CONTROVERSES ET ACTUALITES EN CHIRURGIE VASCULAIRE

CONTROVERSIES & UPDATES IN VASCULAR SURGERY

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MARRIOTT RIVE GAUCHE & CONFERENCE CENTER | PARIS | FRANCE

Foam sclerotherapy: Main criterion for effectiveness is occlusion rate

Dr Marco Fresa

Centre Hopitalier Universitaire Vaudois (CHUV)

Lausanne, Switzerland

Disclosure

I do not have any potential conflict of interest,
(*but my wife told me to behave)*

Speaker name:

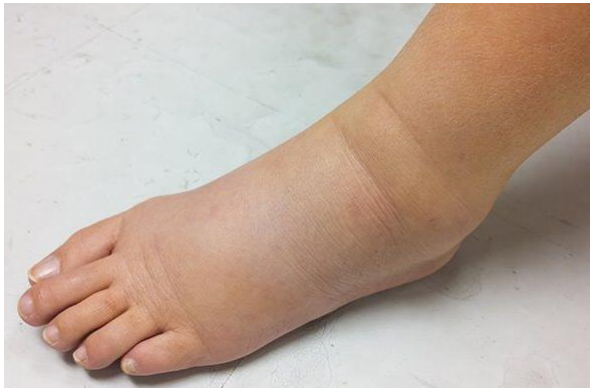
Marco Fresa – Chef de Clinique, Centre Hopitalier Universitaire Vaudois (CHUV)

Lausanne, Switzerland

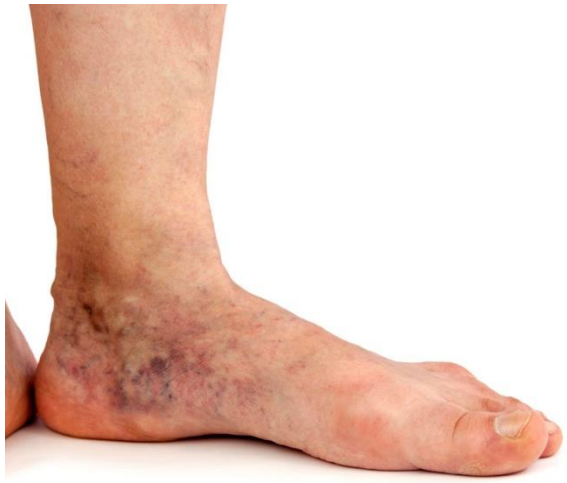
How do we assess the **efficacy** of ultrasound-guided foam sclerotherapy (UGFS)?

Efficacy in terms of :

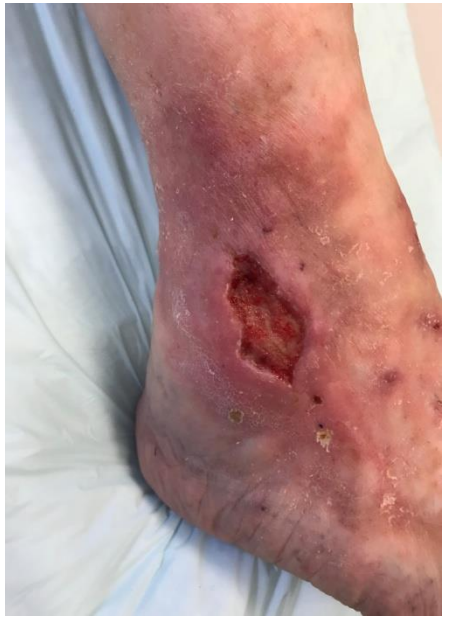
symptoms relief (C2)



Reduction of oedema (C3)



