

Duplexsonographie vor Varizenintervention

Dr. med. Thomas Baldi

Abschlusskurs Duplexsonographie 14.02.2020

Behandlungsziele/mögliche Probleme

Primäre Endpunkte

- Rezidiv
- Rekanalisation
- Neovaskularisation
- Technisches Versagen/Re-Intervention
- Quality of life (QoL)
- Post-interventionelle Komplikationen

Sekundäre Endpunkte

- Interventionsdauer
- Hospitalisationsdauer
- Kosten

***Gute Planung nötig
Gute präinterventionelle
Diagnostik wichtig!***

Bedeutung der Duplexsonographie

	Preoperative duplex		No preoperative duplex	
	Legs at follow-up	Legs reoperated	Legs at follow-up	Legs reoperated
Tactical failure	2	1	28	15
Technical failure	1	0	4	2
Progression of disease	3	1	12	3
Neovascularization	11	0	12	1

Bedeutung der Duplexsonographie

▪ Ultraschall

Recommendation 11	Class	Level	References
Duplex ultrasound is recommended as the primary diagnostic test of choice in suspected chronic venous disease, to reliably evaluate the specific venous anatomy and to identify the source and pattern of reflux.	I	A	147, 151, 152
Recommendation 12			
In the presence of suspected abdominal and or pelvic venous pathology, duplex ultrasound is recommended before phlebography, computed tomography venography, and magnetic resonance venography examinations.	I	C	159
Recommendation 13	Class	Level	References
Duplex ultrasound is recommended for the assessment of recurrent varicose veins to identify the source of recurrence.	I	C	148, 165, 170

▪ Phlebographie

Recommendation 19			
If there is an indication to treat supra-inguinal venous pathology, additional imaging (magnetic resonance venography and computed tomography venography) is recommended.	I	C	169, 194-198
Recommendation 20			
If both magnetic resonance venography and computed tomography venography are inadequate, intravascular ultrasound may be considered as an additional technique for identifying and treating ilio-caval obstruction.	IIb	C	189-193

Planung einer Intervention

Diagnostik:

- Anatomie
- Morphologie
- Flussverhältnisse



Geeignetes Therapieverfahren:

- Laser/Radiofrequenz
- Mechano-chemische Ablation
- Schaumsklerotherapie (VenaSeal)
- Klassische Chirurgie

Anatomische Schlüsselstellen

Saphenofemoraler Übergang

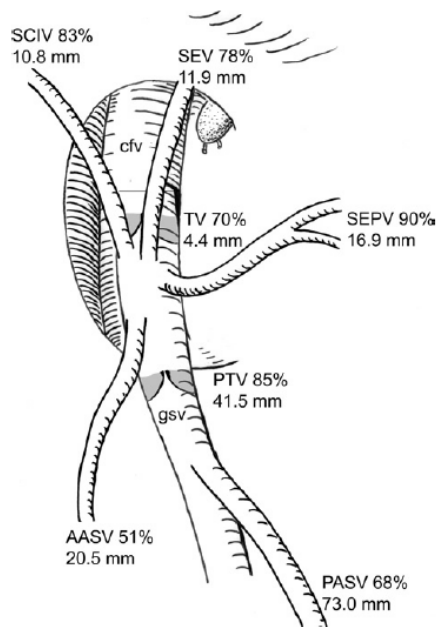
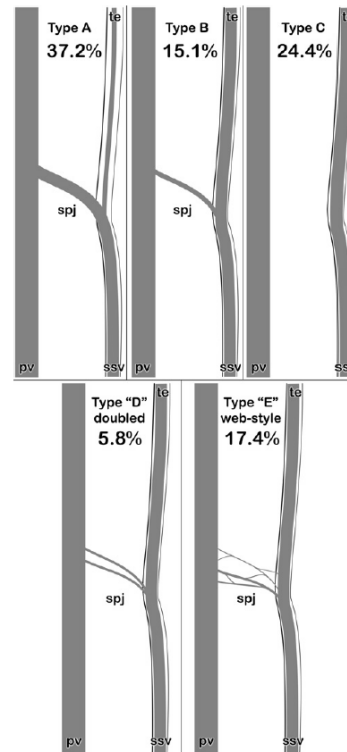


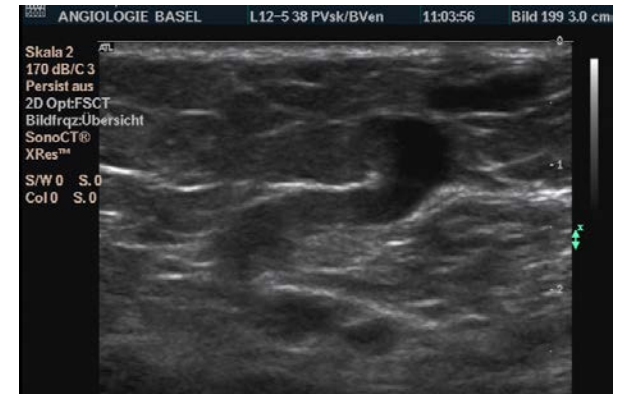
Fig. 4. Idealized saphenofemoral junction.

