

Pediatric Flexor Tendon Injuries

Theresa O. Wyrick, MD
Arkansas Children's Hospital
University of Arkansas for Medical Sciences

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Outline

- Background and anatomy
- Differences between children and adults
- Repair techniques
- Postoperative rehabilitation protocols
- Outcomes related to pediatric tendon repairs

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Background

- Less information about pediatric flexor tendon injuries
- Less frequent than adults
- Challenges exist because of smaller structures and anatomy
- Variations in age and maturity require variations in postoperative protocols

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Background

- Most commonly caused by glass followed by knife
- Most commonly injured digits: index and small fingers
- Average age: 8 years
- Males > females
- Zone III most common location, followed by zone II

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Anatomy and Physical Examination

- Location of laceration and mechanism of injury
- Observe resting cascade of the fingers and thumb
- Tenodesis
- Dryness in skin in zone of digital nerve
- Explore of glass or knife in area of underlying tendon or nerve

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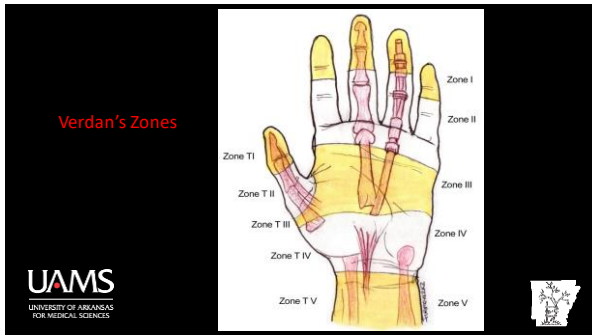
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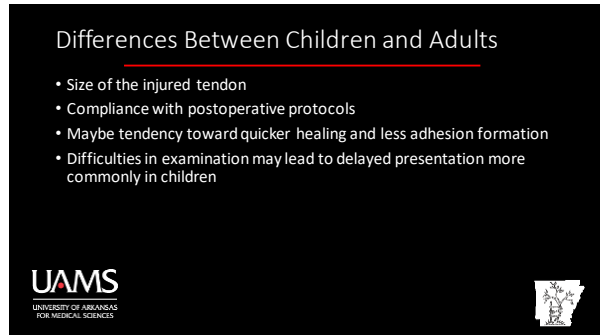
