EVOLUTION OF ENDOVASCULAR VEIN PROCEDURES: GLUE EMBOLIZATION OF PERFORATOR VEINS WITH DIRECT PUNCTURE-TECHNIQUE. MONOCENTRIC INITIAL EXPERIENCE.

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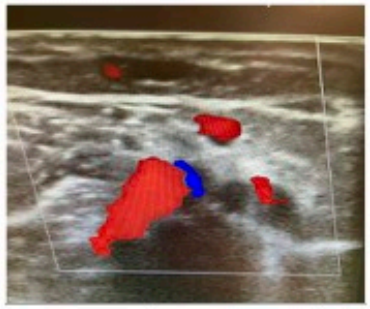
BACKGROUND: In the last few years, the surgical treatment of varicose veins has undergone to a progressive, but substantial, evolution towards minimally invasiveness, both in the primary treatment and in that of relapses. To date, non-ablative surgical techniques are increasingly used in the treatment of saphenous insufficiency. Instead, there is not much medical literature on the treatment of insufficiency of the perforating venous system. To evalue the short-term results obtained in endovenous glue embolizzation procedure of the perforator vein insufficiency of the lower limbs.

METHODS: Between February 2020 to October 2021 we treated a total of 72 patients (37 female and 35 men) at Our Center, suffering from venous insufficiency affecting the perforating system. The mean diameter of the treated veins was 10,09 mm and the mean length treated was 29,7 mm. The endpoints were: closure of the target vessel and complications. The procedures were conducted on local anesthesia with percutaneous access, using a butterfly-needle or directly with 14 G needle at operator's discretion and according to the size of the vessel to be treated. The entire procedure was performed under ultrasound guidance. The glue "Venex" is manufactured by Vesta Tıbbi Cihazlar.. The tip of the needle was positioned in the suprafascial afference of the perforating vein. Under ultrasound guidance, pressure was exerted on the skin projection of the subfascial tract of the vein for 20 seconds. At the end of the surgery an ultrasonographic closure check was performed and an elastic sock monocollant 35 mmhg was applied, with the indication to wear it h24 for 3 days and then only during daylight hours for a further 4 days.

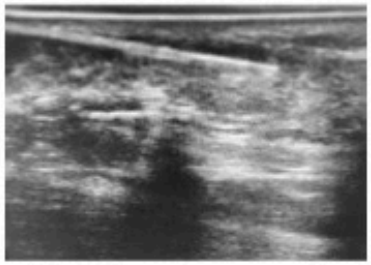
RESULTS: There were no intra- and post-operative major complications. The occlusion rate of the target veins was 100% at 7- and 60-day controls. We report superficial bruising in only in 7 cases. Short-term results demonstrate closure rates comparable to those obtained with thermoablation occlusion.

CONCLUSION: Endovenous Glue Occlusion is a safe and reproducible procedure. In particularly we found the technique advantageous in the treatment of superficial and small vessels, as well as venous segment adjacent to nerve structures.

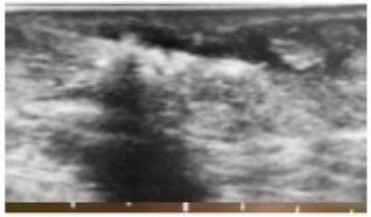
KEYWORDS *: Glue embolization , intravenous occlusion , intravenous occlusion; varicose veins; Glue embolization; venous insufficiency. , varicose veins , venous insufficiency.*



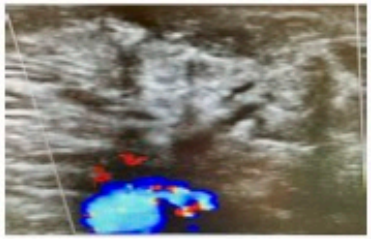
Preoperative image of incompetent perforator vein



Ultrasound-guided percutaneous puncture of the vein in its suprafascial tract



Glue embolizzation



Postoperative image of deep vein patency