Saphenopoplitealer Übergang

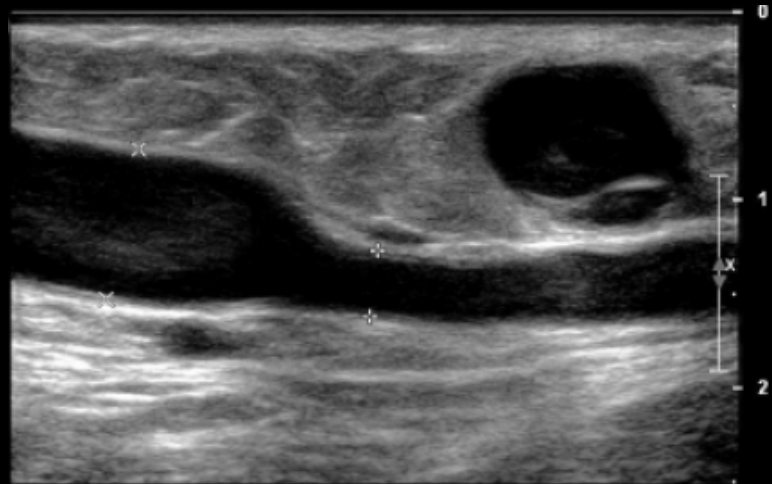
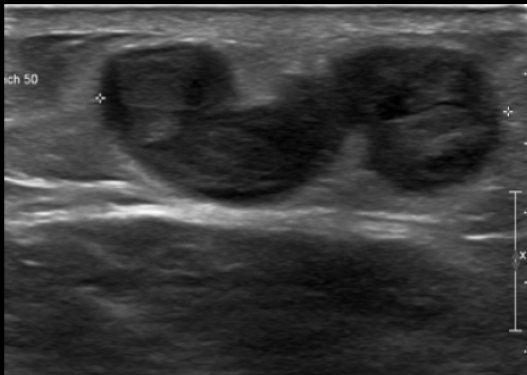
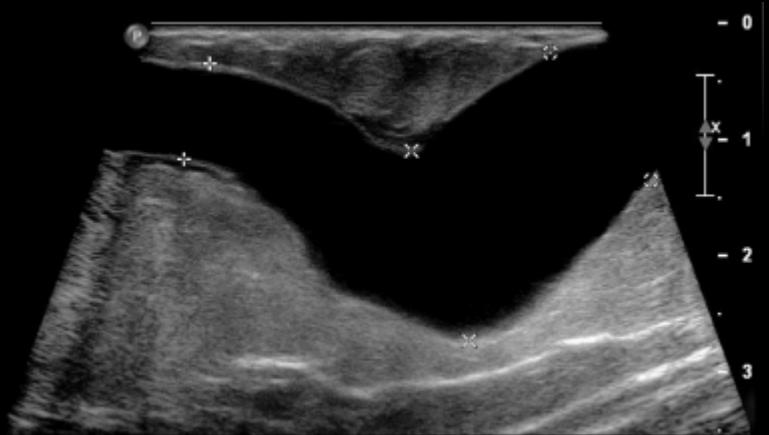
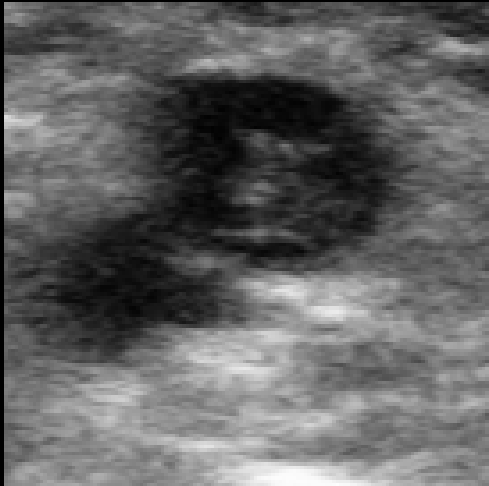


