Thursday, June 21, 2012

7:00 – 7:30 am

Video Technique 1:
Tips and Tricks: Hindfoot Fusion

Moderator:

Terrence M. Philbin, DO
Westerville, Ohio

7:00 am

My Anterior Ankle Fusion Technique
Mark E. Easley, MD
Durham, North Carolina

Overview

**Pertinent References**: (see annotated bibliography below)
(Tarkin, Mormino et al. 2007; Plaass, Knupp et al. 2009; Guo, Yan et al. 2010; Mohamedean, Said et al. 2010)

**Personal observations**
- Trend toward anterior approach and anterior plating for ankle arthrodesis but not universally accepted
- Perhaps will add stability to ankle arthrodesis construct when comparing to screw fixation
- Current techniques favor preserving anatomy (particularly malleoli) so that an ankle fusion takedown may be feasible with conversion to total ankle arthroplasty should ankle arthrodesis lead to adjacent hindfoot arthritis over time

**Exposure**
- Same as for Total Ankle Arthroplasty
- Crossing branch of SPN may need to be sacrificed
- Open extensor retinaculum over EHL
- Interval between TA and EHL
- Protect deep NVB
- Deep retraction only (no skin tension)

**Joint Preparation**
- Preserve joint anatomy (ie, do not resect fibula)
- Remove anterior osteophytes to improve DF
- Clean Gutters to optimize coronal (and sagittal) plane position
- Use joint distraction
- Carefully elevate posterior capsule to allow optimal sagittal plane position
- Maintain subchondral bone architecture if possible but remove all cartilage and fibrous tissue (maintain talar convex and tibial concave surfaces)
- Penetrate tibial and talar subchondral bone with drill +/- chisel to create vascular/marrow access and increase surface area for fusion
- If focal AVN present, then this bone should be resected
- Occasionally structural graft required to fill large defect