Floating thrombus at GSV junction – chance for instantaneous endovenous repair. A case report.

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Background

A 75 year-old male patient (former general practicioner) presented for ultrasound examination with varicose veins. Incidentally, a floating egg-shaped thrombus was found at the right SFJ. Thrombus size was 14 x 7 x 6 mm, located in a clearly refluxive vein of 9 to 16 mm Ø. Due to threatening embolism, the decision was to go for immediate endovenous treatment.

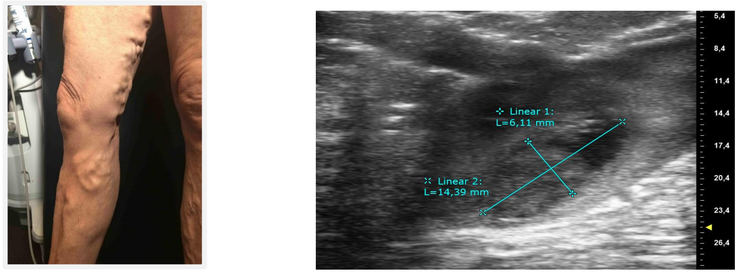

Fig. 1: a) at first presentation, b) floating thrombus at the saphenofemoral junction

Patients and Methods

As a first step, the saphenofemoral junction was narrowed by ultrasound-monitored perivenous saline (Klein´solution), injected with a 21 G needle (120 mm) in coaxial approach. A soft PTFE catheter (PhleboCath®, 2.3 mm) was positioned distal to the thrombus. Using a 810 nm laser device (12 W, Medart, 600 micron spherical fibre), the thrombus was fixed by coagulation. The diseased GSV was occluded with the same laser (80 – 120 J/cm). Discharge with Clexane 2 x 20 mg s.c. for 3 days, film compression bandage for 14 d, compression stocking class II, after 30 min. of walking and final checks (Fig. 3). Total 2.5 hours of clinic stay.

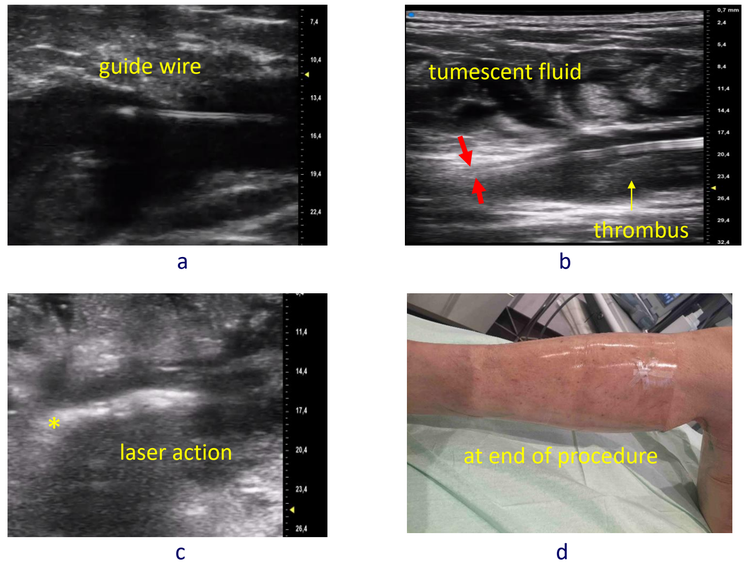

Fig. 2: a) guide wire positioned, b) proximal lumen narrowed (red arrows) by coacial fine needle injection of tumescent fluid, c) laser action (*= start point), d) at end of procedures, parts of film bandage already put on.

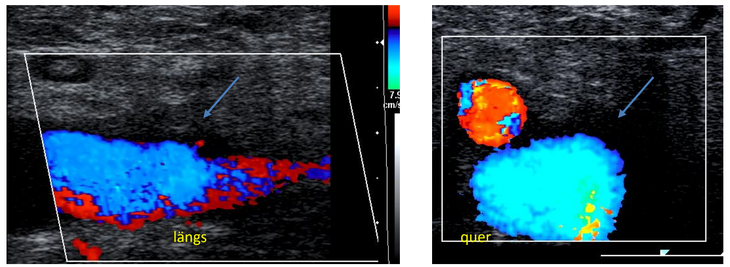

Fig. 3: junction morphology prior to discharge (2.5 h)

Results

The final images showed exact closure of the GSV at femoral level with laminar flow within the femoral vein (Fig. 3). The post-interventional period (follow-up: 2 - 4 - 8 weeks) was asymptomatic with just a minimal discomfort along the treated vein for few days, not limiting any activities and not requiring medication. The patient presented very satisfied for one year FU (Fig. 4).

Fig. 4: Comparison of status at first presentation and at one year follow-up)

Conclusions

Surgical thrombus removal would have been the standard choice, offering reliable prevention of embolism. Interventional thromb-aspiration is less safe and more invasive if a VCF device is used. A large and phlebitic GSV may be better suitable for surgical extraction in standard clinics. However, the chosen strategy to fix the thrombus is as well highly safe in preventing embolism. It is minimally invasive even if including treatment of the GSV and all varicosities at the same time, requires just local anesthesia and allows immediate ambulation with just few days of anticoagulation.

See work group website for video:
www.venartis.org