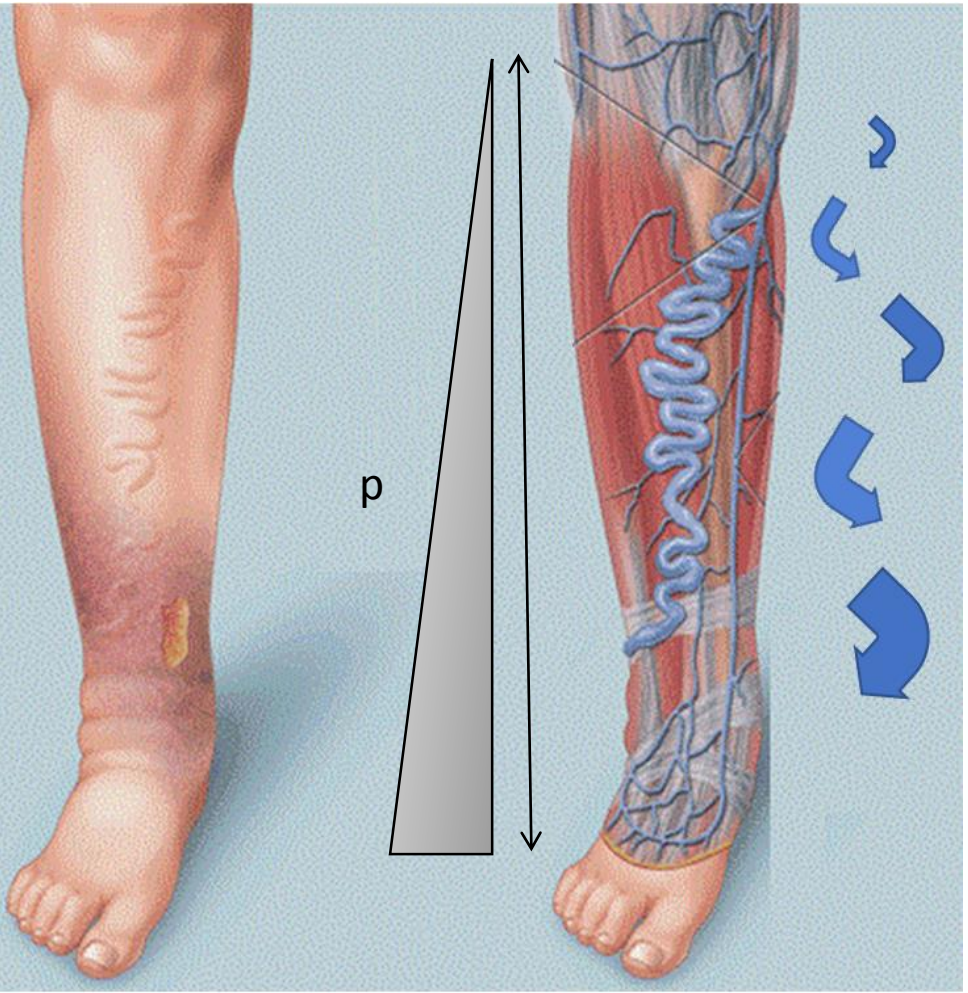
Stabilizing skin changes (C4)

