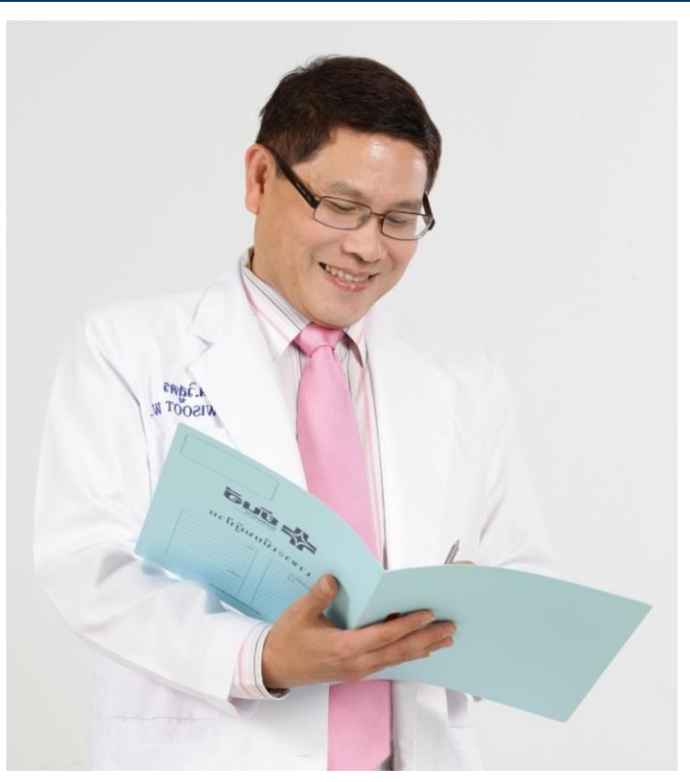


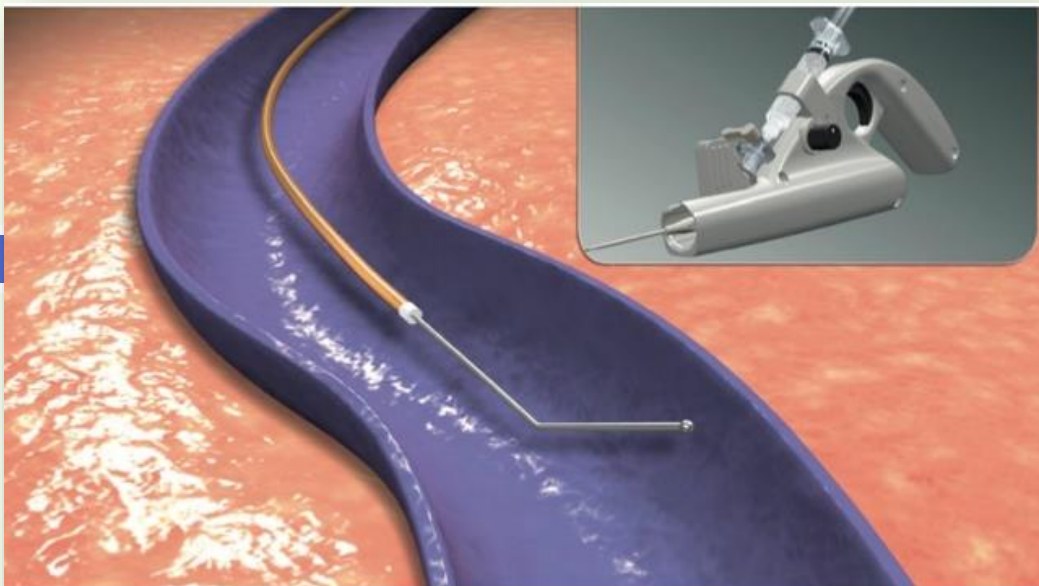
Tip and Technique in MechanO Chemical Ablation



