

Venous Malformations

Indications and limits of surgery

(Exclusion of cervico-facial VMs)

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Disclosure

Speaker name:

.....PARASKEVAS....Nikos.....

I have the following potential conflicts of interest to report:

Consulting

Employment in industry

Shareholder in a healthcare company

Owner of a healthcare company

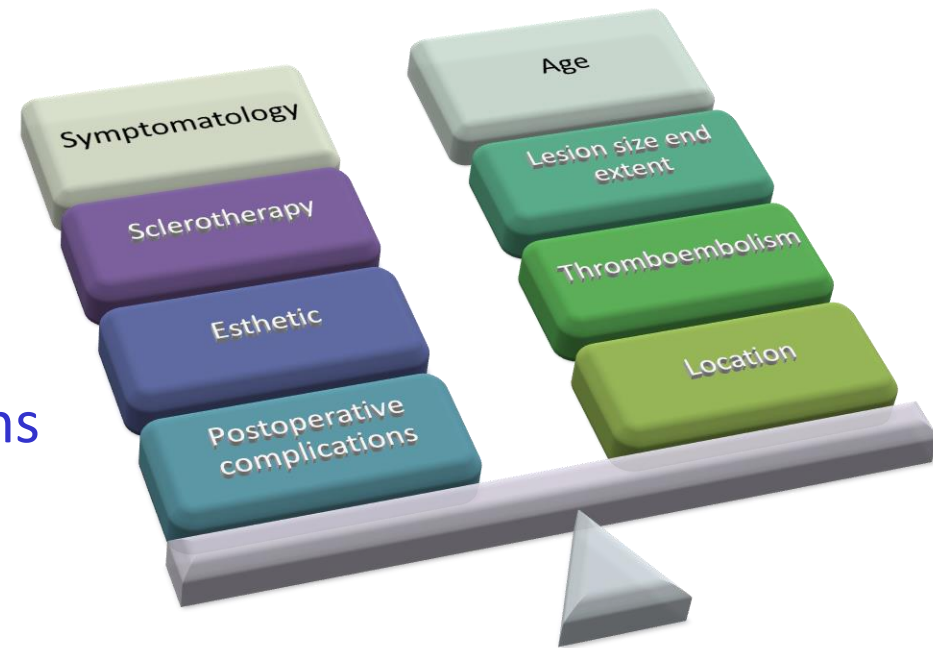
Other(s)

x I do not have any potential conflict of interest

VM: Indications and limits of surgery

- Recurrent pain
Spontaneously/ during exercise
- Limitation of movements
- Aesthetic prejudice
- Thromboembolic complications
- Failure of sclerotherapy/laser

Location
Size
Extent



Surgery / VM type

Extra-truncular / tissular VMs

- Limited - focal
(unique or multiple locations)



cutaneous, subcutaneous,
intramuscular, intra-articular,
cellular interspace

Radical excision

- Diffuse – extensive

Partial excision

Truncular VMs

- Superficial veins

Insufficiency of marginal vein

- Deep veins



hypoplasia, aplasia

dilations

Principles of surgical excision VMs

- Limits of VM
MRI, ultrasound mapping
- Dissection plane during excision of VM
- Cautious hemostasis
- Preservation of important vessels and nerves
- Coagulation complications
- Reconstruction of defect



Extra-truncular: cutaneous and subcutaneous VMs

- Indications

Pain

Aesthetic

Hemorrhage

- Detachment from the skin
- Detachment from deep tissues
- Total / partial resection

