one of the remaining variables may worsen by >30%. Core set criteria were: physician global assessment of disease activity (0–10 cm VAS); parent/patient global assessment of overall well-being (0–10 cm VAS); functional ability; number of joints with active arthritis; number of joints with limited range of motion; and ESR.

Results: All patients completed the study. After 3 months from the initiation of Curcumin therapy, patients in group 1 had an improvement of 75% ACR Pedi30, compared to only 37.5% ($p=0.0353$) in control group. In the end, ACR Pedi30, 50, 70 and 90 scores improved by 87.50%, 81.25%, 68.75% and 43.75%; compared to only 56.25% ($p=0.0508$), 50% ($p=0.0670$), 37.5% ($p=0.0813$) and 12.75% ($p=0.0553$) in the control group. Curcumin at 1.8 g/day associated with standard therapy was well tolerated, did not induce major reactions and ultimately reduced rheumatic disease activity scores statistically significant ($p<0.05$) compared to placebo.

Conclusions: Results proved that curcumin in combination with standard therapy is safe, well tolerated, available at a low cost and has significantly improved the outcome in early stages of OJIA.

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FRI0727-HPR IMPLEMENTATION OF A MODEL FOR THE MEDICATION RECONCILIATION PROCESS IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Background: Medication reconciliation is defined as “the process of identifying the most accurate list of all medications a patient is taking, including the name, dosage, frequency, and route of each medication, and using this list to provide the correct medications for the patient anywhere within the health care system”. It has been demonstrated that inadequate prescribing due to inaccurate medication histories and reconciliation can lead to medication errors, which have been associated with increased morbidity, mortality, and healthcare costs.

Objectives: The aim of study was to design an intervention model led by pharmaceutical personnel in order to implement the reconciliation medication process in patients with RA in a specialized center.

Methods: We included patients with RA; we analyzed their particular situation regarding their pharmacological therapy, dosage, frequency among others. Additionally, we applied checklists to find out about the pharmaceutical processes previously established in the RA center and applied a SWOT analysis (strengths, weaknesses, opportunities, and threats) to plan according to the needs diagnosis.

Results: In our specialized RA center we found as strengths 1. the existence of analysis committee for the evaluation of patient's therapy, 2. the open mind of the managers in order to implement the reconciliation process 3. The continued education opportunities that the health professionals receive in the specialized RA center. As weaknesses we found: 1. The absence of processes regarding the reconciliation process. 2. In the medical charts there was no registry of the chemical pharmaceutical professional procedures into the patient's therapy. We performed 900 consultations as a pilot to implement the reconciliation medication process, as a result we found 73 patients with a clear need of medication reconciliation the reasons were therapeutic failure or adverse events related to medications. Probably attributed to the existence of multiple pathologies in 81% of patients. Regarding the pharmacological therapy 83% had a conventional DMARD primarily methotrexate in any pharmacological presentation, and biological therapy and, 12% had prescribed only biological DMARDs.

Conclusions: With these results we will implement a new model where there will be a process to perform a medication reconciliation in patients with RA, we will review the medical charts in order to identify patients that have needs with the medication process interactions among others. Additionally, we will start new research projects in order to provide evidence of the usefulness of these types of interventions.

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FRI0728-HPR COST-REDUCING AND IMPROVING QUALITY OF LIFE IN JUVENILE ARTHRITIS BY BLUE LASER AND ULTRABIOAVAILABLE CURCUMIN

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Background: Juvenile idiopathic arthritis (JIA) is associated with significant disease- and treatment-related morbidity, despite all modern management efforts. Photo biomodulation counts today more than 5,000 peer-reviewed published papers, including randomized controlled clinical trials. A review of the literature shows that Curcumin has the potential to be a safe, effective and an affordable alternative in the treatment of chronic inflammation. Its anti-inflammatory mechanism is a molecular response to the down-regulation of enzymatic activity of COX-2, lipoxygenase, and inducible nitric oxide synthase. Photobiomodulation at the maximum absorption spectra of curcumin is an innovative approach due to its complex immuno-modulatory effect.

Objectives: Aim was to investigate the effects of sublingual photo biostimulation with blue laser in association with ultrabioavailable curcumin in extensive oligoarticular and polyarticular forms of JIA.

Methods: 48 children with an average age of 13.8 years, diagnosed with JIA were included in a randomized placebo controlled trial from January 2014 to December 2017. Patients together with the legal owners signed an informed consent. Group 1 (28 patients) was administrated along with the standard treatment, Ultra Bioavailable Curcumin (15,000-fold bioavailability) 1200 mg/day p. o. and after 30 minutes was applied sublingual blue laser (447 nm), 5 mW maximum output power continuously, 10 minutes each session. Patients received one session every two days, 5 sessions per month, repeated monthly, for 6 months. Group 2 (20 patients) as control, received only conventional therapy and placebo.

Disease activity was evaluated at 0, 4, 12 and 24 weeks with JADAS-71 scores, including: physician's global assessment and parent's global assessment of well-being, both measured on 0–10-cm VAS, normalized ESR (0–10) and active joint count. Childhood Health Assessment Questionnaire (CHAQ) – Disability Index was calculated as a mean of the eight functional areas, on a 4 point scale of difficulty, scored from 0–3 each. Pain level was quantified on 0–10-cm VAS (0-no pain, 10-severe pain).

Results: In the end of study, median JADAS-71 significantly improved ($p=0.0228$) in Group I (from 13.8 to 2.8), comparatively with Group II, where the evolution was less favourable (from 14.2 to 7.4). Pain level initially estimated at 7.5 significantly decreased to 2.5 in Group I (66.7%), comparatively to the evolution from 7.4 to 5.2 in placebo group (29.7%) [$p=0.0125$]. Daily functional activity assessed by the CHAQ score improved with 62.7% in Group I, comparatively with only 13.93% in Group II ($p=0.0003$). In the end of study the most important economic aspect was that the percentage of patients receiving remissive medications and the corresponding costs per patient have decreased for methylprednisolone by 72.25% in Group 1, comparatively with only 35.04% in placebo group ($p=0.0111$); methotrexate decreased by 66.7% in Group I, comparatively to only 31.25% for placebo group ($p=0.0165$).

Conclusions: Blue laser and curcumin proved to be a safe, efficient and money saver integrative therapeutic intervention with direct impact on JIA patient's quality of life.

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