Common questions patients have regarding cosmetic sclerotherapy:

- # Sessions
- Cost
- Is treatment permanent?
- Expectations for veins to “disappear”
- Can I come every week?
- Why do my veins look the same or worse after the first session?
- When can I resume “normal activities post treatment”?
- What are the most common post-treatment side effects? bruising, lumps, staining?
- What is the worst thing that can happen? Is it permanent?
Note Blue Color!
Arteries are clear, no color and have a pulse
Position patient supine using pillows for comfort

Cleanse area

With gentle pressure, make site taut

Using 32 gauge needle with 1% Polidocanol (1st treatment) or 0.2% Sodium tetradecol sulfate (subsequent treatment),

Insert needle, aspirate small amount of blood, prior to injecting

or watch for vascular access at the tip of the needle

Inject with the needle bent at an angle of 15 degrees

Once intravascular, slowly inject 0.1-1cc solution each vein marked for treatment

Veins may collapse if solution is injected too forcibly or too quickly.

Remove needle, wipe, and apply pressure for 5-10 minutes

Apply ice immediately to any bruised areas

Patient to remain supine for 30 minutes post-injections with cool packs/ice packs

Patient encouraged to ice areas frequently

Keep head slightly elevated overnight following session
SCLEROTHERAPY PEARL

Remember, a needle dulled by repeated use will be more painful for the patient, and make it more difficult for the sclerotherapist to successfully inject a vein.

Changing needles frequently will avoid such problems.

Use 30 ga. or 32 ga. Needles for feet, face and hand veins unless using large amounts of foam then use a 27 ga. Needle so as not to break up your foam bubbles.

These face veins better treated with superficial lasers

• Telangiectasias are described as flat red vessels between 0.1-1 mm in diameter

This improvement was after 2 sessions.

Dr. Goldman's 2002 article concurs our statistics of 90% improvement after 2-4 sessions.
Patients feel that they will have a more "Youthful Appearance" after injections. Others go on to have fat injections or fillers after the veins are removed with phlebectomy or sclerotherapy.

**Hand Sclerotherapy Compression**

- Wear your compression gloves and/or ace wraps until the next morning.
- Remove to shower.
- Wear gloves or wraps, at night, for as much of the next week as possible.
- Readjust your ace wraps whenever they feel too tight.
- Avoid soaking your hands in hot baths, showers, or dish water to minimize dilating the veins in the first 48 hours.
- Use ice packs on the injected areas of your hands, over the wraps or gloves, for 15-20 minutes every hour until bedtime for the first two days as much as possible to aid in healing and to minimize bruising.
- Elevate your hands to shoulder level as often as possible.
- Avoid leaving your hands down at your side, both day and night for the next week to minimize swelling.
- Normally pain medicines are not necessary.
- You may take Tylenol or Extra Strength Tylenol after your procedure, before bedtime and the next day as needed.
- Add Benadryl 25 mg or replace the bedtime Tylenol with Tylenol PM if needed to assist with sleep.
- Please do not take any form of Aspirin, Excedrin, or Ibuprofen for 3 days after your injections, as those medicines may increase bruising.
CONTRAINDICATIONS FOR HAND SCLERO:

- Foreseeable need for future IV access, if patient frail, debilitated and limited veins
- Presence of dialysis shunts
- Carpel tunnel syndrome
- Chronic hand pain, weakness, edema,
- Severe arthritis or functional abnormalities
- Post radical mastectomy with lymphedema component
- Blood clotting disorders or severe circulation disorders
- Pregnancy and lactation

LUMP AND BRUISE
Telangectasias are described as flat red vessels between 0.1-1mm in diameter.
DO NOT inject healthy veins on top of the feet.

If venous insufficiency has been treated, and this is matting/neovascularization, then sclerotherapy and laser may be indicated.