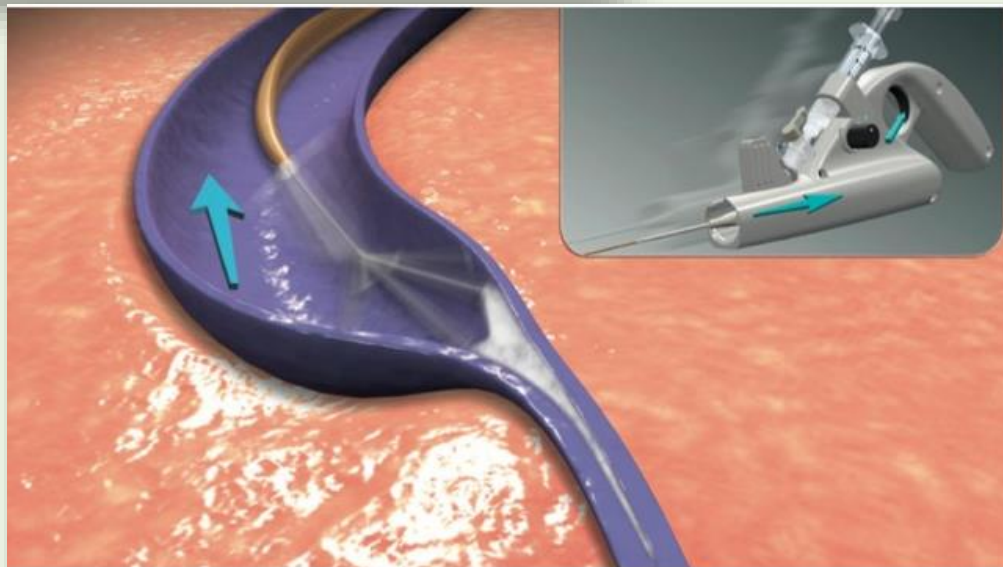
Dr. Wisoot Wongklahan
Thai Phlebology Society

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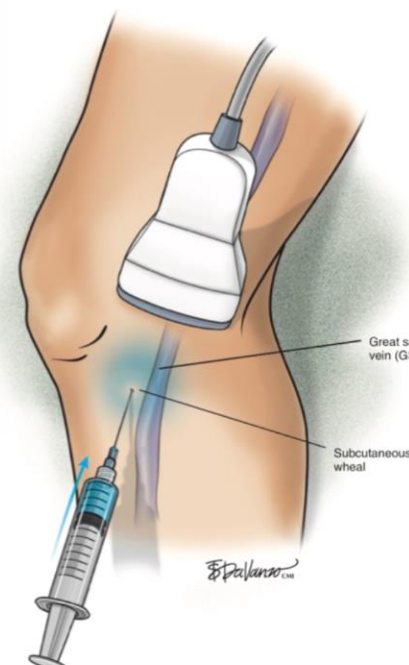




■ Fig. 8.4 Mechanical occlusion chemically assisted mechanism of action.



■ Fig. 8.5 Mechanical occlusion chemically assisted wire rotating/sclerosant injection.













Techniques

- ✓ Start with inserting clarivein Catheter into treated vein using local anesthesia.
- ✓ Then use Catheter sheath 4F or jelco or cathlon no.16/18 (lecturer use) to insert into the the lowest Reflux position in Varicose vein treatment process.
- ✓ Once complete the Catheter sheath insertion process, insert clarivein Catheter through Catheter sheath or jelco gently while also check the Ultrasound throughout the process.
- ✓ End of Catheter giving a 2-3 cm space away from SFJ. In case of SPJ, aims precisely for the Curve of SSV, using the Motor unit that has already removed battery protection tape, attached it together with Clarivein Catheter. Attach Side port together with Syringe containing Sclerosant Polidocanol 1.5 % -2% (Percentages vary depending on the size of treated vein)

Techniques

- ✓ Rotate the handheld clockwise/counter clockwise to fit into lock position. A round knob at the end of the wire's tip will stick out about 2 cm from the Plastic tube. Recheck the position of the tip of Catheter (the wire part) as it should be about 2-3 cm from the SFJ.
- ✓ During treatment, give a wire a free-rotation for 2-3 seconds then begins to withdraw the Catheter out at the ratio of 1.5 mm./Sec or 7 Sec/1cm. Use approximately 1.5 % -2% Aethoxysklerol Rate 0.1 ml/cm.

Mechano Chemical Ablation (MOCA) CLARIVEIN



- ✖ Clarivein usually comes in two different parts; Catheter and Motor unit. These parts require assembly. Once assembled, they cannot be separated.

Tip No.1) Do not constructed Catheter and Motor unit during Catheter insertion treatment process because the bended tip of the Catheter unit has been designed to help control the direction, hence using only the Catheter gives an easier control.

Tip No.2) In set also provides “One way stop valve” to close the Side port at the tip of the Catheter in order to prevent inverted blood flow which is the cause of the clog in the Catheter. Hence causing problem during the actual Sclerosant injection treatment.

