

Ultrasound Study of the Groin and Thigh (RaFeVA Protocol)

Ultrasound-Guided Puncture Techniques for FICC Placement

Antonia Di Sarno

*Responsabile della UOS - Impiantistica vascolare e terapia antalgica
Ospedale FATEBENEFRATELLI, Napoli*



**REGIONAL
ANAESTHESIA:
LET'S OPEN
THE BORDERS**



Introduction

Femoral central venous access (FICC) is recommended for fragile, oncologic, or thoracic-contraindicated patients. The RaFeVA protocol enables a rapid and standardized ultrasound assessment of groin and thigh vascular anatomy.



OBJECTIVES

Describe the RaFeVA protocol Illustrate ultrasound-guided puncture techniques

Highlight safety considerations

Recognize anatomical variants

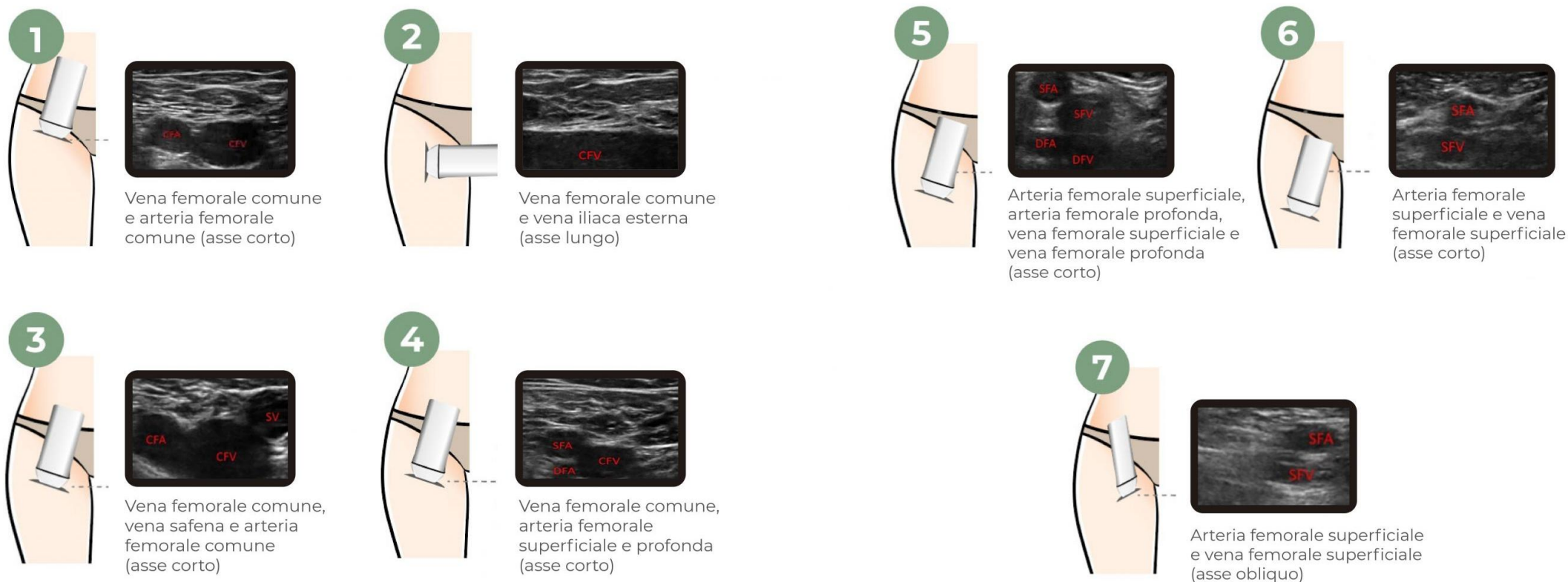
Improve clinical outcomes

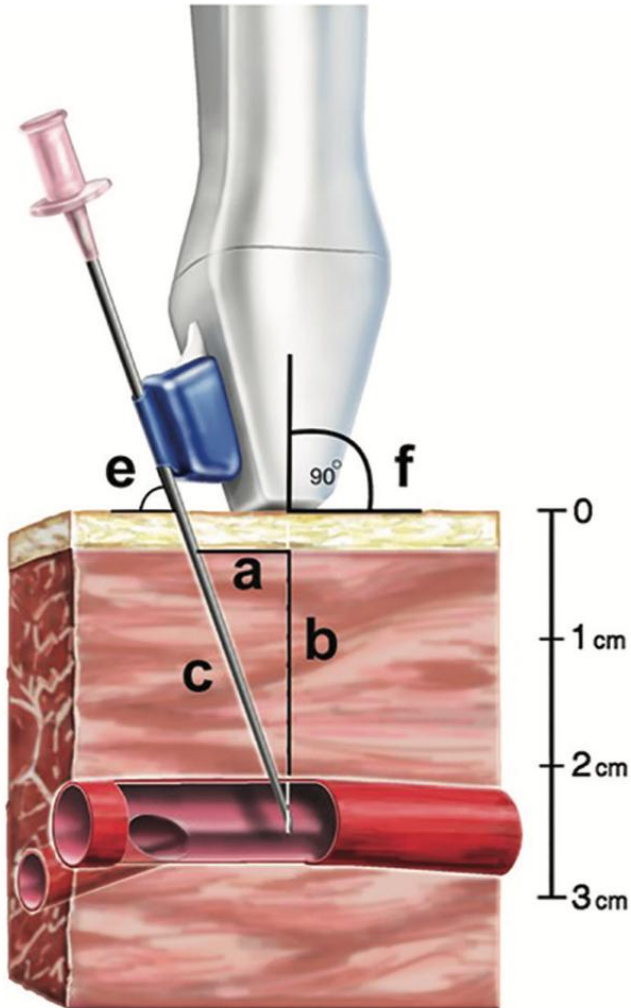


RAFEVA PROTOCOL OVERVIEW

- **Patient Positioning:** Supine, leg abducted and externally rotated
- **Probe Orientation:** Transverse and longitudinal scans
- **Key Structures:** Common femoral vein (CFV), femoral artery (FA), great saphenous vein (GSV), deep femoral vein (DFV)
- **Assessment Criteria:** Compressibility, diameter, depth