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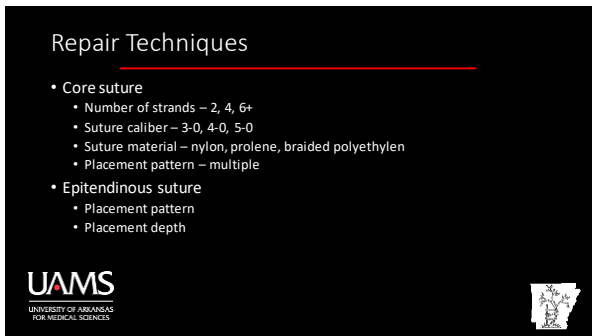
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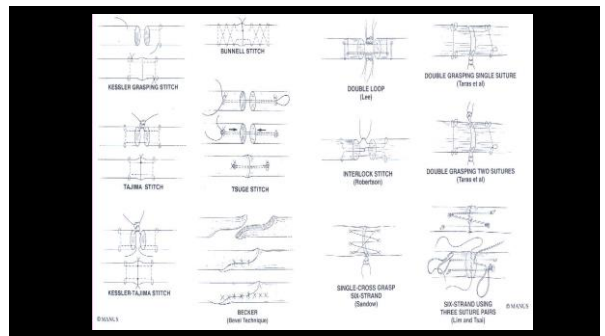
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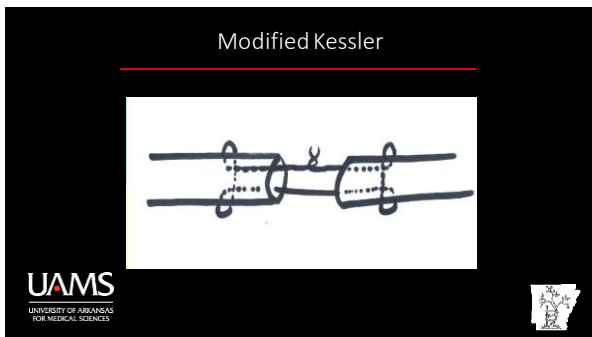
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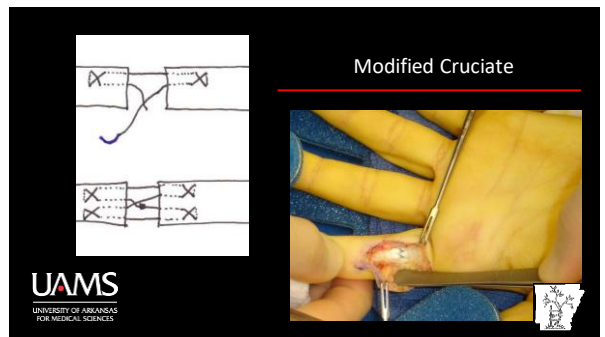
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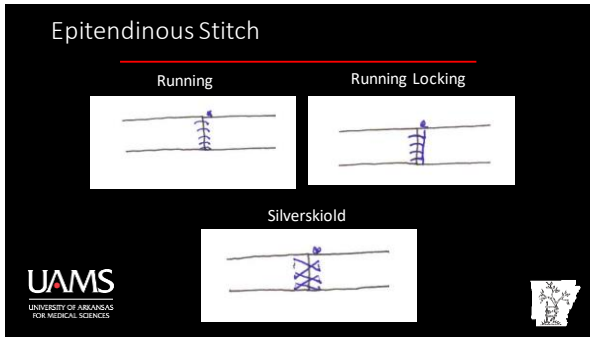
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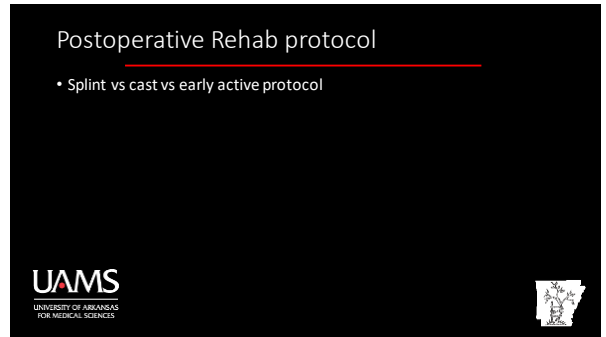
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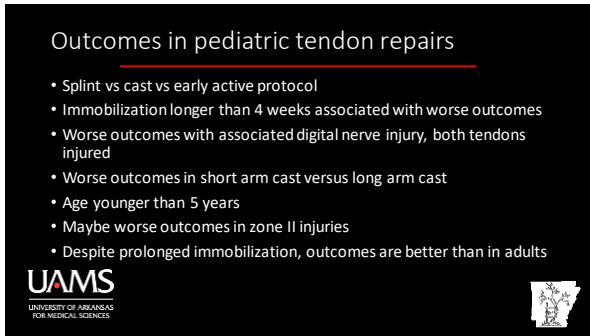
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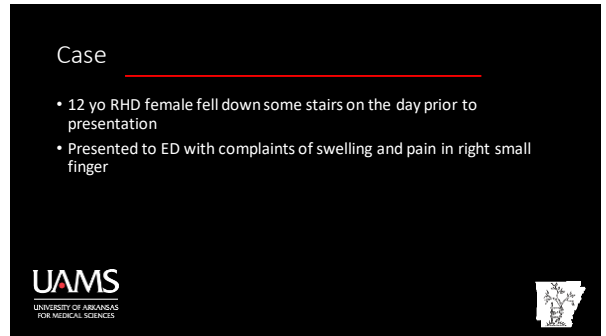
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Delayed Presentation/Rupture after primary repair

- Not infrequent in children
- Single stage vs 2 stage reconstruction
- Single stage can work well in children
- Single stage probably has better outcomes than 2 stage in children

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Take Home Points

- 4-0 suture caliber sufficient
- 2 strand modified Kessler, +/- epitendinous
- If unable to comply with early ROM protocol, then immobilize
 - Long arm immobilization preferred in this group
 - Cast vs splint immobilization similar
 - Immobilize for 4 weeks

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