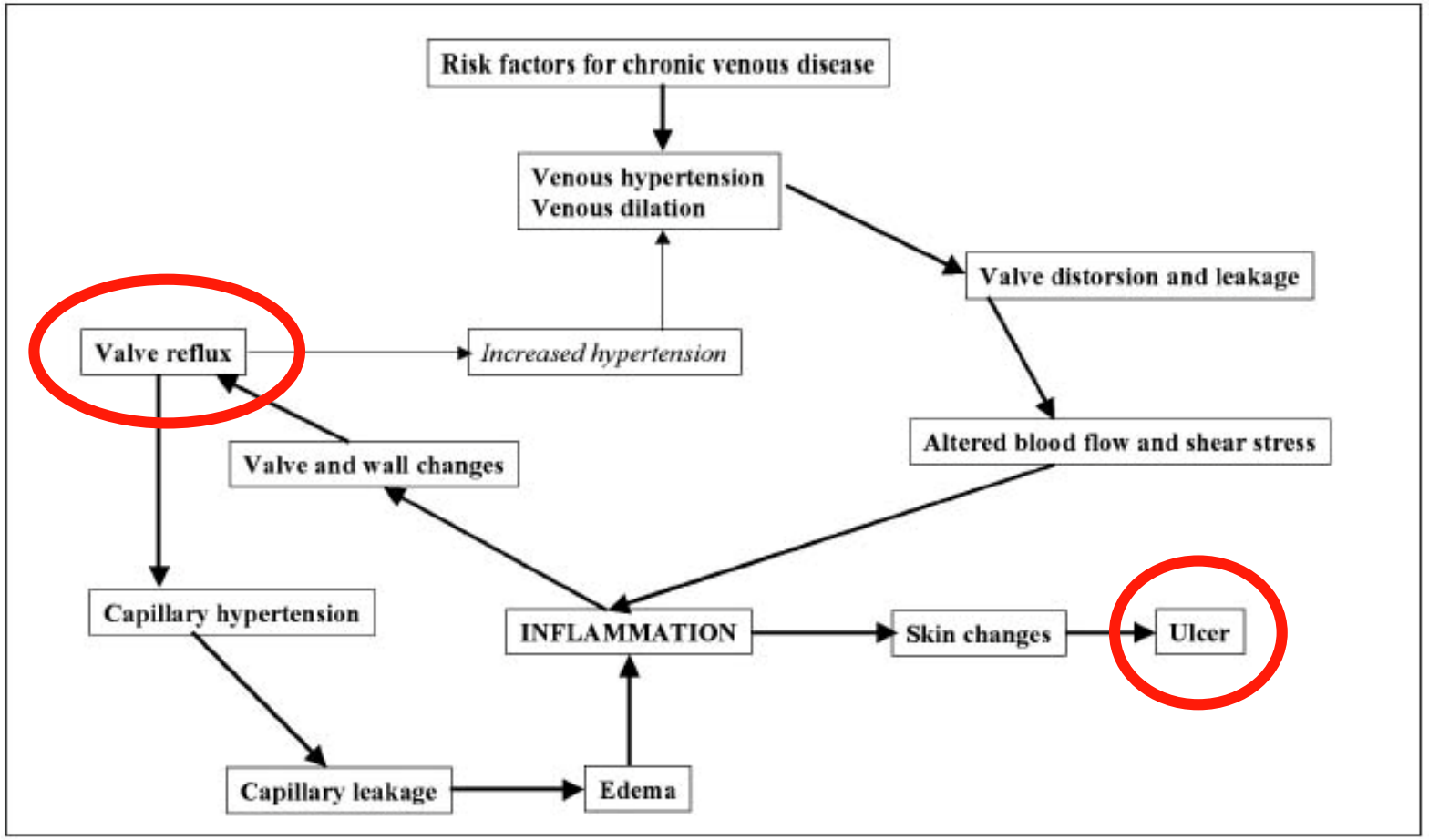


Wound healing (C6)

For all CEAP stages >2, to be efficient we have to

<u>eliminate the reflux</u>





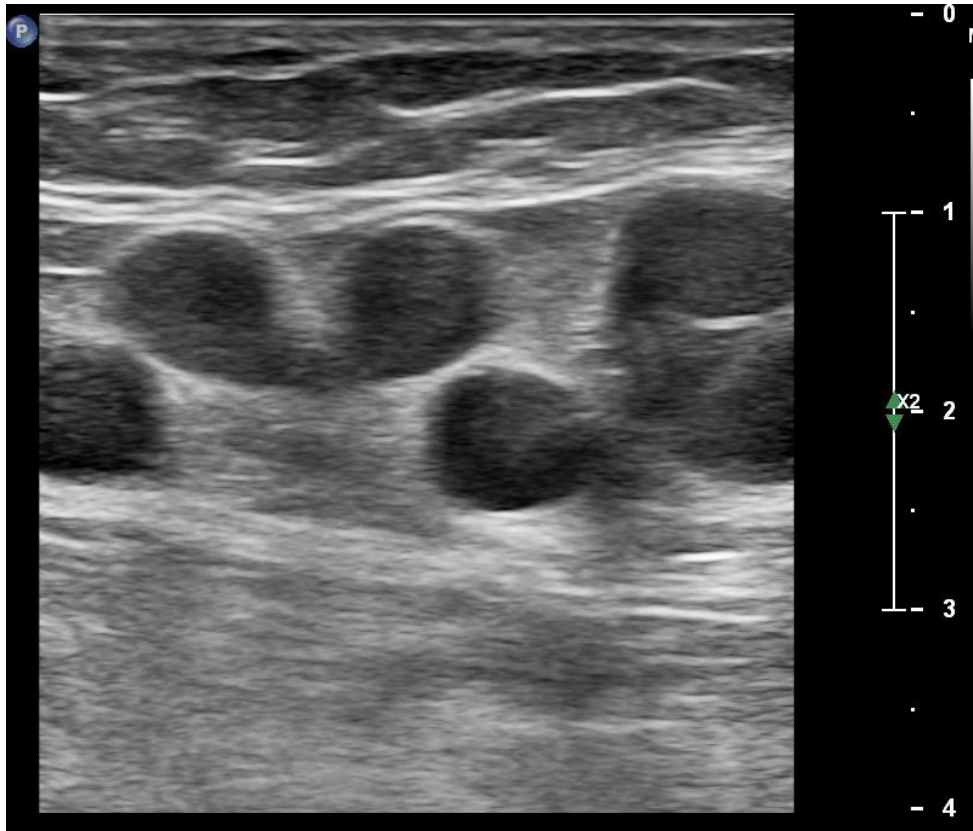
From a technical point of view we evaluate UGFS's efficacy in its ability to occlude incompetent veins

- What is a **good indication** for this technique?

