Microsurgical Salvage of neonatal upper limb ischaemia subsequent to intrauterine brachial vessel constriction.

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**The Case**
- 36+6 male baby born via uncomplicated elective C-section
- Nulliparous mother
- Antenatal care and family history unremarkable
- APGARs normal
- ‘Flail’, pulseless RUL post delivery

**Investigations**
- XR= no cervical rib, fracture or dislocation
- Bedside transthoracic echo= normal
- Doppler USS= thrombosis of the proximal brachial artery

**Working Diagnosis**
- Volar forearm compartment syndrome secondary to neonatal thromboembolism

**Intervention**
- Surgical exploration under GA
- Aetiology was due to dense fibrotic circumferential constriction of the brachial vessels and plexus
- Successful revascularisation achieved with a contralateral interposition reversed great saphenous vein graft.

**Outcome**
- At 6 month follow up – the limb demonstrated normal vascularity and normal sensorimotor function.

**References**

**Neonatal Thromboembolism: Key Facts**
- **Incidence:** 0.5 in 100,000 live births
- **Complications:** compartment syndrome, tissue loss, limb loss, reduced limb growth, irreparable neuropathies and Volkmann’s syndrome
- **Risk factors:** maternal lupus, maternal diabetes, birth asphyxia, neonatal polycythaemia, sepsis, poor cardiac output and dehydration
- **Treatment:** unfractionated heparin, fasciotomies, open thrombectomy, segment arteriectomy with interposition reversed vein graft

**Figures**
- [1] Pallor on elevation and dry necrosis
- [2B] - Brachial artery deep to vein (yellow sloupe).
- [2C] - 3cm resection brachial artery
- [3B] - Microvascular anastomosis of interposition vein graft