GENERAL INFORMATION SHEET FOR
SCLEROTHERAPY
(Injection treatment of varicose veins)

This treatment was designed many years ago and popularised in the United Kingdom in the 1960's. The procedure involves the injection of a solution (called sclerosant) into unwanted varicose veins. The injected veins then go solid and are absorbed by the body. All of the injection treatments for varicose veins are based on the principle of damaging the lining of the vein to be obliterated. Over the past ten years several agents have been used to achieve this effect. The agent that is currently the most satisfactory for this treatment is known as "Aethoxysklerol" or its generic name "Polidocanol". This agent is a surfactant, which means that it has a soap like action, which leaches the fat from the wall of the vein, resulting in the vein collapsing and going solid. Pregnancy is the only contraindication for treatment with this agent.

WHAT VARICOSE VEINS ARE SUITABLE FOR INJECTION TREATMENT?

Sclerotherapy treatment alone is only effective for small veins of less than 4mm diameter. If larger veins are treated by this technique alone, recurrence usually occurs in 12 months with secondary brown staining. Large varicose veins or veins secondary to incompetent valves in the main surface veins only respond to injection treatment for a year or two. Brown staining, that does not fade, is the penalty of treating these high pressure veins with injections alone.

The large lumpy varicose veins that occur with major leaks in the valves of the main surface leg veins are better managed by Surgery or “Coiling”.

Left over veins after Surgery, Coil treatment or Laser treatment are suitable for injection treatment.

Small surface veins called “Starburst veins”, “Spider Veins”, “Broken Capillaries”, “Dermal Venules” or “Reticular Veins”, that look like bruises, are suitable for injection treatment. These veins do tend to recur with time and although eliminated with treatment regrow elsewhere on the legs. They also occur on other areas like the face and chest. These veins are also managed by injection but facial capillaries and veins often do well with combined Laser an Sclerotherapy. Because these small veins regrow elsewhere with time treatment is best regarded as an ongoing commitment similar to haircuts but less frequent.

Laser treatment is only useful for the main surface vein, called the long saphenous vein, or small facial capillaries. It is not useful for lumpy veins or surface veins on the lower limbs.

THE TREATMENT:

You will notice, with the treatment minor discomfort from the needle pricks and some stinging sensation from the agent itself. Excessive pain on injection usually indicates some leakage of the agent from the vein but this stops quickly. Multiple injections are performed sequentially until all vessels have been treated or the maximum dose of sclerosant is reached. Following each injection the vein is compressed by means of a cotton wool ball and a strip of adhesive tape. Once all the injections are completed on a limb a compression bandage is applied. This results in the vein walls being pushed together so that they “stick”. The compression therefore is an important component of the treatment of larger varicose veins although smaller spider veins do not require this. You must take your bandages off and remove the tapes and cotton wool balls either on retiring or first thing the next morning. The leg will be bruised and lumpy and somewhat tender. This is a normal response. You may be instructed to rebandage the legs to the knee for a further one to two days but this is an uncommon requirement.

The use of elastic stockings or “Skins” may improve comfort in the days following treatment but is not essential. The wearing of stockings after completion of the bandaging phase is therefore optional.
The normal events following treatment are as follows:

**Bruising** is common and occurs in the area of injection and this usually takes two to four weeks to resolve. **Inflammation** occurs around the solidified vein as it is absorbed and this process starts up after about one week and can last as long as six months for the larger veins. This produces a sore lumpy area in the leg.  **Swelling** is common after treatment especially around the ankle region. Any swelling extending to the level of the knee should be reported to Mr Milne’s office.

The solidified vein itself will go a dark colour and this colour will fade with time. The time taken for this colour to fade away depends on the vein size and can range from six weeks to two years. The deposition of brown substance (Haemosiderin) from the absorption process of the vein often occurs in the skin and this can take up to two years to resolve completely. The overall improvement in comfort and appearance usually occurs in six weeks after commencement of therapy.

**COMPLICATIONS:**

**Pain:** Pain can occur, on injection, in the form of a stinging sensation. When the vein wall leaks sclerosant into the tissue this pain can be uncomfortable. Normally this resolves, with no untoward effects. Persisting pain usually indicates difficulties with the process and should be reported.

**Ulcers:** Ulcers or blisters can arise as the agent used damages vessels. Entry or leakage of the agent into the capillaries of the skin can produce damage to a small area of the skin causing a black scab or a small ulcer. Small scabs or ulcers usually heal spontaneously within six weeks. The risk of this complication is one in five hundred treatments. Very rarely a large area can be damaged and require surgical treatment.

