**Abstract #2077**

**All-Arthroscopic AMIC for Osteochondral Lesions of the Talus: Clinical and Radiological Findings**

**Presenting Author:** 
Luigi Manzi, MD

**Additional Authors:** 
Riccardo D’Ambrosi, MD, Camilla Maccario, MD, Laura De Girolamo, Federico G. Usuelli, MD

**Category:** Arthroscopy

**Keywords:** Osteochondral; matrix; arthroscopic; ankle

**Introduction/Purpose:** Autologous Matrix-Induced Chondrogenesis (AMIC) technique has shown to provide satisfactory clinical results for the treatment of knee, hip and ankle cartilage lesions. The purpose of this study is to evaluate clinical and radiological outcomes of patients treated with a new All-arthroscopic AMIC (A-AMIC) technique for osteochondral defects of the talus at a minimum follow-up of 24 months (mean f.up, 41 months).

**Methods:** 20 patients underwent A-AMIC procedure for type III and IV osteochondral lesions of the talus. Patients were evaluated pre-operatively and at 6, 12 and 24 months post-operatively using AOFAS score (American Orthopaedic Foot and Ankle Society), VAS (Visual Analog Scale) and SF-12 (Short Form -12). Radiological assessment included CT-Scan and MR.

**Results:** All the scores significantly improved with respect to pre-operative values already after 6 months, with further improvements up to 24 months (AOFAS, from 57.1±14.9 before surgery to 86.6±10.9 after 24 months; VAS, from 8.1±1. to 2.5±2.2; SF-12, from 29.9±4.1 to 48.5±6.9 and from 43.8±2.9 to 53.1±3.9 respectively for PCS and MCS). Lesion size volume significantly reduced from 810±536.3 mm3 pre-operatively to 453±310.6 mm3 at final follow-up as assessed by CT-scan, and from 1251 mm3 to 489 mm3 as assessed by MR. MOCART score (magnetic resonance observation of cartilage repair tissue) was 42.8±22.9 and 50.9±24.9 at 12 and 24 months, respectively.
**Conclusion:** Our study demonstrates that A-AMIC can be considered a safe, scarcely invasive and effective technique able to rapidly and significantly improve pain and function and radiological healing of lesions, with progressive further improvements at least up to 24 months.