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Fig (1) Ultrasound Transverse scan over left TA of male 25 squash player shows hyperechoic dot of calcification inside the tendon with acoustic shadowing before treatment.

Fig(2) same patient, after 3 months of treatment with ESWT shows disappearance of calcification

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AB0913 THE ROLE OF BISPHOSPHONATES IN THE MANAGEMENT OF SPONTANEOUS OSTEONECROSIS OF THE KNEE (SONK)

Mark Ford, Roshan Amaraseena. *The Robert Jones and Agnes Hunt Orthopaedic Hospital NHS Foundation Trust, Gobowen, United Kingdom*

Background: Spontaneous osteonecrosis of the knee (SONK) was first described by Ahlbäck, Bauer and Böhner in 1968 when they identified 39 patients with radiolucent lesions of subchondral bone in the medial femoral condyle which represented a manifestation of osteonecrosis. The aetiology and pathogenesis of SONK remains unclear with possibilities including microvascular compromise, reduced bone mineral density, and mechanical disruption within the knee. The treatment compromises of conservative, medical and surgical options depending on the severity of osteonecrosis identified on imaging. Lai *et al* (2005) demonstrated the beneficial effect of alendronate in the prevention of early collapse of the femoral head in patients with nontraumatic osteonecrosis. However, the role of bisphosphonates in the treatment of SONK is debated and the evidence is based upon a few studies.

Objectives: To assess the evidence for the use of bisphosphonates in SONK.

Methods: A literature search was conducted to identify studies reporting the effect of bisphosphonates in the treatment of SONK and the usefulness and validity of their conclusions was subsequently assessed.

Results: We have identified one randomised controlled trial and four case series investigating the use of a bisphosphate on the clinical and radiological outcome in patients with osteonecrosis of the knee. All four case series showed improvements with bisphosphonates on patient visual analogue scale (VAS) and radiological outcome. However, the sole randomised controlled trial reported that bisphosphonates had no additional benefit over conservative measures and anti-inflammatory medications after 24 or 48 weeks both functionally and radiographically. These studies had a small number of participants and the size of the osteonecrotic lesion was either small, which traditionally is managed conservatively, or not interpreted in the context of the results.

Conclusion: The role of bisphosphonates in the treatment of SONK remains unclear. Further randomised controlled trials would be beneficial in these patients with emphasis on the symptom duration and the size of the osteonecrotic lesion.

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AB0914 EFFECT OF VITAMIN D SERUM CONCENTRATION ON ARTRALGIA INDUCED BY ADJUVANT THERAPY WITH AROMATASE INHIBITORS IN NON METASTATIC BREAST CANCERS SURVIVORS

Emanuele Gotelli, Carlotta Schenone, Francesco Cattelan, Elisa Alessandri, Federica Goegan, Massimo Patanè, Massimo Ghio, Maurizio Cutolo, Sabrina Paolino. *IRCCS San Martino Polyclinic Hospital, Genoa, Italy, Research Laboratory and Academic Division of Clinical Rheumatology, Department of Internal Medicine, University of Genova, genoa, Italy*

Background: Hand arthralgia is often reported by breast cancer patients treated with adjuvant hormonal therapy. Aromatase inhibitors (AIs) improve survival in postmenopausal women with hormone-sensitive breast cancer, but can cause joint pain and stiffness (2). Low concentration of vitamin D in adults can cause musculoskeletal pain and joint discomfort (1). No data are available to date, on serum concentrations of (25-hydroxyvitamin D) [25 (OH) D₃] vitamin D in AI-treated patients and possible relationship with arthralgia.

Objectives: To evaluate possible correlation between different 25 (OH) D₃ serum concentrations and hand arthralgia in patients with breast cancer treated with AIs.

Methods: All patients that during the AIs therapy develop arthralgia referred to the rheumatologist; they reported the pain following the VAS (visual analogic scale) and contemporary performed a sample blood for dosage of vitamin D as well as biomarkers for inflammation and autoimmunity to exclude concomitant immune/inflammatory rheumatic musculoskeletal causes.

Results: In a group of 63 women taking AIs (mean age 62.3±9.8years; disease duration from first assumption of AIS 10.6±3.2 months) 81% reported hand arthralgia and stiffness within the first year of follow-up; the most prevalent site of pain localization was bilateral hands (85%). Symptom was associated with minimal increase of serum parameters of inflammation (the mean value of C-reactive protein was 7.1±3.0 mg/L (normal value 0-5) but negative autoimmune profile (negative rheumatoid factors and anticitrullinated protein antibodies). The mean 25(OH)D₃ serum concentration was 18.4± 8.5 ng/ml. Only 9% of women had an adequate (≥ 30 ng/ml) [25 (OH) D₃] vitamin D serum levels, 70% were insufficient (> 10 < 20 ng/mL), and 21% were severely deficient (< 10 ng/mL). 55% of patients started AIs after chemotherapy. From the group that received AIs after chemotherapy 77% patients with arthralgia were found during the first years of hormonal therapy, in the group that previously did not take chemotherapy 88% of patients referred arthralgia. There was any