MANAGEMENT OF POST TRAUMATIC ARTHRITIS AFTER TALUS FRACTURE

MICHAEL P CLARE, MD
FLORIDA ORTHOPAEDIC INSTITUTE
TAMPA, FL USA

TALUS ARGUABLY THE MOST IMPORTANT BONE IN THE FOOT & ANKLE:
MECHANICS / MOTION / FUNCTION

ESSENTIAL JOINTS: ANKLE/SUBTALAR/TALONAVICULAR/CALCANEOCUBOID/4-5 TMT

NON-ESSENTIAL JOINTS: 1-3 TMT / NAVICULOCUNEIFORM

THE PROBLEM: TALUS FX OFTEN A 2-3 JOINT INJURY
POTENTIAL LIFE-CHANGING EVENT

CLINICAL ASSESSMENT:

STANDING ALIGNMENT / ANKLE & HINDFOOT MOTION / LOCATION OF PAIN

STANDING RADIOGRAPHS / CT SCAN INVALUABLE:
EXTENT OF ORIGINAL INJURY / IS JOINT(S) PRESERVABLE?

PERIPHERAL FRACTURES:

TALAR HEAD FX / LATERAL PROCESS FX / POSTERIOR PROCESS FX
SUBTALAR DISLX WITH AVULSION FX

GENERALLY BEST PROGNOSIS: LIMITED ARTICULAR INVOLVEMENT

EXCISION/EXOSTOSIS VS MALUNION TAKEDOWN/REVISION FIXATION
DEPENDS ON FRAGMENT SIZE / BONE ATTACHED / CARTILAGE STATUS

INCLUDE INTRA-ARTICULAR ADHESIOLYSIS

EARLY AGGRESSIVE MOTION

NECK / BODY FRACTURES:

POOR VASCULAR SUPPLY: 60% OF TALAR BODY FROM TARSAL CANAL OFF PTA /
LIMIT DISSECTION IN SINUS TARSI / TARSAL CANAL / MIDDLE FACET

GENERALLY LESS OPTIMAL PROGNOSIS:
CAPSULAR CONTRACTURES / STIFFNESS
SIGNIFICANT ARTICULAR INVOLVEMENT / 2-3 JOINT INJURY
PARTIAL / COMPLETE OSTEONECROSIS
PRIORITY (ATTEMPT TO PRESERVE): ANKLE > TALONAVICULAR > SUBTALAR

CAPSULAR RELEASE / ADHESIOLYSIS:
SUPINE VS PRONE / INCLUDE GASTROC RECESSION OR OPEN TAL

NONUNION/MALUNION CORRECTION:
USUALLY VARUS THRU NECK VS PRE-EXISTING CAVUS
OPENING WEDGE OSTEOTOMY / STRUCTURAL BONE GRAFT
CORRECTION OF VARUS/CAVUS UNLOCKS HINDFOOT MOTION
INCLUDE INTRA-ARTICULAR ADHESIOLYSIS

PARTIAL VS COMPLETE OSTEONECROSIS:
EXCISION / CANCELLOUS VS STRUCTURAL AUTOGRAFT
DEFORMITY CORRECTION / LIMIT ARTHRODESIS TO INVOLVED JOINT(S)

MODIFIED BLAIR ARTHRODESIS (WITH SHORTENING)

REFERENCES: