RFA (RFITT): pulsed RadioFrequency induced Thermal Therapy
What We Should Know

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Pulsed CELON RFITT: Bipolar Conductive Ablation

Pulse: 10 msec, Pause: 30 msec
Temperature profile

Proximity of applicator tip to Saphenofemoral Junction

- Complete ablation: -100%
- DVT - 0%
- EHIT 2-4 - 0%
- Occlusion < 10mm of SFJ - 89%
- Flush SFJ ablation (EHIT1) - 67%

Review of 100 GSV ablation with pulse RFITT

- Increased risk of Accessory Saphenous Vein recurrence
- Increased rate of EHIT

Usual criteria -2cm clearance (maintain IEV patency)
- Occurred in 1434 GSV ablations RFITT from <5mm
- No clinical problems with EHIT at 6/52
Pulsed RFITT advantages

Generator
- Easy 'plug-and-go' function

Applicator
- Flexible
- Robust (resists needle injury)
- Visible tip

18mm tip
- Treat short AASV, trunks, perforators

Bipolar current (pacemakers)
- 60 - 100°C
- Less remote thermal injury
- Less pain/need for analgesia

Feedback
- Auto-stop inactivation
- Visual feedback
- Sonic feedback

Tips/Tricks to aid pulse RFITT Ablation

Map the target vein yourself (kinks)

Use additional access for knees

Pre-place guidewire & reuse sheath

Plug-in applicator only after tumescence

Retreat larger veins (>4, >6-8, >8mm)

Use haptic pull-back sensation & duplex

Consider static treatment - varix or perforator

Clean tip coagulum with wet swab wiping

Autostop - tip in sheath (or coagulum formation)

Start by treating slightly faster & retreat (rather than too slow)

Conclusions

- Pulse RFIT is a safe and effective thermal ablation device
- Steeper learning curve than competitor devices
- Versatility for treating long and short trunks, and perforators