- What is a "foam-target" varicose vein? The debate is open (lack of evidence)

- According to our experience foam should be used in all those veins not eligible for thermal ablation:

- too **tortuous** or **deep** or **ramified** or **small** for canulation

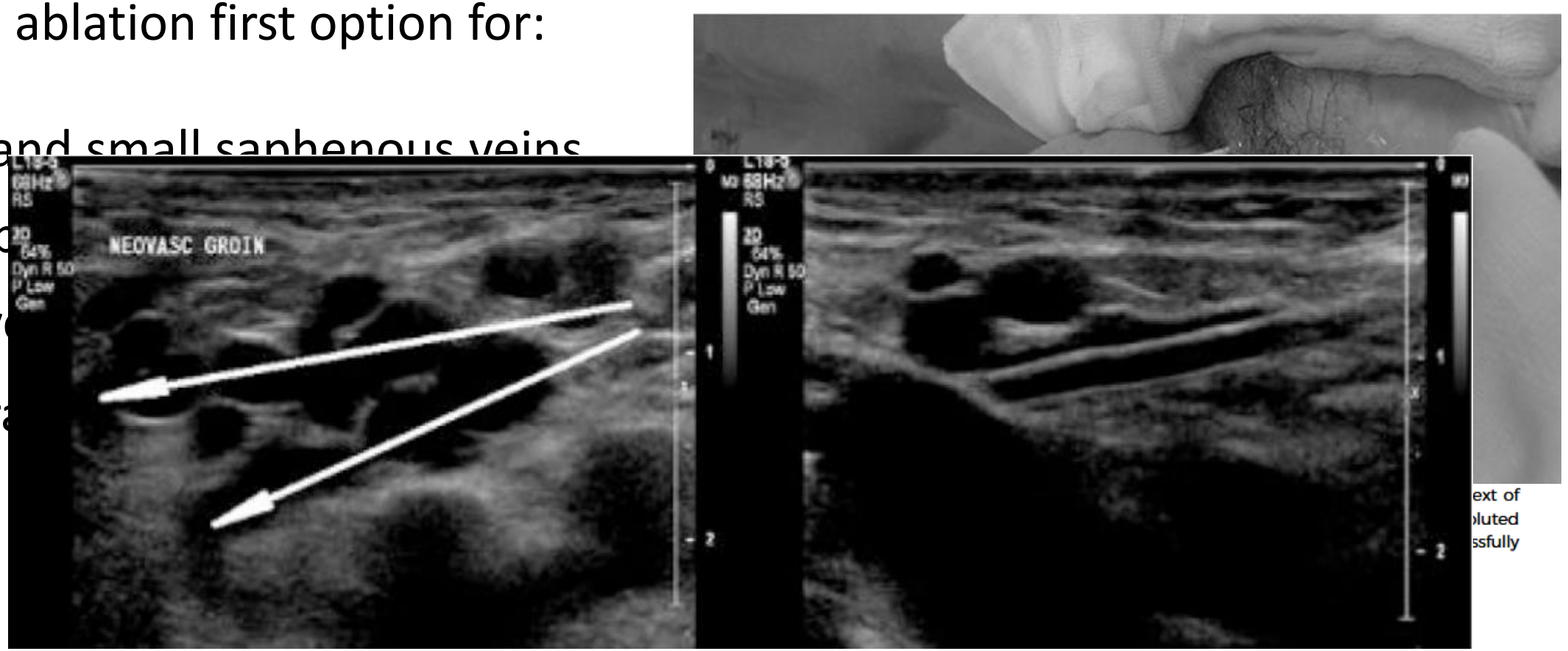


That means: always go thermal first, if possible.

Because thermal ablation it’s precise, effective (100% closure rate), and durable.

Thermal ablation first option for:

