Step by Step: Cyanoacrylate Embolic Adhesive

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Conflict of interest: none
Disclosures: none

Why non-thermal-non-tumescent?

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• The perfect glue
• Viscous to prevent embolisation
• Polymerises quickly
• Soft and elastic
• Strong, durable, no compression
• Low dose requirements

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Non-thermal-non-tumescent

• The perfect glue patient
• Long length of vein to treat (e.g. tall, CS)
• Intolerant of needles
• Intolerant of compression
  — ulcer pain
  — Leg shape
• (Rich)
Endovenous glue: step by step

Access

- Seldinger technique with 5Fr micropuncture kit
- Pass J wire up to SFJ

Positioning

- Remove access sheath
- Insert introducer and dilator over the wire
- Remove wire and dilator and position the tip of the sheath 5cm from the SFJ
- Flush introducer with saline and leave syringe in place

Priming catheter

- Draw glue into syringe, fit to gun and prime catheter up to the mark

Mark 3cm from catheter tip: do not pass!

Position glue catheter

- Glue catheter extends 5cm beyond the introducer
- Pull the introducer back so the glue catheter is 5cm from the SFJ

Glue and pull-back sequence

- Compress the Proximal GSV and SFJ
- Dispense two doses (0.1 ml) of glue 1 cm apart
- Immediately pull back another 3cm
- Compress 3 minutes
Glue and pull-back sequence

• Dispense further doses 3cm apart with 30 seconds pressure over each one (+/- ultrasound to localise)

Treated Saphenofemoral Junction

VenaSeal System
Before

After (1 week)

Variclose procedure
Continuous pull back at 2cm per second
Squeeze trigger ever 5 seconds/10cm

Pitfalls

• Bubbles in GSV from flushing air

Pitfalls

• Multiple trunks:
  – Potential to glue the catheter inside the introducer
Endovenous acrylocanate glue

- Straightforward
- No tumescent anesthesia
- No capital equipment
- No risk of thermal nerve damage
- No compression stockings