiveness of treatment and permanent results using the EVRF and a CR45i catheter for ablation of the internal saphenous vein in patients with sapheno femoral reflux.*

*Method: from June 16, 2011 to September 16, 2011 were submitted to saphenous ablation 20 patients with saphenous reflux, using the EVRF equipment and the CR45i catheter with an output power of 25 watts. The catheter removal rate was 15 shots at the beginning and then removing .5 cm every 3 to 4 shots. The total power emitted, and the diameters of the treated vein were recorded. Accepted protocol was used for thermo-coagulation techniques, initiating ablation at 2 cm from the sapheno femoral junction and administering tumescent solution.*

*Clinical evaluation was performed a week after surgery and one month after using a scale of post-operative pain, post operative patient satisfaction and outcome ultrasound procedure.*

*Results: the procedure was performed in 48 limbs of 30 patients with saphenous vein diameters no greater than 1.8 cm, using an amount of 3000 Joules total energy emitted on average; Finding a complete occlusion of saphenous vein (44/48), incomplete occlusion without reflux (3/48) and incomplete occlusion with reflux (1/48) procedures. Postoperative pain reported by patients on a visual analog scale was 2 / 10 and the average patient satisfaction was 9 / 10. There were no cases of deep vein thrombosis or burns neuritis.*

*Conclusion: The saphenous ablation with EVRF radio-frequency equipment and catheter CR54i is highly effective in the treatment of femoral saphenous reflux, with high patient acceptance and minimal postoperative discomfort, and high levels of safety.*