

## [THU0254] TREATMENT FOR METATHARSALGIA BY PLANTAR INSOLES AND SILICONE ORTHOSIS FOR TOES IN PATIENTS WITH RHEUMATOID ARTHRITIS AND OSTEOARTHRITIS: A CROSS-OVER STUDY

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**Background:** In Rheumatoid Arthritis (RA) and Osteoarthritis (OA) forefoot involvement causes disability and metatarsalgia. **Objectives:** to evaluate, in RA and OA patients, the efficacy of two programs combining insoles in polypropylene terephthalate (PPT) and custom silicone orthosis for toes. **Methods:** 24 women (13 with OA e 11 with RA) with metatarsalgia were assigned at T0 to 2 groups (each formed by 12 patients): group A was treated for 30 days with PPT insoles (T1) and in the further 30 days silicone orthosis for toes were added (T2). Group B was treated for 30 days with PPT insoles and silicone orthosis (T1) and for the next 30 days only with insoles (T2). At T0, T1 and T2, pain, disability and functional limitation (by Foot Function Index -FFI-); plantar pressure (KPA) and areas (cm<sup>2</sup>) (by baropodometer) were assessed. At T0 and T2 a questionnaire evaluating global pain (5 VAS scales 0-10) and at T2 a VAS scale (0-10) assessing satisfaction were administered. **Results:** In Group A, insoles application improves at T1 *versus* T0 all FFI sub-scales that, at T2 (after insoles and orthosis) result stable *versus* T1, and better *versus* T0 ( $p < 0.05$ ). At T1 *versus* T0, plantar pressures improve ( $p < 0.05$ ), with the results maintained at T2 *versus* T0 ( $p < 0.05$ ) and no difference between T2 and T1 ( $p = NS$ ). Plantar areas improve at T2 *versus* T0 ( $p < 0.05$ ). In group B, at T1, the treatment with insoles and digital orthosis improves all FFI sub-scales *versus* T0. ( $p < 0.05$ ). FFI-pain and FFI-disability remain better at T2 than at T0 ( $p < 0.05$ ). At T2 *versus* T1, with the use of only insoles, FFI-pain impairs ( $p < 0.05$ ). Plantar pressures at T1 improve in respect to T0 ( $p < 0.05$ ), do not change at T2 *versus* T1, with the improvement maintained at T2 *versus* T0 ( $p < 0.05$ ). Plantar areas do no change at any time point ( $p = NS$ ). At T2, satisfaction from the treatment results  $6.65 \pm 1,56$  in group A and  $5.90 \pm 2,16$  in Group B ( $p = NS$ ) and global pain improves *versus* T0 in both groups ( $p < 0.05$ ). **Conclusions:** In patients with RA and OA with metatarsalgia, silicone toe orthosis and PPT insoles improve foot pain, disability and pressures, especially with the protocol using firstly insoles and then adding toe orthosis. **Disclosure of Interest:** None Declared **Citation:** Ann Rheum Dis 2013;72(Suppl3):251 **Session:** Rheumatoid arthritis – non biologic treatment