## XLIII National Congress of Angiology y Vascular Surgery from October 29<sup>th</sup> until November 2<sup>nd</sup> 2011. Aguascalientes, Ags.

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## SAPHENA TREATMENT WITH HIGH FREQUENCY USING THE EVRF DEVICE WITH A CR45i CATHETER. FIRST EXPERIMENT IN AMERICA.

Our group has been using the saphena treatment with high frequency since 2002 and has performed more than 700 since.

The Belgium device EVRF has been used for 13 years for endovenous treatments and since last year in Europe for saphena magna. It generates a 4-10 MHz radio frequency (high frequency) which allows an effective treatment of the vein wall and with minimal damage to the surrounding tissues; causing less pain and improving the post-surgery results. Goal: Estimate the effectiveness of the treatment and the permanent results using the Belgium device EVRF with the CR45i catheters, to remove the internal saphena of patients with femoral saphenous flow problem.

Method: 30 patients, with femoral saphenous flow problems, were treated from June 16<sup>th</sup> 2011 until September 16<sup>th</sup> 2011 with the EVRF, the CR45i catheter and a power of 25 watts. The speed removal of the catheter was first after 15 shots and then after 3 or 4 shots for each half centimeter. Recording the total power used as well as the size of the treated vein. The followed protocol goes along with the thermocagulation techniques, beginning with the removal at 2 cm of the femoral saphena junction and injecting a tumescent solution.

An evaluation was carried out during the same week of the surgery and during the month, using a post-surgery pain scale, post-surgery satisfaction of the patient and ultrasonic results of the treatment.

Results: 34 cases based on 30 patients were treated with this procedure, with a saphena diameter of 1.8 cm, tranmitting 3000 Joules average total energy. Meeting a total occlusion of the saphena vein (29/34) Partial occlusion without flow problem (4/34) and partial occlusion with flow problema (1/34). The post-surgery pain of the patients was 2/10 and the average satisfaction of the patients was 9/10. The patients didn't have any deep vein thrombosis, side burns or refractory neuritis.

Conclusion: The most reliable EVRF device and the CR45i catheter are highly effective to remove femoral saphenous, perforating and colateral veins with the CR12i and CR30i catheters. It causes mínimum pain and post-surgical side effects.