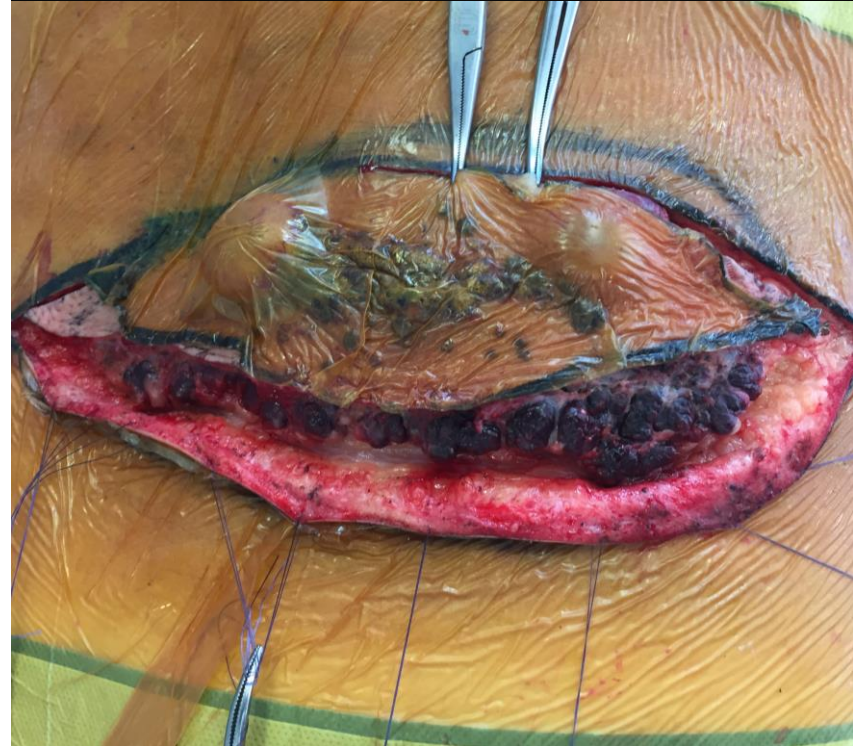




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A10004972644 (66a , 66a)
Rachis Dorsal
AX T2 PROP FS SI

