Versalok

A New Technique for

Arthroscopic Knotless Rotator Cuff Repair…..

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Optimal Cuff Repair

- Arthroscopic
- Knotless
- Secure fixation
- Simple technique
- Nothing protruding into SA space
- Allow tensioning of repair
- Versatile technique
- Single or Dual Row
Knotless: Existing Options…

- **Tacks**
  - Fragments in SA space
  - 13/25 failed (Elias AOSSM annual mtg 2004)
  - Revision rate 33% (Arthroscopy 2003)

- **Opus**
  - Cumbersome technique
  - Large metal anchor
  - Stainless steel

- **Pushlock**
  - Poor fixation
  - Poor tensioning
The Versalok: Advantages

- Knotless
- 4.9mm insertion diameter
- No pre-drilling
- Easy technique
- Accurate tensioning
- Versatile
Einstein discovers that time is actually money.
VERSALOK™

Self locking anchor:
Locks suture within anchor after deployment

Titanium core
PEAK Shell

Pre-deployment
Post-deployment
Versalok: Deployment

Expanding anchor locks sutures and fixes anchor to bone...

1. Tap inserter to laser line.
2. Tension Rotator Cuff w/tension wheel or manually
3. Deploy Anchor Lock suture by fully squeezing trigger
4. Unscrew & Remove anchor shaft by turning inserter counterclockwise.

Sub-cortical fixation

Protection sutures

Ø4.9mm (Pre-Deployed OD)

Ø6.3mm (Post-Deployed OD)
The Versalok: Tensioning Gun

Tensioning wheel
Versalok: STRONG!

Cadaiveric Anatomical Pullout Load
After 200 Cycles of Cyclic Load

VERSALOK
n=6

Opus*
n=6

PushLock*
n=2, 4 Repairs Failed
Prior To The 200 Cycles

Max Load (N)

79 lbs

31 lbs
Versalok Benefits: Simplicity

- Simple technique:
  - No drilling
    - Single step insertion
  - Single or double loading
  - Easy/accurate tensioning
Versalok Benefits: Security

- Secure fixation even in poor quality bone!
  - Circumferential compression
  - Cortical and subcortical fixation
  - Excellent pull-out strength

Expansion within bone
Versalok Benefits: Versatility!

- Can use any suture
- Can use any suture passing method
- Single or double load anchor
- Suture first, or anchor first
Versalok Benefits: Tensioning

- Allows tensioning of repair after anchor inserted! (before deployment)
- Secure suture tension every time
- Tensioning wheel for accuracy
Versalok: Versatile Technique Options

- **Single row lateral fixation:**
  - Simple suture
  - Inverted mattress
  - Arthroscopic Mason Allen (single step)

- **Double row fixation (improved footprint):**
  - Separate Medial & lateral suture rows
  - Medial mattress, footprint compression (suture spanning)
Versalok technique #1: Single row lateral fixation

- Simple
- Inverted mattress
- Arthroscopic Mason Allen ("rip-stop")
Single row lateral fixation: using simple sutures
Versalok Technique

Express Sew
Versalok Technique
Versalok Technique
Lateral “Anatomic” Position

- Beach Chair
- Lateral
Video Example of Lateral Anatomic View (Compared to Beach Chair)
Versalok Technique #2: Inverted Mattress
Versalok:
Simple Lateral Row
Double Loaded
Versalok: Single Step Lateral "V" Closure
Versalok
Dual Row Fixation

Larger repair footprint!

Medial and lateral row fixation
Dual Row

- **Benefit:**
  - Maximizes compression onto tuberosity
  - Increasing fixation footprint
  - Decreased movement of cuff-bone interface during healing
  - Minimize synovial fluid infiltration

- **Technique**
  - Medial row:
    - Versalok: knotless mattress
    - Spiralok: standard mattress
  - Lateral row:
    - Suture spanning
    - Separate row
Medial Row Mattress: Knotless
Two Separate Rows

- Medial row standard mattress

Separate lateral row
Dual Row: Crossover: Suture Spanning Technique

- One double loaded medial anchor
- Single large medial mattress
- Cross for footprint compression

- Two Double loaded medial anchors
- Tie Two medial mattress
- Criss-Cross for footprint compression

Single cross
Criss-cross
Dual Row:
Medial Mattress / Simple Lateral
Dual Row:
Criss- Cross
Dual Row: Criss-Cross

Medial Row anchors - double loaded

Shuttle sutures through tissue
Dual Row: Criss Cross –cont.

Repeat Two Anchors
Dual Row: Criss Cross- cont.
Dual Row: Criss Cross -cont
Dual Row: Criss Cross cont.
Dual Row:
Criss –Cross- cont.
Dual Row: Criss Cross
Summary

- Versalok offers significant advantages for arthroscopic RTC repair
  - Knotless
  - Versatile
  - Simple
  - Multiple options for ‘double row’ fixation
  - Best fixation of any knotless anchor after cyclic loading
THANK YOU!