Wichtige Seitenäste z. B. V. saphena accessoria superficialis

Perforansvenen

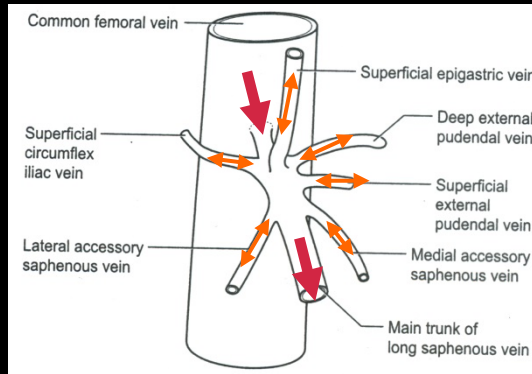


Morphologie

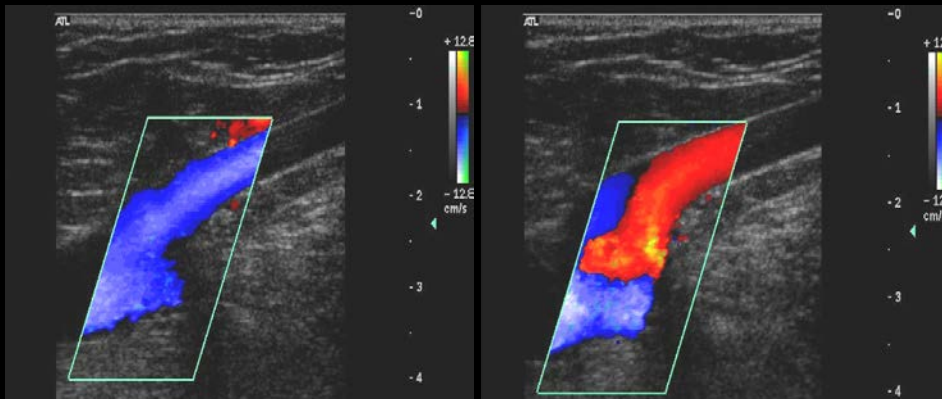
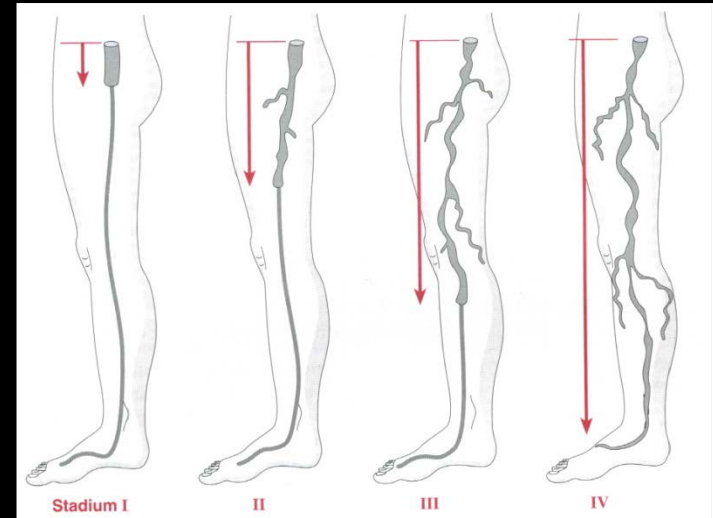


Funktion

Ursprung
des
Reflux?



Hach Klassifikation



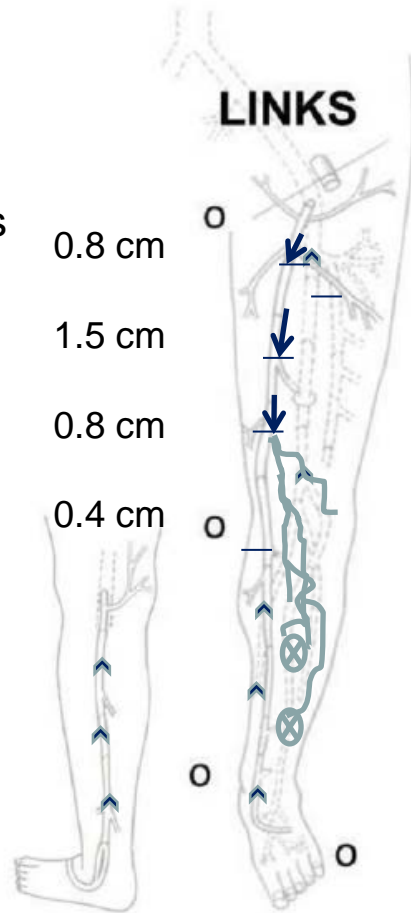
Inkomplette Insuffizienz?

Zusammenfassung:

- Verlauf der varikösen Vene?
- Durchmesser an distaler Zugangsstelle?
- Maximaler/minimaler Durchmesser im Verlauf?
- Abstand von der Hautoberfläche?
- (partiell) okkludierte Venensegmente (Septen? Thrombosiert? Hypoplastisch)?
- Zu behandelndes Venensegment genug lang für Katheterplatzierung?

Geradliniger Verlauf des Stammes
1 cm unter Oberfläche
Keine postphlebitischen Veränderungen
DIP 65 cm pp

Perforansvenen
25 cm und 35 cm
pp



Diagnose:

C1 C2 C3 C4 C5 C6

Stamminsuffizienz VSM Hach 2
Astvarikose im Magna-Gebiet
2 Perforansvenen