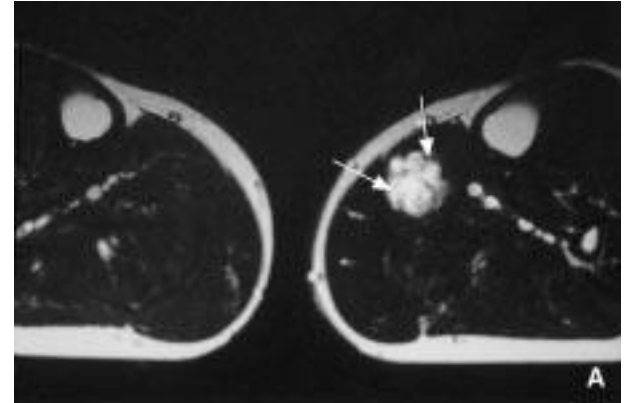






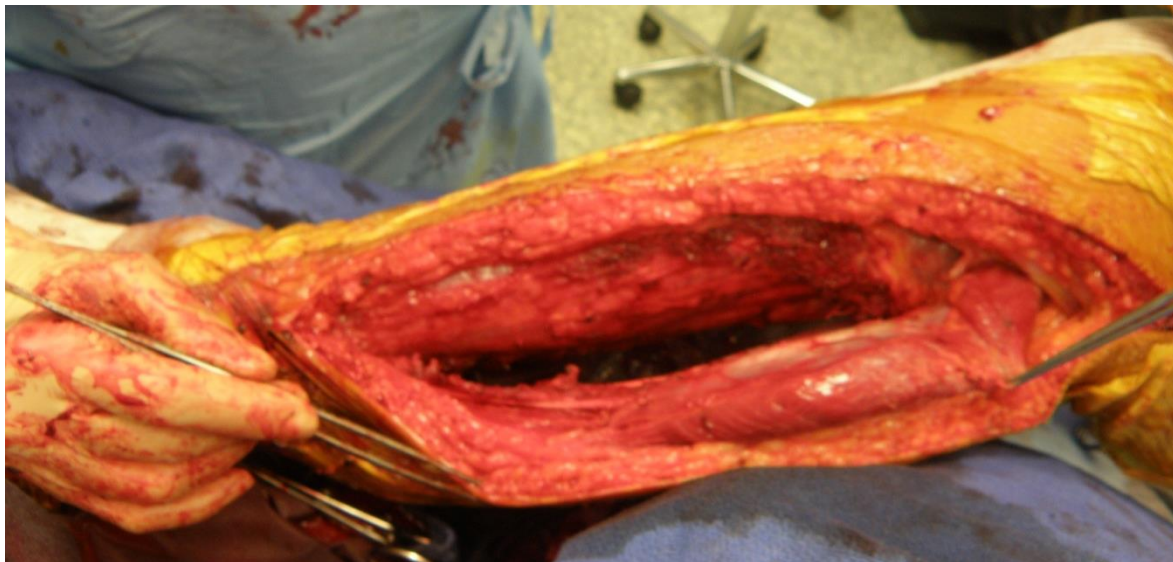
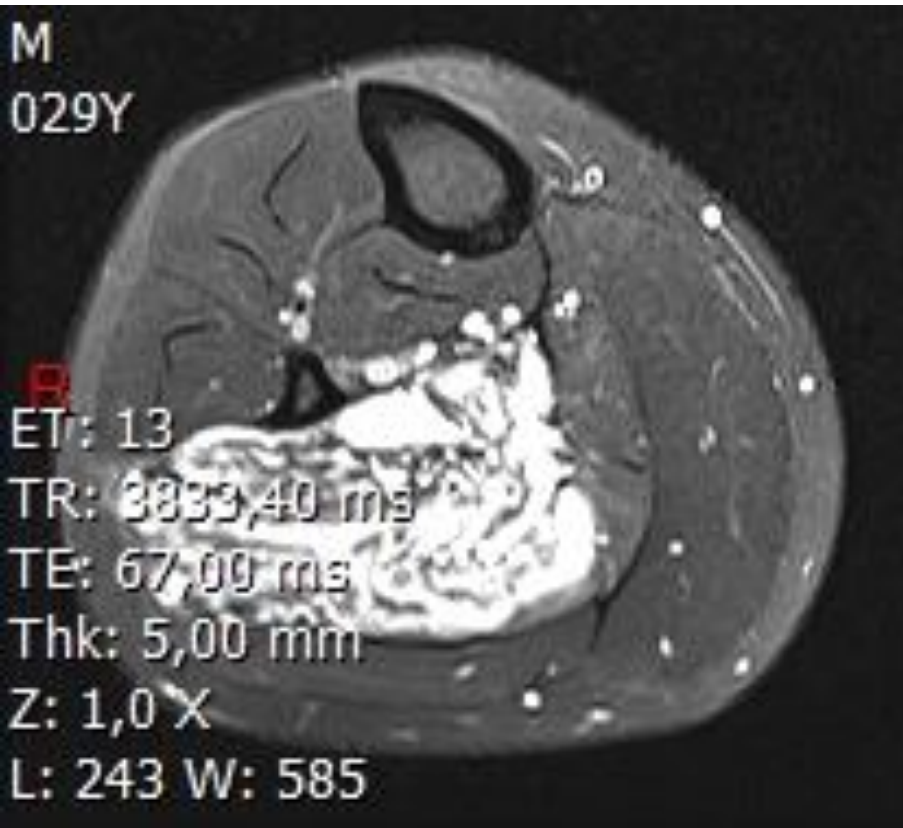
Extra-truncular: intramuscular VMs

- Most common form of unique VM
- Mainly lower limbs
- **Indication: recurrent pain
thromboembolism**
- VM concerns part of the muscle
- VM concerns totally the muscle
- There is no infiltration of tendons
- Avoid functional complications
- Aesthetic problem: size of incision
hollow appearance



