ADVANCED SUTURING SKILLS

John Kane and Veronica Coleman
Department of Physician Assistant Studies
School of Health Professions
UT Southwestern Medical Center

Objectives

• Identify different suture material and needles for complex wound closure
• Discuss management of more complex wound closure
• Demonstrate advanced wound closure techniques

Suture Material
Suture
Absorbable
Short Term 5-7 days
Natural Chromic Plain Catgut
Synthetic Vicryl Rapide Caprosyn Polysorb

Non-Absorbable
Medium Term 10-21 days
Braided Vicryl Dexon Monofilament Monocryl

Long Term 21-30 days
Braided Monofilament Maxon PDS Biosyn

Suture Size

• 3-0
  Skin: foot
  Deep: abdomen, chest, back
• 4-0
  Scalp, chest abdomen, extremities
• 5-0
  Brow, face, genitalia
• 6-0
  Ear, eye lid, lip

Needles
Complex Wound Management

- Re-evaluation of wound within 24-48 hours
- Suture removal
  - Typically 7-14 days
    - Eyelid: 3 days
    - Face: 5 days ± steri-strips
    - Consider 14-21 days with DM and chronic corticosteroid use

Types of Wounds

- Abrasion
- Avulsion
- Incision
- Laceration
- Puncture
- Amputation
- Burns
- Ulcers

Advanced Closures

- Vertical mattress
- Horizontal mattress
- Correcting dog ear deformity
- V shape wound closure (Angled skin flap)
V Shaped Wound Closure

References

• Clinical Procedures for Physician Assistants. R. Dehr, D. Asprey
• VATA Anatomical Healthcare Models. Vatainc.com
• Closing the Gap Advanced Suturing. Lacerationrepair.com
• Ethicon Wound Closure Manual