- great and small saphenous veins
- big sub
- relativ
- perfor

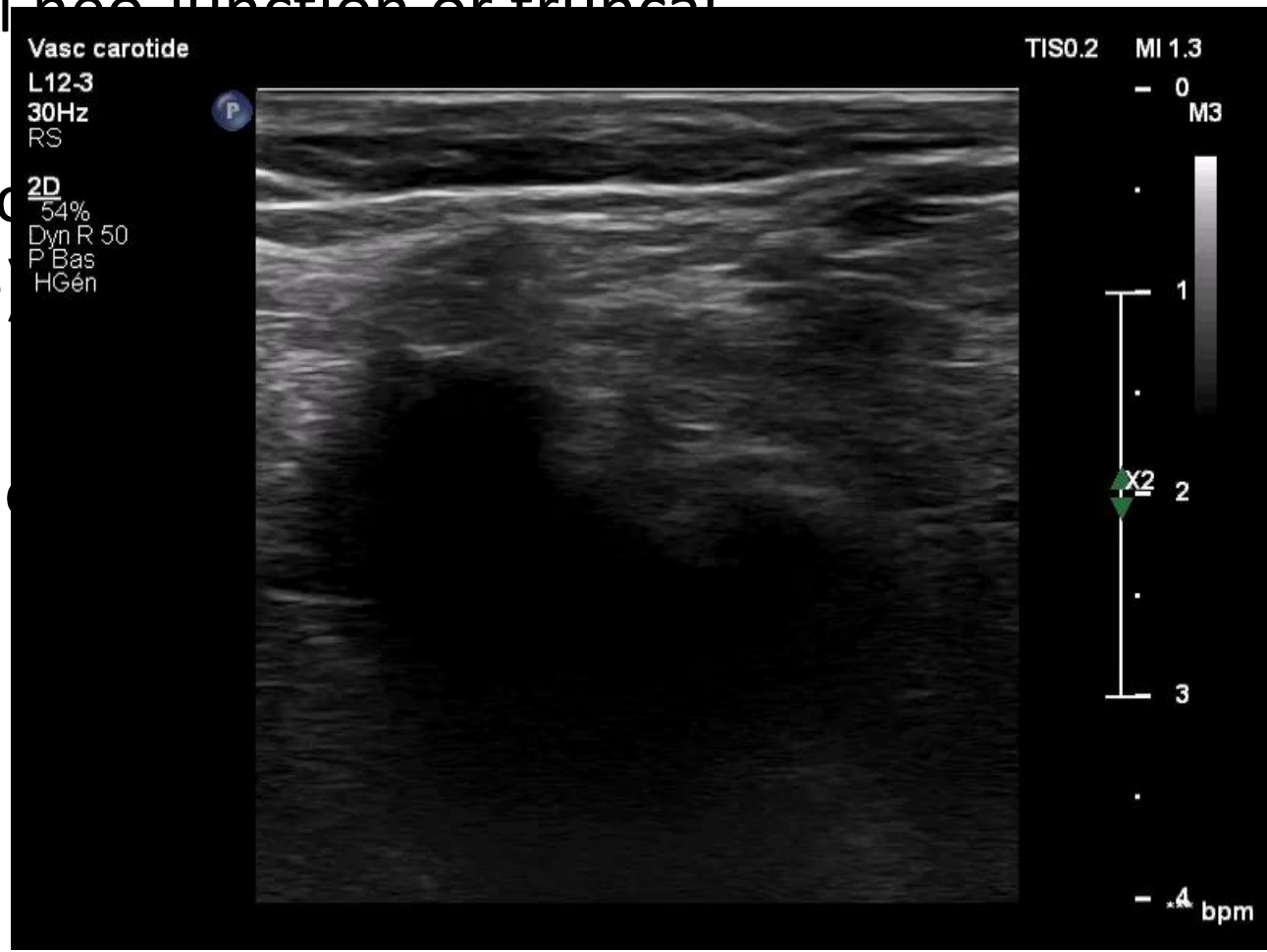


“Foam-target” varicose vein:

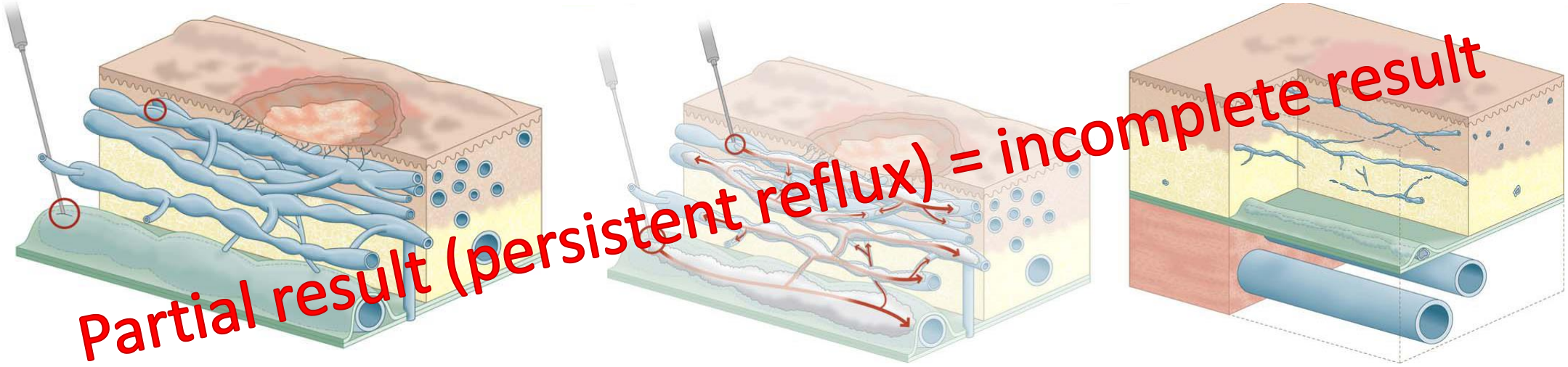
- too deep/tortuous/ramified/small neo-junction or truncal