M
029Y

ET: 13
TR: 3833,40 ms
TE: 67,00 ms
Thk: 5,00 mm
Z: 1,0 X
L: 243 W: 585



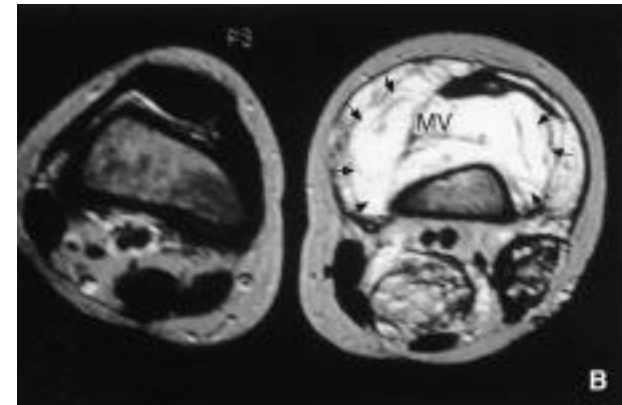
Extra-truncular: intra-articular VMs

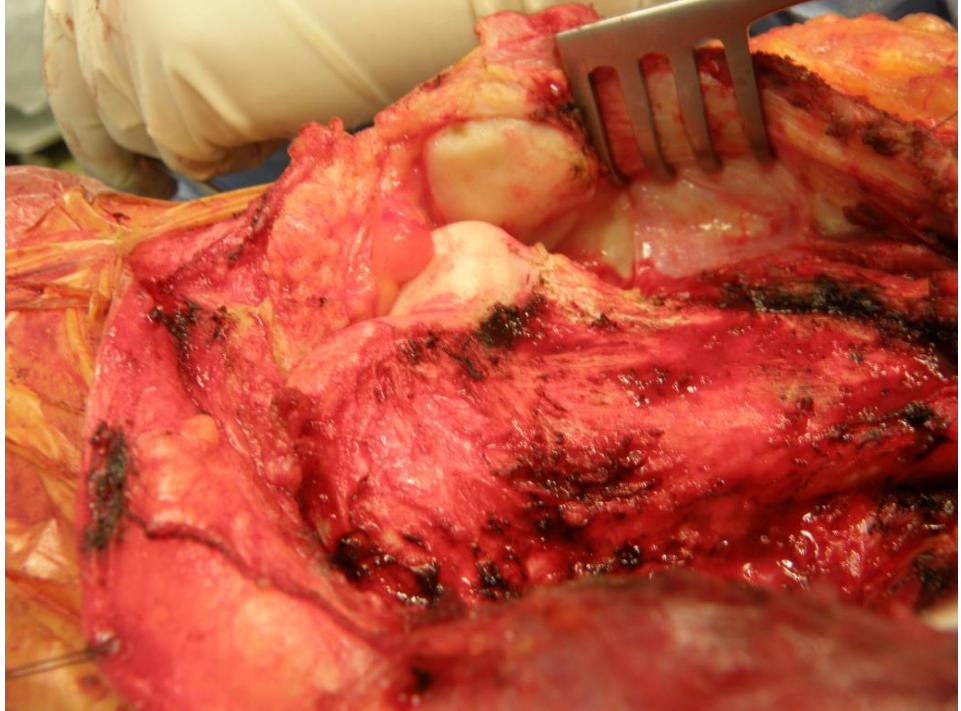
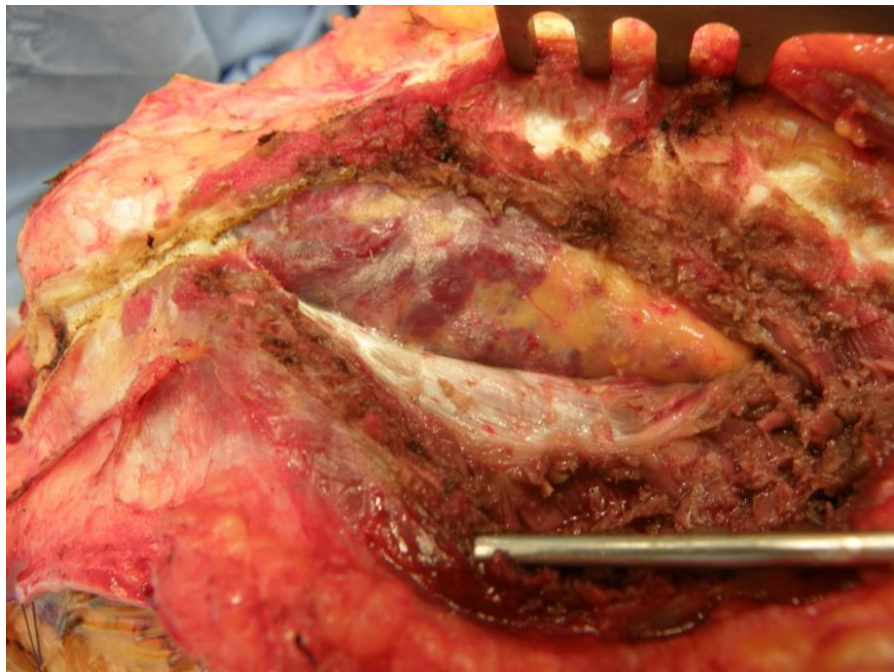
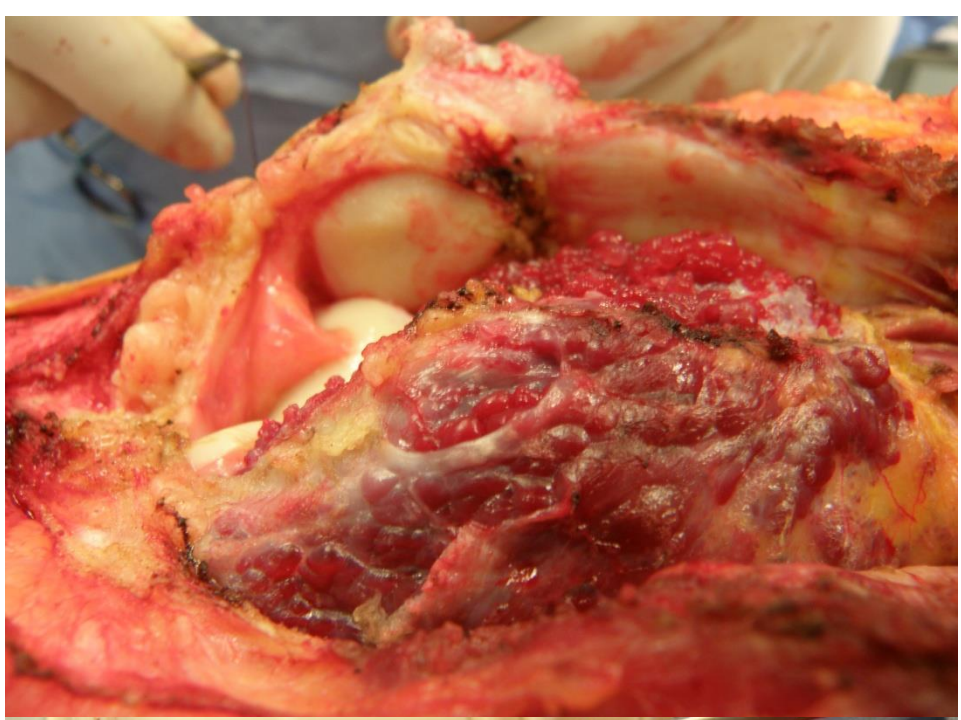
- Mainly knee joint
- Unique, localized / may involve adjacent structures

