Sclerotherapy For Telangiectasia

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No Disclosures

Goals of Sclerotherapy

- Irreversible damage to the endothelium
- Vascular fibrosis and obliteration
- Minimal dose and concentration
- Avoidance of injury to normal vessels and surrounding tissue

Preparation and Technique

- History and PE
- Expectations
- Consent
- Photographic documentation

Determine the Source of the Spider veins

- Axial vein reflux
- Perforator vein reflux
- Spider veins associated with reticular veins
- Isolated spider veins

Equipment

- Sclerosants in varying concentrations
- Syringes 1 to 3 cc
- 27 and 30 gauge needles and or butterflies
- Cotton balls soaked with alcohol
- +/- magnification
- +/-Polarized lights or “vein lights”
- +/-infrared imaging
- +/-inventory of compression stockings
- +/-Cotton balls and tape
Basic Principles

- Proximal to distal starting at source of reflux
- Larger and protruding to smaller
- Treat entire varicosity in one session
- Lowest effective concentration
- Minimize plunger pressure
- Watch for extravasation
- Compression
- Ambulation

Contraindications

- Allergies to sclerosants
- Acute DVT
- PAD
- Acute SVT
- Skin infections of lower extremity

Sclerosants

- Detergents
- Osmotics
- Chemical irritants

Sclerotherapy of telangiectases and reticular veins: a double-blind, randomized, comparative clinical trial of polidocanol, sodium tetradecyl sulphate and isotonic saline (EASI study).

- Rabe E et al
- 0.5% POL, 1% STS or placebo for telangiectasias:
- reticular veins received 1% POL, 1% STS or placebo
- POL demonstrated a statistically significant superiority versus placebo (P < 0.0001) for the primary criterion 'improvement of veins'. Significantly more patients were satisfied with POL at 12 or 24 weeks (44% vs. 35% compared to STS (44% vs. 63%; P < 0.0001) and placebo (14% vs. 11%; P < 0.0001).

Osmotic agents

- Hypertonic saline 23.4%
- Hypertonic saline and dextrose [sclerodex®]
- Dexhose 0.5% 0.7%
Chemical irritants

- Glycerin
- Chromate glycerin

Others

- Sodium morrhuate (Scleromate®)
- Etholamine oleate (ethamoline®)
- Iodine
- Alcohol

Technique

- Lowest effective concentration
- Results determined by the concentration and contact time of sclerosant with the vein wall
Complications

- Hyperpigmentation
- Telangiectatic matting
- Cutaneous ulceration
- Allergic reaction
Hyperpigmentation
- Hemosiderin deposition
- More likely in Skin type V-VI

Prevention of Pigmentation
- Drainage of trapped blood
- Compression
- Choice of sclerosants
- Concentration of Sclerosant

Prevention of Matting
- Identify and treat underlying incompetence
- Treat “feeding” veins
- Appropriate concentration of sclerosant

Prevention of Cutaneous Ulceration
- Appropriate concentration
- Avoid extravasation
- Gentle plunger pressure
Conclusions

- Lowest effective concentration
- Low plunger pressure
- Long dwell time
- Manage patient expectations
- Photodocumentation