Mechano Chemical Ablation (MOCA) CLARIVEIN



- Tip No.3) Always Test Patency of Catheter by rinsing with NSS.
- Tip No.4) Beware of angle tip of Catheter position, mark position of angle tip direction before insert into vein



Mechano Chemical Ablation (MOCA) CLARIVEIN

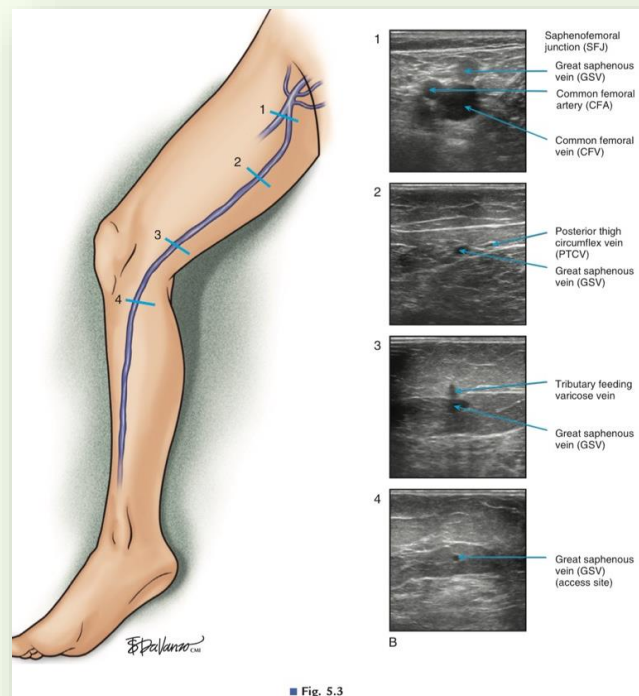


- Tip No.5)** Check the Catheter tip position in varicose vein when detecting a clog. These clog might occurred due to the valve or the bended tip of the Catheter pointed out into the side branch instead.
- ✓ When clog occurs, “Retract, Rotate, Reinsent” to change the direction of the angle tip of clarivein Catheter. Then gradually move forward again. If the vein is not too crooked, usually able to pass clarivein Catheter up to SFJ or SPJ in the end.

Mechano Chemical Ablation (MOCA) CLARIVEIN

Tip No.6) Always stay longer from recommended distance (for beginner)

- ✓ Scan and map vein thoroughly before treatment. Check the position of Bulging, Side branch, kinking, size/level and valve.



Mechano Chemical Ablation (MOCA) CLARIVEIN



- Tip No.7)** Beginner's common mistake is the quick drawback speed. Retraction speed more important than Sclerosant volume (slowly drawback to create a good Occlusion rate)
- Tip No.8)** In case of treating many veins all at once, Double Prepuncture preferred. Start with Catheter insertion to prevent vein Collapse

Mechano Chemical Ablation (MOCA) CLARIVEIN



Tip No.9) Retrograde, antegrade In the case of C5-C6 patient has Ulcer, lipodermatosclerosis, acceptable to access vein distal to Ulcer or from top to below.

Tip No.10) Vein Diameter 2 mm is acceptable to perform MOCA

- ✓ Vein Diameter 12-15 mm is also acceptable to perform MOCA. Able to close off.
- ✓ Vein Diameter > 15 mm is NOT recommended to perform MOCA (too big) (even 19 mm is ok to be treated)

Mechano Chemical Ablation (MOCA) CLARIVEIN



- Tip No.11)** During treatment, check U/S closure (prefer to check FLOW from Doppler color rather than gray scale).We can also make a test insertion to check whether vein close or not.
- Tip No.12)** When treating many veins, switching between Sclerosant type or reduce concentration to 1%
- Tip No.13)** When rotate in the same spot for a period of time without withdraw, the Catheter might hook and stuck Vein wall so perform a free rotate for only a split second then withdraw.

Mechano Chemical Ablation (MOCA) CLARIVEIN



- Tip No.14)** If vein stuck inside, pull with little force similar to when peeling plaster out off the skin. Once out, continue the treatment. (Acceptable to pull with force since the wire will not be broken)
- Tip No.15)** During the pull-out/withdraw, if Vein wall got stuck, the motor noise will change following with the patient sensing like something pulling in the vein.
- Tip No.16)** When perform Phlebectomy together with MOCA, it is recommended to start with Phlebectomy then followed by MOCA in order to keep Sclerosant in for a short period of time. After MOCA treatment, ask patient to do Dorsiflexion and Plantar flexion in order to push Sclerosant out off the deep venous system.

Mechano Chemical Ablation (MOCA) CLARIVEIN



- Tip No.17)** Benefit of NTNT is that it does not inflict Nerve injury.
When perform Below knee Segment treatment, also able to treat down to Ankle, SSV.
- Tip No.18)** CEAP C6 and SSV incompetence is effective when treat with NTNT



ขอบคุณครับ

THANK YOU!