- Lying under advanced lipodermato
(tumescent anaesthesia impossible)

- Positioning of the patient/ lenght
procedure not eligible for thermal



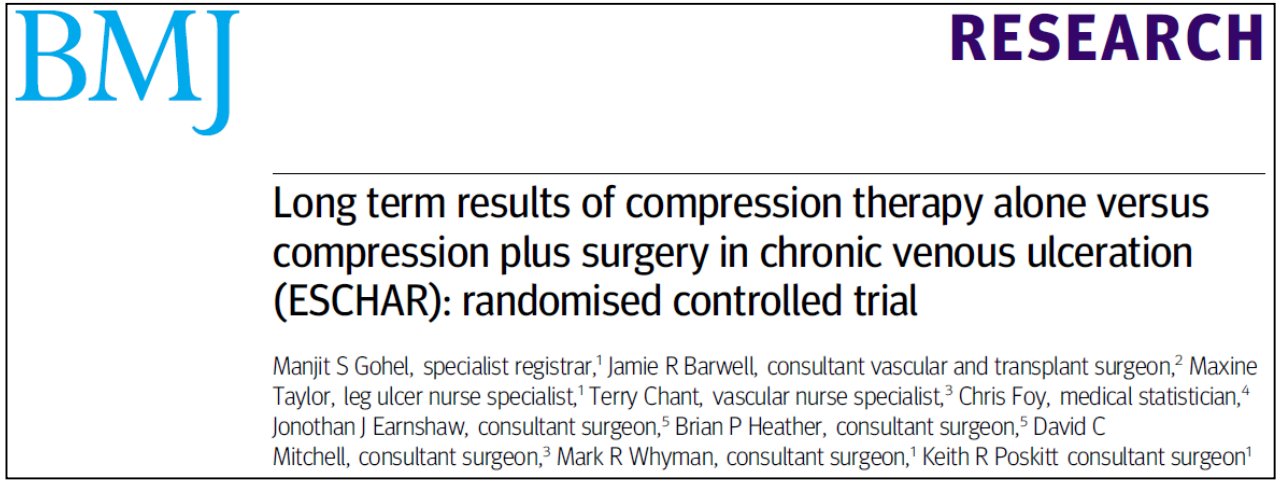
Goal = eliminate the reflux (columnar pression and perilesional network)



So **treat and re-treat** until this goal is achieved.
Often even with a partial treatment the clinical evolution is positive, possible bias are: moment of diagnosis CVI = starting of any conservative treatment (nurse meeting, wound dressing protocol, compression, hygiene measures…).

2004

Ulcer **recurrence was significantly reduced** for surgery+compression compared to compression alone (31% vs. 56% leg ulcer recurrence at 4 years)



2007

From the Society for Vascular Surgery

Factors that influence perforator thrombosis and predict healing with perforator sclerotherapy for venous ulceration without axial reflux

Misaki M. Kiguchi, MD, MBA,[a] Eric S. Hager, MD,[a] Daniel G. Winger, MS,[b] Stanley A. Hirsch, MD,[a] Rabih A. Chaer, MD,[a] and Ellen D. Dillavou, MD,[a] *Pittsburgh, Pa*

2014

62 patients, ulcers ongoing for 28mo (reflux due to perforators)

2,6 UGFS procedures per ulcer, **54%** occlusion rate

30 mo FU: 69% of occlusion in pts that healed vs 38% of occlusion in pts that didn't heal

Complete **reflux ablation** is positive predictor for ulcer healing

When reflux is abolished pts have **3.5** more chances of ulcer healing than if reflux is still present

Wound Repair and Regeneration

Treatment of venous leg ulcers with ultrasound-guided foam sclerotherapy: Healing, long-term recurrence and quality of life evaluation

Pedro Lloret, MD, PhD[1]; Pedro Redondo, MD, PhD[1]; Juan Cabrera, MD, PhD[2]; Alejandro Sierra, MD, PhD[2]

1. Department of Dermatology, and,
2. Phlebology Unit, University Clinic of Navarra, Pamplona, Spain

2015

180 venous ulcers.

Treatment with UGFS on a monthly base **until reflux eliminated**.