Extra-synovial: supracondylar bursa

Intra-synovial

- **Indications:** recurrent pain
limitation movement
hemarthrosis
prevention of chondropathy





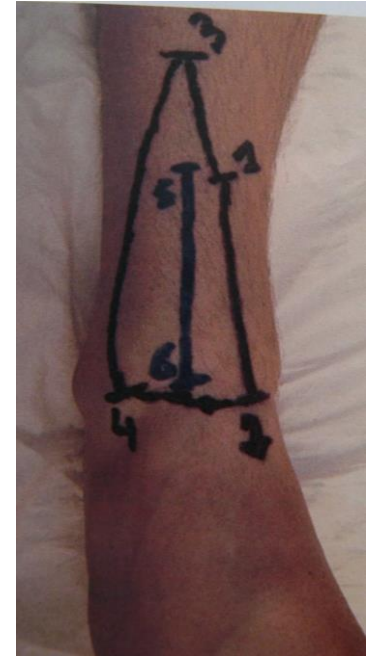


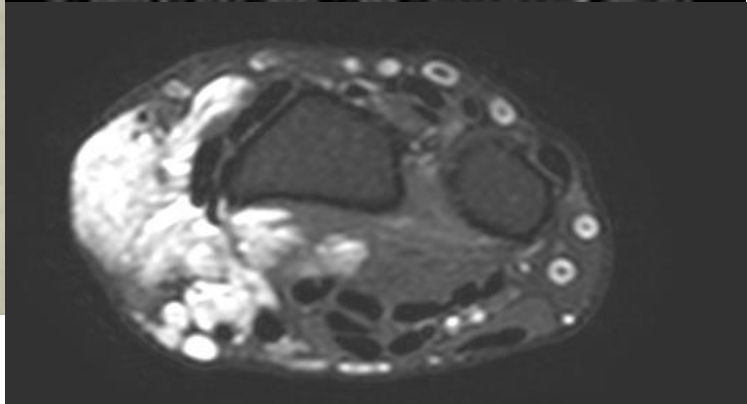
Extra-truncular: cellular space VMs

- Lower limbs: popliteal fossa , ankle area, plantar area
- Upper limbs: mainly forearm

