SATURDAY, 15 JUNE 2019

Orthotic treatment: is it in or out?

OP0337-HPR

EFFECTIVENESS OF CUSTOMIZED INSOLES IN PATIENTS WITH MORTON'S NEUROMA: A RANDOMIZED, CONTROLLED, DOUBLE-BLIND CLINICAL TRIAL

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Background: Morton's neuroma (MN) is a benign enlargement of the third common digital branch of the medial plantar nerve. The most common symptom is burning pain in the plantar foot, located between the metatarsal heads, often radiating to the two corresponding toes. Treatment can be surgical or conservative, which consists of decreasing nerve pressure and irritation through therapies that promote analgesia, patient education, and plantar orthosis. The custom insole prescriptions are aimed at relieving the pressure in the MN region, and to redistribute pressure throughout the sole of the foot. There is no study evaluating the effect of insoles in patients with MN.

Objectives: The aim of the present study was to assess the effectiveness of a customized insole with metatarsal and arch support on pain in patients with Morton's neuroma and the impact of this insole on function, load distribution in the plantar region, gait, quality of life and satisfaction with insole use.

Methods: A randomized, controlled, double-blind, clinical trial was carried out with intent-to-treat analysis. Seventy-two patients with NM were randomly allocated into a study group (n=36) and control group (n=36). One week following the baseline evaluation, the study group received a customized insole with metatarsal and arch support made of ethyl vinyl acetate and the control group received a flat insole of the same material, color and density. The groups were evaluated after 6, 12 and 24 weeks of insole use. The following assessment parameters were employed: pain when walking, on palpation and at rest (END); paresthesia (ENP); quality of life (SF-36); foot function (FFI and FHSQ); six-minute walk test (6MWT) and foot pressure analysis using the AM Cube FootWalk Pro program.

Results: The groups were homogeneous regarding the majority of variables at baseline. In the comparisons over time, statistically significant differences between groups were found for pain when walking (p=0.048), in the general health domain (p<0.001) and physical activity (p=0.025) in the FHSQ questionnaire, in the general FFI questionnaire score (p=0.012) and in the functional capacity domain of the SF-36 questionnaire (p=0.046). For pain at rest and palpation, in the domains of the FFI, some parameters of the FHSQ (vigor, pain, function and general health of the foot) and quality of life (limitation by physical aspects, bodily pain and vitality), we observed improvement in both groups with no statistically significant difference between them. No change was observed in the baropodometry parameters with the use of the insole.

Conclusion: A customized insole with metatarsal and arch support reduce pain when walking and improve function of patients with NM.

REFERENCES:

- [1] Bennett GL, Graham CE, mauldin DM. Morton's interdigital neuroma: a comprehensive treatment protocol. *Foot Ankle Int* 1995;16:760-763.
- [2] Adams WR 2nd. Morton's neuroma *Clin Podiatr Med Surg*. 2010 Oct;27(4):535-45.
- [3] Lee KS. Musculoskeletal ultrasound: how to evaluate for Morton's neuroma. *AJR Am J Roentgenol*. 2009 Sep;193(3):W172.

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Current treatment of vasculitis

OP0338

LOW-DOSE IL-2 SELECTIVELY RESTORES REGULATORY T CELLS IN PATIENTS WITH BEHCET'S DISEASE

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Background: The lack of CD4+CD25+Foxp3+ T regulatory cell (Treg) has been associated with human systemic autoimmune diseases, such as rheumatoid arthritis (RA). IL-2 is an essential growth and survival factor for Treg cells. However, the significance of Treg cells in the pathogenesis and the effect of low dose IL-2 on Behcet's disease (BD) are rarely reported.

Objectives: To investigate the significance of Treg cells and the effect of low dose IL-2 on BD.

Methods: Eighty patients with BD and seventy healthy donors were enrolled. CD4⁺T cell subsets in peripheral blood mononuclear cells from these people were measured by multicolour flow cytometry. Twenty-six patients were treated daily with subcutaneous injections of 0.5 million IU of human IL-2 for five consecutive days. CD4⁺T cell subsets were analysed before and after treatment by flow cytometry.

Results: Compared to health control, the absolute counts of circulating Treg cells were significantly decreased in patients with BD (median:29.93 cells/ul VS median:33.16 cells/ul, P=0.039) and it is negative correlation with disease activity. While the ratios of Th17/Treg in patients with BD (median:0.29) were significantly higher than those of health control (median:0.2). No difference in the absolute counts of circulating Th17 cells (CD4⁺IL-17⁺) between patients with BD and health control. Treatment of patients with BD with a low-dose IL-2 selectively increased the absolute counts of Treg cells, from a median of 18.97 cells/ul to 74.68 cells/ul (at 5 days) (P<0.001). No significant difference was observed in the absolute counts of circulating Th17, Th1 and Th2 cells after IL-2 treatment.

Conclusion: Th17/Treg cells may play a role in the pathogenesis of patients with BD, low-dose IL-2 proposes a selective biological treatment strategy by restoring immune tolerance.

REFERENCES:

- [1] Zeidan M J, Saadoun D, Garrido M, et al. Behcet's disease physiopathology: a contemporary review[J]. *Auto Immun Highlights*,2016,7(1):4.
- [2] Malek T R, Castro I. Interleukin-2 receptor signaling: at the interface between tolerance and immunity[J]. *Immunity*,2010,33(2):153-165.
- [3] Klatzmann D, Abbas A K. The promise of low-dose interleukin-2 therapy for autoimmune and inflammatory diseases[J]. *Nat Rev Immunol*,2015,15(5):283-294.

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OP0339

TOCILIZUMAB IN GIANT CELL ARTERITIS. MONOTHERAPY VERSUS COMBINED WITH CONVENTIONAL IMMUNOSUPPRESSIVE DRUGS

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Background: Giant cell arteritis (GCA) can be refractory to corticosteroid therapy. Tocilizumab (TCZ) has been approved in the treatment of GCA. There are no studies comparing the efficacy and safety when using TCZ as monotherapy or in combination with conventional immunosuppressive drugs in GCA.

Objectives: Our aim was to compare efficacy and safety of TCZ combined or in monotherapy in GCA.

Methods: Multicenter study on 134 patients with refractory GCA who received TCZ therapy as monotherapy or combined with conventional immunosuppressants. Prolonged remission, absence of clinical symptoms and signs and normalization of the acute phase reactants for at least 6 months. Relapse, recurrence of signs or symptoms of GCA and/or ESR >20 mm/h in men or >25 mm/h in women, and/or serum CRP >0.5 mg/dL related to GCA, both before and after starting TCZ therapy.

Results: We evaluated 134 patients (101 w/33 m) with a mean age of 73.0±8.8 years. TCZ was prescribed as monotherapy in 82 (62.2%) cases and combined with conventional immunosuppressants in 52 (38.8%) patients: MTX (n=48), AZA (n=3), and LFN (n=1). A comparative study between both groups is summarized in **TABLE**. Patients who received combined TCZ were younger and had a higher C-reactive protein (CRP) and a higher presence of aortitis in imaging techniques. After TCZ was started, prolonged remission was reached with combined therapy (statistical significance at 12 and 24 months). The corticosteroids sparing effect