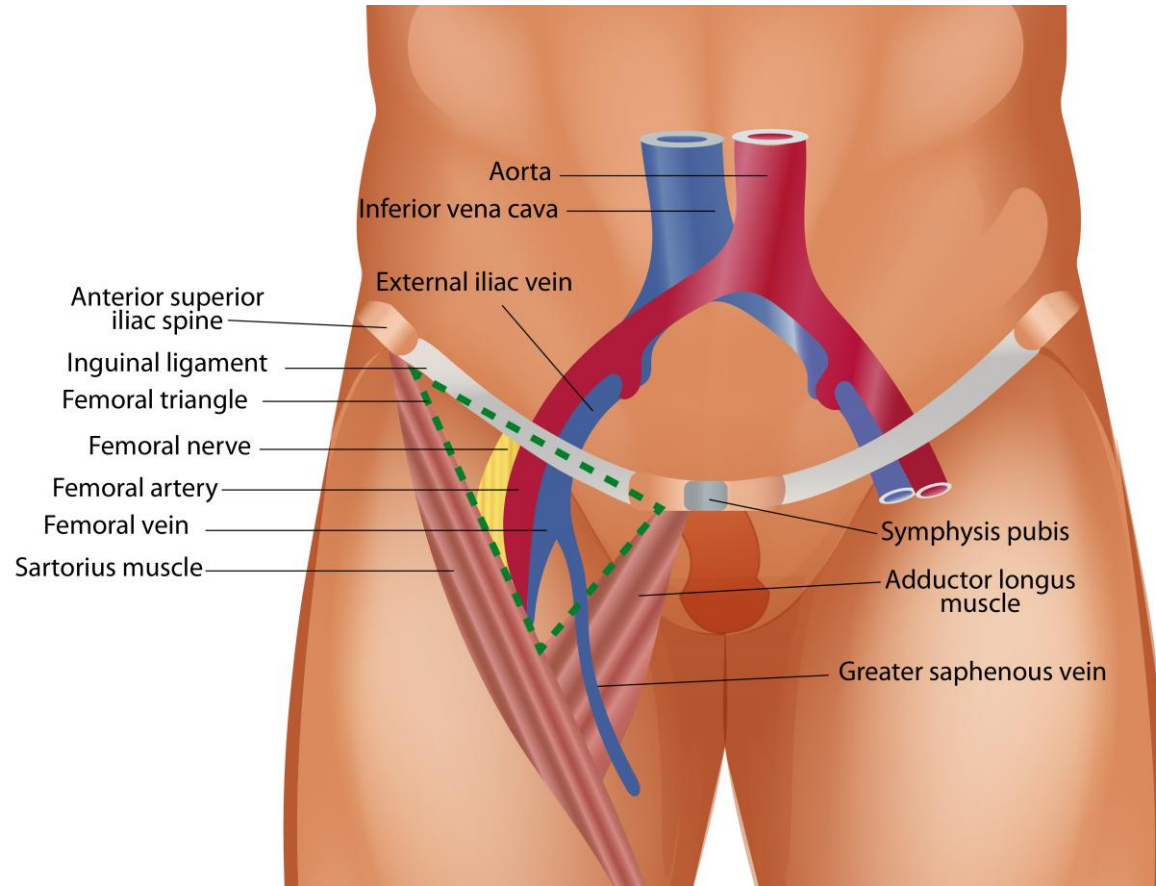
ESPLORAZIONE DEL PATRIMONIO VENOSO DEL PAZIENTE CON IL METODO RAFEVA





ULTRASOUND-GUIDED PUNCTURE

- **In-Plane Technique:** Needle visible along the ultrasound beam
- **Out-of-Plane Technique:** Needle crosses the beam perpendicularly
- **Landmarks:** CFV lies medial to FA
- **Sterile Technique:** Covered probe, sterile gel, full barrier precautions



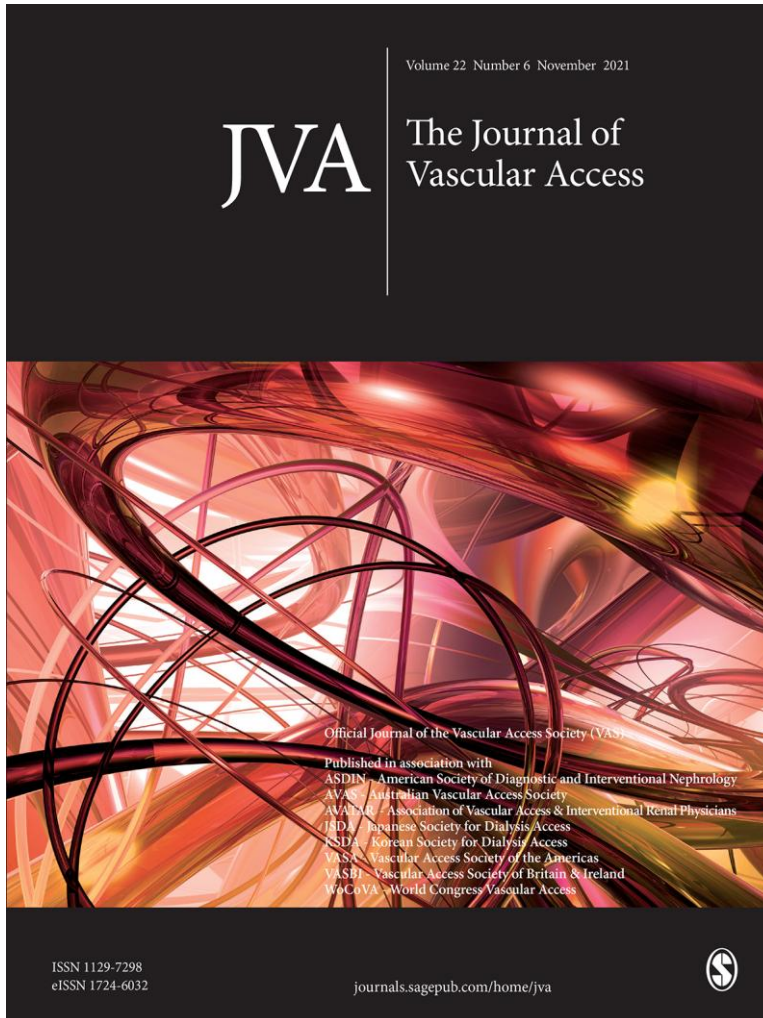
Safety and Anatomical Variants

- Avoid arterial puncture
- Identify high bifurcations and duplicated veins
- Confirm catheter placement with post-procedure ultrasound



PROTOCOLLO SIF: i 7 step per l'inserimento dei FICC

1. valutazione pre-procedurale
2. tecnica asettica appropriata
3. venipuntura ecoguidata
4. valutazione intra-procedurale
5. adeguata protezione del sito di uscita
6. adeguato fissaggio del catetere
7. copertura del sito di uscita



Conclusion

The RaFeVA protocol and ultrasound-guided techniques enhance safety, reduce complications, and optimize femoral central venous catheter placement