**Anaphylaxis:** Severe allergy (life threatening) occurs in approximately one in two million treatments with this agent. It happens within minutes of the treatment.

**Rash:** Sometimes a rash can occur and the incidence of this is approximately one in five thousand treatments.

**Deep Vein Thrombosis:** There is a risk of damage occurring to the deep veins inside the leg but less than one per 10,000 treatments have resulted in this complication.

**Swelling:** Because the obliteration process involves inflammation, swelling can occur in the limb that has been injected for some period of time (6 weeks).

**Cough:** A cough may occur with a feeling of tightness in the chest and this resolves in 5-10 minutes.

**Migraine:** A migraine headache, unusual tingling or numbness of a limb or visual aura may occur but also resolves quickly.

**Bandaging:** Although bandaging can cease after twelve hours a better result usually occurs if the bandages are kept on for an extra day but you will be advised as to the best option. Elastic compression stockings are useful but not essential after treatment. Smaller capillary or starburst veins do not require compression for more than a few hours.

**Facial vessel injections:** These experience far fewer problems than those listed. Usually swelling is noticeable for 2 days and some redness for 6 weeks.

**Costs:** Cost is $450-650 per treatment. The agent is expensive and service costs high. A rebate from Medicare is available for treatment of large veins and also “safety net” can sometimes apply. Small vessels (spider veins or star burst capillaries) do not attract a Medicare Benefit for treatment.

**Complications:** Any complication of treatment should be referred back to this office. Your local doctor will look after any normal illness but difficulties with this treatment have to be reported to Mr. Milne for correct management.
Aethoxysklerol is a sclerosant used to inject varicose veins, venules and spider veins. It has been used in Europe and the United Kingdom for many years on thousands of patients. Over the last nine years it has been used in the United States. According to extensive information, that is available overseas and in Australia, it is the safest and most effective sclerosant available in the world to date. The major advantages of this sclerosant is the minimal pain on injection and the low incidence of serious complications compared to older available sclerosants in Australia. The agent is now approved in Australia and providing that it is used properly, it is safer than the older sclerosants.

Possible side effects are as follows:

1. **Anaphylaxis** It is extremely rare but one case has been reported overseas.
2. **Allergic Reactions** These are mainly in the form of minor rashes. Only one reported rash in several thousand treatments.
3. **Local Skin Ulcers** These are uncommon (1:500 treatments) and tend to be very small. They form as a black scab with surrounding red skin. If such an event occurs they are best managed by this office. Occasionally excision of an ulcer with suturing may be necessary and this is done usually under local anaesthetic.
4. **Deep Vein Thrombosis** This is extremely rare but requires immediate treatment.

Any complication must be reported to the office immediately.
At the time of your first consultation you will be given this information sheet and asked to read it carefully. At a subsequent consultation you will have your injections and should you have any questions or queries then please make sure that you ask Mr. Milne these questions before signing the consent form.

“**AETHOXYSKLEROL**” (Polidocanol)

An ongoing study of the safety and effectiveness of polidocanol by 98 investigators in Australia infecting 16,804 limbs over 2 years. OBJECTIVE. To evaluate the complications of polidocanol and compare its effectiveness and complications with sodium tetradecyl sulphate (STD) and hypertonic saline. METHODS. A single-arm prospective study of polidocanol complications and its effectiveness as a sclerosant was performed. This was compared with each investigator's previous experience with other sclerosing agents. Patients had either varicose veins or venule ectasias and/or spider veins (telangiectasia).
A total of 16,804 limbs were injected by 98 investigators. Sclerotherapy was performed with 0.5% or 1% polidocanol for telangiectasias or spider veins, and with 3% polidocanol for varicose veins. The effectiveness of the sclerotherapy and any complications were reported during a 2-year period. RESULTS. There were very few complications reported with polidocanol. There were no reported deaths or anaphylaxis. The investigators with previous experience of other sclerosants considered that the effectiveness of polidocanol was superior to STD (85%) and hypertonic saline (84%). Ninety percent of investigators considered that polidocanol had less frequent complications than STD, and 80% considered that these were less severe. Seventy-four percent considered that polidocanol had fewer side effects than hypertonic saline, and 74% considered that these were less severe. CONCLUSIONS. Polidocanol is an effective sclerosant that has few complications.
REQUEST FOR INJECTION OF AETHOXYSKLEROL
FOR SCLEROTHERAPY OF VARICOSE VEINS.

I, _______________________________ have read Mr. Milne's information sheets
About “Aethoxysklerol”, the sclerosant and I fully understand the side effects
and possible complications including ulceration.

I consent to being injected with the above drug.

Signature: __________________________

Witness: ____________________________

Date: ______________________________

(c 08/14)

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