

Sclerotherapy

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Class	Sclerosant	Allergenicity	Unique risks ¹	Dose limitations	Concentration for small reticular veins ²	Concentration for telangiectasias ³
Hyperosmotic	Hypertonic saline	None	Pain	6-10 mL		11.7-23.4%
	Hypertonic saline and dextrose	Low (due to phenethyl alcohol)	Pain (less than hypertonic saline alone)	10 mL of undiluted solution		10% hypertonic saline/25% dextrose
Detergent	Sodium tetradecyl sulfate	Rare anaphylaxis	Pain with perivascular injection	10 mL of 3%	0.2-0.5% (liquid); 0.1-0.2% (foam)	0.1-0.25% (liquid)
	Polidocanol (most commonly used agent worldwide)	Rare anaphylaxis, urticaria	Lowest risk of pain, disulfiram-like reaction	5 mL of 3% (depends on body weight)	0.5-1.0% (liquid); 0.25-0.5% (foam)	0.25-0.5% (liquid)
	Sodium morrhuate ⁴	Highest risk of anaphylaxis	Extreme necrosis with extravasation	10 mL		
	Ethanolamine oleate ⁴	Anaphylaxis, urticaria	Viscous, acute renal failure, hemolytic reaction; extreme necrosis with extravasation	10 mL		
Chemical irritant	Polyiodide iodide	Iodine hypersensitivity reaction	Dark brown color makes intravascular confirmation difficult	5 mL of 3%	0.3-1.0%	0.1%
	Glycerin [72%] with chromium potassium alum [8%]; glycerin [72%] diluted 2:1 with 1% lidocaine ± epinephrine	Rare anaphylaxis (none when glycerin alone)	Low risk of hyperpigmentation, viscous, hematuria with >10 mL	10 mL		72%



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¹Most common risks = telangiectatic matting and hyperpigmentation

²Small reticular veins = cyanotic blue to blue-green, 2-4 mm; concentrations vary across texts

³Telangiectasias = red network, 0.1-1 mm; concentrations vary across texts

⁴Primarily used for esophageal varices

Compression stocking recommendations

Telangiectasias only = OTC 15-20 mm Hg

Telangiectasias and reticular veins = 20-30 mm Hg

Reticular and small varicose = 20-30 mm Hg

Truncal varicose = 30-40 mm Hg

(Compression stockings should be worn for 2-3 weeks; first 3 days are most critical)

References

1. Bologna JL, Jorizzo JL, Schaffer JV eds. Dermatology. 3rd ed. Saunders; 2012.
2. Weiss MA, Hsu JT, Neuhaus I, et al. Consensus for sclerotherapy. Dermatol Surg. 2014;40:1309-18.