Follow up 30 months

95% ulcers healed during follow-up

Recurrence rate 12 mo: 8,1%

Eur J Vasc Endovasc Surg 29, 74–77 (2005)
doi:10.1016/j.ejvs.2004.10.002, available online at http://www.sciencedirect.com on SCIENCE DIRECT®

Risk Factors for Delayed Healing and Recurrence of Chronic Venous Leg Ulcers—An Analysis of 1324 Legs

M.S. Gohel, M. Taylor, J.J. Earnshaw, B.P. Heather, K.R. Poskitt and M.R. Whyman*

Cheltenham General Hospital, Sandford Road, Cheltenham, Gloucestershire GL53 7AN, UK

2005

1324 legs with ulcers

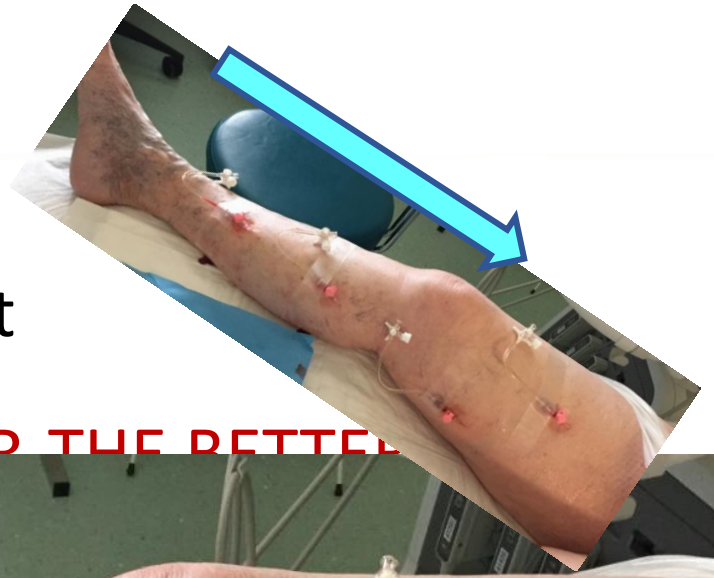
6 weeks FU: 76% healing
17% recurrence at 12 months

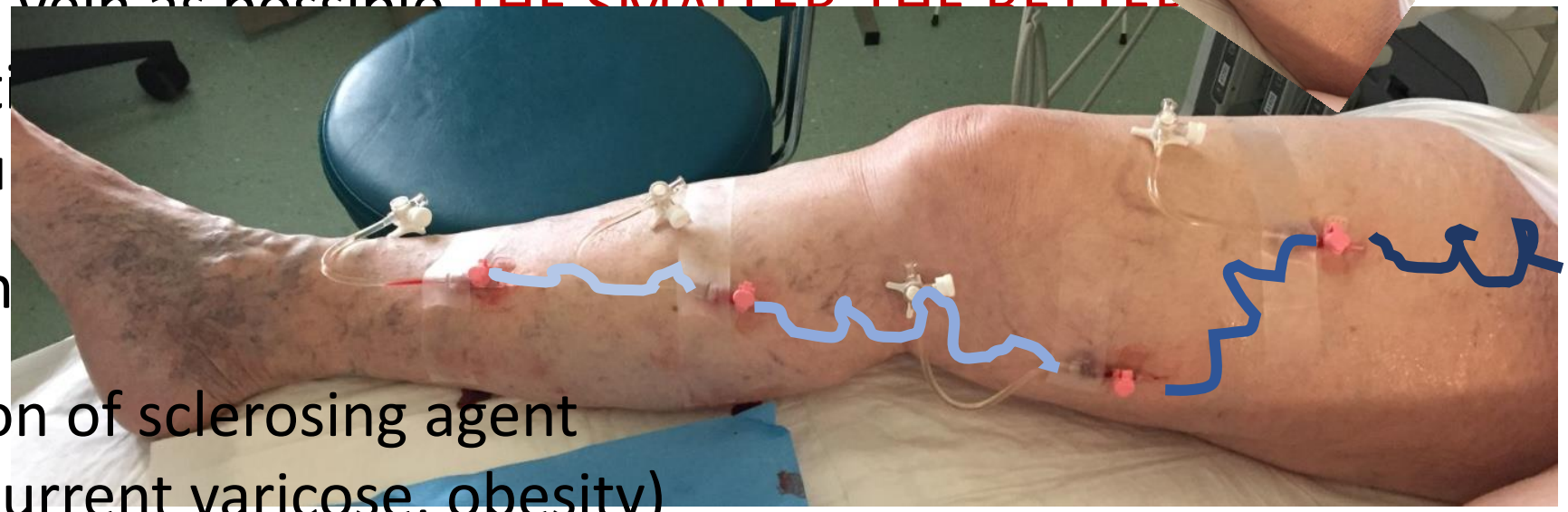
When **reflux is not abolished hazard ratio 2.21** for non healing or recurrence

