INTERNAL SPLINTING: A NEW TECHNIQUE FOR ACHILLES TENDON REPAIR

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My disclosure is in the Final AOFAS Program Book. I have no potential conflicts with this presentation.
INTRODUCTION

- "Internal Splinting" a new technique in ATR
  
  - Preserves the healing tissue, and the skin as in the percutaneous techniques
  - With strong sutures to hold the ends together as in open techniques
  
  - Thus enables a strong repair and protects the local healing tissue at the site of injury
METHODS

• "Internal Splinting" bridging the rupture site

• Two different methods for distal fixation.
  – rupture site - calcaneal insertion >3 cm, sutures on both ends of the tendon
  – rupture site - calcaneal insertion <3 cm, bony tunnel to calcaneal tuberosity

• All patients were evaluated at postoperative 6 months with AOFAS scores and Thermann Post Achilles surgery scores.
RESULTS

- 24 patients between the years 1998-2011
- 2 women and 22 men
- The mean age 38 years (range 27-53 years)
- 15 left, 9 right achilles
- Time to operation 3.5 days (range, 1-12 days).
- The mean AOFAS 96.2 (86-100)
- Thermann Post Achilles Surgery Scores  87.9 (81-100)
- The AOFAS scores were higher than those reported in literature
- The Thermann scores were similar as in literature
- Complications:
  - mild hypoesthesia at sural nerve distribution in 2, healed completely at 6 months
  - One re-rupture in one patient at postoperative 2 months with vigorous activity.
CONCLUSION

- Technique combines best features of both open and percutaneous techniques.
  - Technique preserves the healing tissue, the paratenon and skin as in closed techniques
  - Strong sutures holds the ends together as in open techniques

- We concluded that the Internal Splinting method is a safe, easy and successful method for Achilles tendon repair provided that there is good patient compliance