VMs develop around tendons and neurovascular trunks

- **Indications:** recurrent pain
limitation of movement
aesthetic reasons



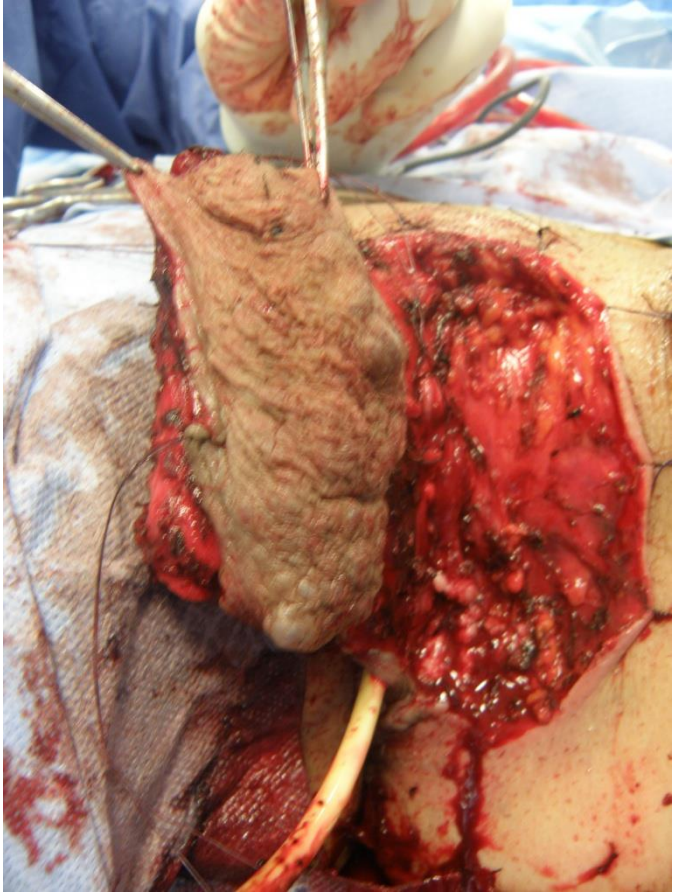




Extra-truncular: VMs of genitalia

- Indication: aesthetic, discomfort, pain
- Location, extensive lesions





Truncular VMs: superficial forms

- Insufficiency of marginal vein
- Embryonic remnant/ Valve aplasia

Incompetence: reflux from
Gluteal and perforating veins

- **Indication: symptoms of chronic superficial venous insufficiency**
- Hemodynamic therapy

Ultrasound mapping ++++



Truncular VMs: deep forms

- Dilation : Recurrent thromboembolism

- Popliteal vein

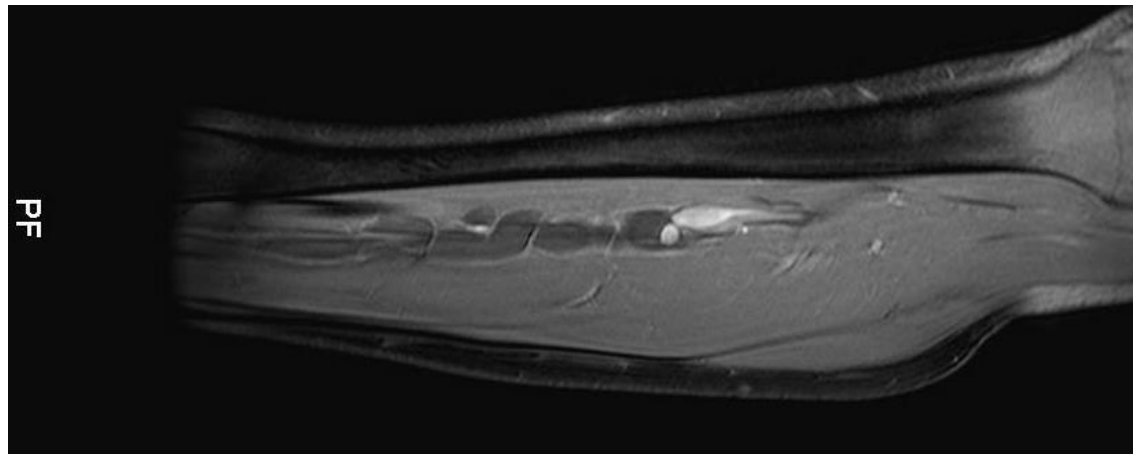
recalibrage

ligature

- Tibial veins

resection

dissection of tibial nerve
resection of veins and artery

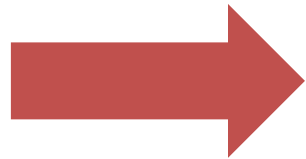


Conclusion

- VMs Variety in : location, extent, clinical manifestations
Absence of consensus on treatment



Multidisciplinary approach / Reference center



Lower/ upper extremities VMs:
Surgery > sclerotherapy/ laser

Head and neck VMs:
Sclerotherapy/ laser > surgery