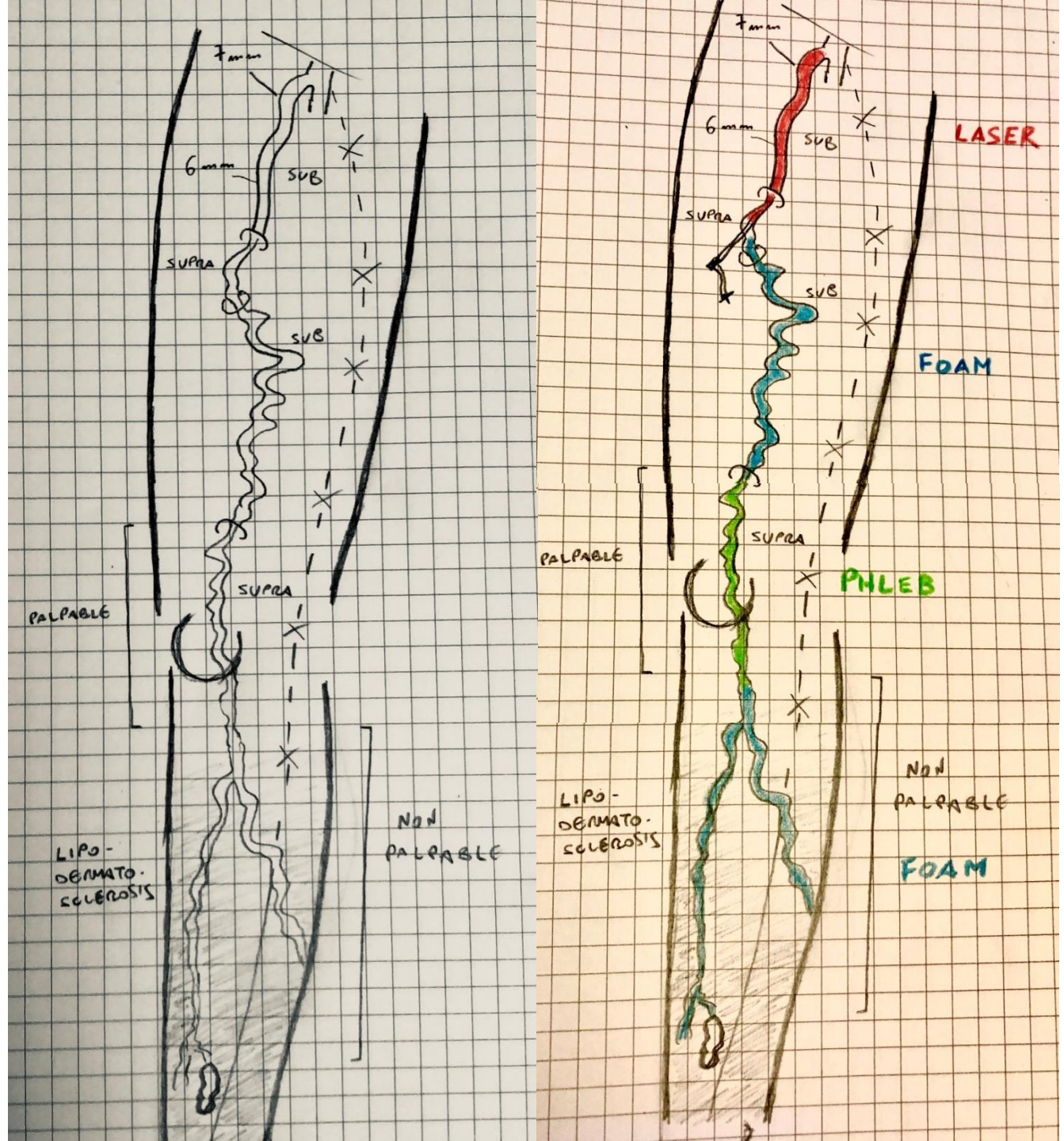
Reflux is always the evaluation parameter

How to **optimize the outcome** to achieve occlusion:

- good ultrasound skills are necessary
- multiple injections
- flush with saline before injecting sclerosing agent
- obtain the smallest vein as possible THE SMALLER THE BETTE
(trendelenburg positi
with adrenaline, dou
- Upstream injection
- higher concentration of sclerosing agent
(anticoagulation, recurrent varicose, obesity)
- combine techniques (thermal, surgical, foam)



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SUPRA
SUB
FOAM
PALPABLE
SUPRA
PHLEB
LIPO-
DERMATO-
SCLEROSIS
NON
PALPABLE
FOAM

Conclusions

1 - UGFS is not a plan B; it has its good indications:

target the “foam-target” veins

2 - Optimize the foaming technique (it is an art)

3 - Combine different techniques

4 - Treat until there’s no more reflux to the lesion


Thank you