Plymouth Nuffield Hospital

Ultrasound Guided Foam Sclerotherapy

- Varicose veins are a sign of underlying venous insufficiency and affect 20-30% of adults. Long saphenous vein insufficiency is the most common form of venous insufficiency in people presenting with symptoms. People with venous insufficiency may have the following symptoms: fatigue, heaviness, aching, throbbing, itching and cramps in the legs. Chronic venous insufficiency can, in some patients, lead to skin discoloration, inflammatory dermatitis and ulceration.

- Conservative methods such as compression therapy (for example, bandages or stockings) may be considered for patients with small varicose veins. If the condition is more complicated, the main treatment options are sclerotherapy and/or surgery (such as ligation or stripping). Ultrasound-guided foam sclerotherapy for varicose veins is a variation of established sclerotherapy techniques that use liquid injection. It uses a sclerosant solution that has been transformed into foam by being forcibly mixed with air.

- A needle is inserted into the main affected superficial vein and is monitored using ultrasound imaging. Sclerosant foam is then injected and monitored. Once the foam has filled the entire main superficial vein, the top end of the vein may be compressed to keep the foam in the superficial veins. The foam causes inflammation of the vein wall, obliteration of the vein's lumen and vein occlusion.

- Further injections may be given during the same session to make sure that all the varicose veins have been completely filled. If any vein is incompletely treated, further injections can be given in a second session. In most cases a single treatment is sufficient, in about a third of cases we need to repeat the treatment to deal with the remaining veins.

- The National Institute for Health and Clinical Excellence (NICE) published guidance in June 2006. Current evidence on ultrasound-guided foam sclerotherapy for varicose veins suggests that it is efficacious in the short term. Studies have shown the treatment to be successful in around 67-97% patients after 3 weeks to 2 years of follow up. However, the current published evidence does not provide clear evidence of the efficacy of this treatment particularly in the long-term and further studies are ongoing.

- The potential complications of this procedure are deep vein thrombosis, thrombophlebitis and allergy. A very few people have had transient visual disturbances or chest discomfort immediately after the treatment, this is very rare and does not last, others have had a bad headache.

- After a few weeks there may still remain a hard lump and some bruising where the vein used to run, THIS IS NORMAL and will resolve, it indicates that the treatment has worked well. A small number of patients may get some pigmentation developing in the skin overlying the treated veins. This tends to fade with time but may not resolve completely.

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Ultrasound Guided Microfoam Sclerotherapy - Treatment

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