- First session with 5% Asclera® (polidocanol) liquid solution
- or 2% STS Sotradecol® (sodium tetradecyl sulfate injection)
- position patient to access injection site
- cleanse area
- using gentle pressure, make site taut
- slowly insert 30 gauge needle with 1% Polidocanol
- aspirate for small amount of blood or use the puncture feel technique - “feeling” of perforating the vein wall and then observe for confirmation of vascular access
- once intravascular, slowly inject up to 1-2cc solution
- withdraw needle and wipe
- apply compression pads and to remain in place 24 hours
- apply ice packs to injection sites as needed for bruising for the next 24 hours
- No hot showers, nor weight lifting or intense straining for 24 hours
- Use compression stockings or socks, 3 weeks, 30 mmHg, first night, then only waking hours thereafter.
### Side Effects of Sclerotherapy or Phlebectomy

- **Always:** Loss of intravenous access sites
- **Often:** Intravascular thrombi, dysesthesia, parathesia, pain
- **Rare:** Permanent vascular matting, motor deficits
- **Never:** Postoperative pigmentation

### Post Sclerotherapy: Compression Pearls

- Apply local compression immediately following injection
- Spot compression may be applied over injection sites with beveled STD compression pads and micro pore tape, so you can move on
- Compression pads are particularly helpful when treating bulging vessels and for patients who bruise easily.
**Agents Used as Sclerosing Treatment**

**Detergents:**
- Sotradecol® (sodium tetradecyl sulfate injection or STS 1%, 3%)
  - FDA approved
- Asclera® (polidocanol) Injection
  - FDA approved

**Osmotic agent**
- Hypertonic saline - not FDA approved for sclerotherapy

**Chemical irritant**
- Glycerin

---

**Advantages:**
- Low allergic potential
- High yield of effectiveness
- Patient acceptance
- Effective for a wide range of vessel size
- Perivascular infiltration reasonably tolerated
- Can be foamed

---

**Disadvantages:**
- Asclera and STS Not FDA approved in foam

---

**Asclera® (Polidocanol) Injection**

**Mechanism of Action**
- Active ingredient is polidocanol
- Locally damages the endothelium of vessels
- Dense network of platelets, cellular debris, and fibrin occludes the vessel
- Vein replaced with connective fibrous tissue

**Pharmacodynamics**
- Concentration- and volume-dependent damaging effect on endothelium of blood vessels
**Advantages:**
- FDA approved
- Very low incidence of allergic reaction
- Low incidence of hyperpigmentation and matting

**Mechanism of Action:**
- Sclerosant aggregates at endothelium

- Asclera<sup>®</sup> contact and disruption of the endothelium

- Sclerosant produces endothelial damage

- Destruction of the endothelium
• Platelets and cellular debris begin to occlude vessel as a clot is formed

SCLEROSANT

Endothelium damage

Platelets, cellular debris

• Vein replaced with fibrous connective tissue

Destroyed vein

Protocols

■ STS
  ■ < 3mm veins -.1-.25 % liquid solution
  ■ >3mm veins .25 % - 3 % liquid or foam

■ Polidocanol
  ■ <3mm veins .3% - 1%
  ■ >3mm veins .5% - 3%

• Foam is not commonly indicated for use on veins <2 mm
Spider Veins (≤1mm)

Reticular Veins (1-3mm)

FOAM SCLEROSANTS
- Any detergent can be foamed
- Foaming increases effectiveness by increasing the surface area of the solution on the vein wall and displacing the blood for a longer contact time

PREPARING FOAM
- Foam is prepared by using a 3 way stopcock with 2 syringes
- 0.2% sts FOAM is used in cases that would normally require 0.5% STDS
- ½ cc of Sclerosant: 2 cc of air is the commonly used solution
- Foam Solution must be mixed and used immediately because bubbles dissipate quickly
### Side Effects/Complications of Foam Sclerotherapy

- Injection site itching
- Chest discomfort
- Localized pain
- Dizziness
- Localized burning
- Nausea
- Tingling
- Headache
- Localized erythema
- Visual disturbance
- Metallic taste
- Respiratory difficulty
- Changes in Mentation
- Hyperpigmentation
- Ocular Migraine
- Cutaneous necrosis
- Thrombophlebitis
- Dry cough
- Circumoral paresthesia

### Aspiration of Trapped Blood

![Image of aspiration procedure]

### Post Sclerotherapy

- **Treatment Interval**
  - Probably no more frequently than every 3-5 weeks

- If not meeting patient or therapist expectations, consider increasing concentration or changing sclerosing agents
Bowes, Goldman—Sclerotherapy of reticular and telangiectatic veins of the face, hands, and chest
Dermatol Surg 28:1 Jan 2002


Treatment of Hand Veins: Rejuvenation of the Aging Hand: Neil Sadick, MD FACP FAACS, FACPh
ACP Presentation, Nov 2012 Hollywood Florida

For more information:
Contact Terri:
Email:
info@morrisonvein.com
Office:
480-860-6455
Cell:
602-692-7066