Relationship Between Symptomatic Osteochondral Lesions of the Talus and Quality of Life, Body Mass Index, Age, Size and Anatomic Location

Riccardo D'Ambrosi, MD, Camilla Maccario, MD, Federico Giuseppe Usuelli, MD

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Introduction/Purpose: The aim of the study was to assess the relationship between symptomatic osteochondral lesions of the talus (OLTs) and age, Body Mass Index (BMI), quality of life (QOL), size and anatomic location.

Methods: Fifty-two patients with chronic OLTs were analyzed including BMI, Visual Analogue Scale (VAS), American Orthopaedic Foot and Ankle Society (AOFAS), Short-Form Health Survey (SF-12 divided into Mental (MCS) and Physical (PCS) score) and the 12-Item General Health Questionnaire (GHQ-12). Every patient underwent magnetic resonance imaging (MRI) and computed tomography (CT) examinations. We carried out a sub-analysis by dividing the talus into 6 areas, 3 vertical (medial, central and lateral group) and 3 horizontal (anterior, middle and posterior group).

Results: There were 31 (60%) male and 21 (40%) female patients. Mean MCS and PCS resulted respectively 43.9 and 35.2. OLTs were located as follows: medial 20 (38.50%); central 13 (24.0%); and lateral 19 (36.50%); anterior 24 (46.15%); middle 16 (30.77%); and posterior 12 (23.08%). No significant differences were found among different groups with the exception of the anterior and posterior group for MCS (p=0.021). In central group we identified a negative correlation (R=-0.672) between aging and AOFAS and a positive correlation between BMI and lesion size. We found a positive correlation between CT and MRI in each group.

Conclusion: OLTs impact patients quality of life particularly in the physical component. Additionally, in patients with central lesions we found a positive linear correlation between lesion size and BMI and a worsening of the ankle with increasing age.