# THERAPEUTIC STRATEGIES FOR SYMPTOMATIC OLTS

**HOW TO CHOOSE?** 





#### NON OPERATIVE TREATMENT

- REST, NSAID,
- WEIGHT BEARING AS TOLERATED
- +/- CAST
- **SUCCESS: 45 TO 53%**

NEVER TREAT
ASYMPTOMATIC LESIONS







- NON OPERATIVE TREATMENT
- EXCISION, CURETTAGE, DRILLING
  - CURETTES OR SHAVER
  - UNSTABLE CARTILAGE REMOVAL
  - DEAD BONE REMOVAL
  - DRILL (DRILL SLEEVE)
  - MICROFRACTURE PROBE
  - HOLES IN THE SCLEROTIC ZONE
  - SUCCESS: 85% (46-100)









- NON OPERATIVE TREATMENT
- EXCISION, CURETTAGE, DRILLING
- CANCELLOUS BONE GRAFT
  - FILLING WITH AUTOGENOUS CANCELLOUS BONE
  - LIFT, DRILL, FILL AND FIX (G KERKHOFFS)
  - OCD> 15MM DIAMETER
  - SUCCESS: 41 TO 93%





- NON OPERATIVE TREATMENT
- EXCISION, CURETTAGE, DRILLING
- CANCELLOUS BONE GRAFT
- OSTEOCHONDRAL TRANSPLANTATION
  - MOSAICPLASTY OR OATS
  - OPEN OR ARTHROSCOPIC APPROACH
  - DIFFICULTIES IN POSITIONING THE TRANSPLANT
  - MORBIDITY OF THE DONOR SITE
  - SUCCESS: 87% (74-100)







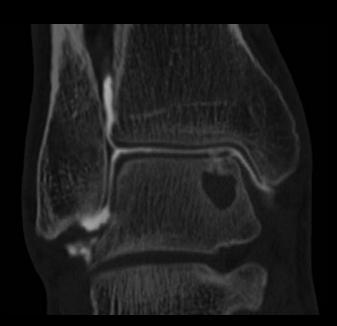


- NON OPERATIVE TREATMENT
- EXCISION, CURETTAGE, DRILLING
- CANCELLOUS BONE GRAFT
- OSTEOCHONDRAL TRANSPLANTATION
- AUTOLOGOUS CHONDROCYTE IMPLANTATION
  - REGENERATION OF HYALINE-LIKE CARTILAGE
  - 2 PROCEDURES
  - SUCESS: 76% (70-92)



Baums MH et al. Autologous chondrocyte transplantation for treating cartilage defects of the talus. JBJS. 2006; 88A: 303-

- NON OPERATIVE TREATMENT
- EXCISION, CURETTAGE, DRILLING
- CANCELLOUS BONE GRAFT
- OSTEOCHONDRAL TRANSPLANTATION

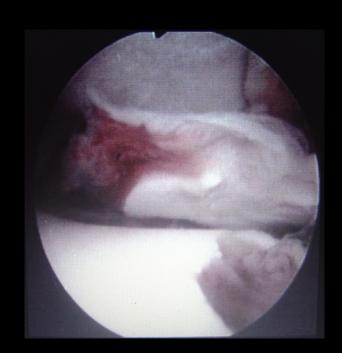


- AUTOLOGOUS CHONDROCYTE IMPLANTATION
- RETROGRADE DRILLING
  - LARGE CYST + INTACT CARTILAGE + DEFECT HARD TO REACH
  - SUCCESS: 88% (81-100)





- NON OPERATIVE TREATMENT
- EXCISION, CURETTAGE, DRILLING
- CANCELLOUS BONE GRAFT
- OSTEOCHONDRAL TRANSPLANTATION



- AUTOLOGOUS CHONDROCYTE IMPLANTATION
- RETROGRADE DRILLING
- FIXATION: LARGE LOOSE FRAGMENT, GOOD UNDERLYING BONE



Kumai T et al. Fixation of osteochondral lesions of the talus using cortical bone pegs. JBJS. 2002; 84B: 369-74.

#### **OCD: PREOPERATIVE CONSIDERATIONS**

- SIZE
  - 15 MM
- SUBCHONDRAL BONE
  - SCLEROTIC ZONE
  - CYSTIC LESION
- FOG CLASSIFICATION
  - FRACTURE
  - OSTEONECROSIS
  - GEODE (= CYST)



#### **OCD: PREOPERATIVE CONSIDERATIONS**

#### SURGICAL APPROACH

- OPEN
  - ANTERIOR
  - POSTERIOR
- MALLEOLAR OSTEOTOMY
- ARTHROSCOPY
  - DISTRACTION?
  - PREOPERATIVE ANKLE ROM
  - FORCED PLANTAR FLEXION





#### **OCD: PREOPERATIVE CONSIDERATIONS**

- OVER WEIGHT
- LOWER LIMB MALALIGNEMENT
- ANKLE INSTABILITY
- FUNCTION







## **EXCISION-CURETTAGE**& BONE MARROW STIMULATION

- GOOD OR EXCELLENT RESULTS:
  - 83% TO 86% IN PRIMARY GROUP
  - 75% IN REVISION GROUP
- NO DEGENERATIVE CHANGES



- -Schuman L et al. Arthroscopic treatment for osteochondral defects of the talus. Results at follow-up at 2 to 11 years. JBJS Br, 2002; 84: 364-8.
- -Zengerink M. Current concepts: Treatment of osteochondral ankle defects. Foot Ankle Clin N Am. 2006; 11: 331-59.





### ALWAYS CONSIDER ARTHROSCOPIC OPTION

- EXCISION-DEBRIDEMENT-DRILLING:
  - FIRST STEP IN THE TREATMENT OF SYMPTOMATIC OCD.
  - BEST INDICATIONS: < 1 CM</li>
  - CAN ALWAYS BE CONSIDERED FOR LARGER LESIONS
- FOR LARGE CYSTIC LESIONS:
  - PLACE FOR RETROGRADE DRILLING & CANCELLOUS GRAFT
- -Tol JL et al. Treatment strategies in osteochondral defects of the talar dome: a systematic review. Foot Ankle Int . 2000; 21: 119-26
- -Verhagen RA et al. Systematic review of treatment strategies for osteochondral defects of the talar dome. Foot Ankle Clin. 2003; 8: 233-42.
- -Chan KM, Karlsson I. Ankle instability. Chronic injuries Management for osteochondral defects. Presented at the 2005 biennal ISAKOS Congress.

