OUTCOMES OF THE CALCANEAL SCARF OSTEOTOMY FOR SURGICAL CORRECTION OF THE ADULT ACQUIRED FLATFOOT DEFORMITY

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My disclosure is in the Final AOFAS Program Book
I have no potential conflicts with this presentation.
One osteotomy that provides triplanar correction
Can be combined with soft tissue procedures
The purpose of this study is to investigate the long term outcome of the calcaneal scarf osteotomy (CSO) for AAFD with outcome surveys, clinical and radiographic exams.

- Medical records were reviewed to identify
  - CSO/AAFD patients
  - January 2002 to March 2012
  - Pre-operative radiographs
  - Pre-operative VAS scores
  - Complete medical records

- Exclusion criteria:
  - Incomplete medical records
  - CSO for calcaneal varus deformity
  - Rosalind Franklin University of Medicine and Science IRB approved study.

- Research visit
  - Physical exam
  - Weight bearing radiographs
  - Outcome surveys
    - Visual analog scale (VAS)
    - Foot and ankle outcome score (FAOS)
    - FFI (Foot function index)

- Demographics
  - 29 patients (31 feet)
  - 10 males, 19 females
  - Average age: 49.0 ± 17.2 years
  - Follow up: 5.7 ± 2.0 years
Post-operative VAS scores were significantly lower than pre-operative scores (p<0.01).

Foot function index scores decreased significantly (p<0.01) indicating better foot function.
Post-operative FAOS scores indicate moderately high function post-operatively.

Higher the score indicates better function.
RESULTS – CC JOINT ANGLE

Pre-op

Post-op

Pre-operative
Post-operative

Angle (degrees)

0 5 10 15 20 25 30 35

Pre-operative
Post-operative

Angle (degrees)

0 10 20 30 40 50

Pre-operative
Post-operative
RESULTS – CALCANEAL CUBOID ARTHRITIS: RADIOGRAPHS

- Patients with post-operative CC joint arthritis had pre-operative CC joint arthritis
- No patients were found to develop CC joint arthritis
Optimal treatment for AAFD is evolving

**Clinically**
- Normalized appearance of foot
- Ability to perform a single leg heel raise

**Radiographically**
- Tri-planar correction obtained with low rate of CC joint arthritis

**Outcome scores**
- Significant decrease in VAS scores
- High outcomes scores (FAOS and FFI)

**Correlations**
- Low to moderate correlations noted between radiographic parameters and outcome scores

The CSO is a versatile triplanar osteotomy and should maintain its place in the surgical treatment algorithm for AAFD.