Conclusion: Child’s psychosocial adjustment is likely to be related with school attendance. When the attendance decreases, problems such as social functioning and isolation can occur. The fact that families and children agreed on the reasons about not to go to school but their functional and psychosocial status were good may have been due to different reasons. It was thought to normalize and encourage children to go to school. In addition, families should motivate their children with positive reinforcements.

REFERENCES:

Disclosure of Interests: None declared

OP0271-HPR ASSESSMENT OF MUSCLE MASS RELATIVE TO FAT MASS AND ITS ASSOCIATION WITH DISEASE ACTIVITY STATUS AND PHYSICAL FUNCTIONING IN RHEUMATOID ARTHRITIS

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Background: Rheumatoid arthritis (RA) is an autoimmune, chronic, progressive, inflammatory disease characterized by symmetrical, destructive polyarthritis and is accompanied by systemic manifestations. RA patients show low appendicular lean mass index (ALMI) and higher fat mass index. Impaired physical function is associated greater with fat mass and the adiposity is an important confounder that may mask true relationships between physical functioning and ALMI (1).

Objectives: To assess muscle mass relative to fat mass and verify associations this parameter with disease activity status, functional capacity and biologics treatments.

Methods: 90 RA patients, aged between 40 and 70 years, were recruited and followed for 12 months. Body composition was assessed by total body dual-energy x-ray absorptiometry for measurement of appendicular lean mass index (ALMI), kg/m2 and fat mass index (BMI, kg/m2). Age-, sex-, and race-specific Z-Scores and T-Scores were determined by comparison to published reference ranges. ALMI values were adjusted for BMI (ALMI/FMIZ) using a published method. Disease activity was assessed by Disease Activity Score-28 with erythrocyte sedimentation rate (DAS28). RA patients were divided in non-remission (DAS28>2.6) and in remission (DAS28<2.6). Physical functioning was assessed by Health Assessment Questionnaire (HAQ). Pharmacological treatment used by patients were assessed in patient medical records and the RA were divided in RA patients treated with biologic disease modifying antirheumatic drugs (bDMARDs) and non-treated with bDMARDs. Frequency analysis, Pearson Correlations and GEE analyses were used and statistical significance was considered as p<0.05.

Results: Of the 90 patients analyzed, most were women (86.7%,78/91), with mean age of 56.5±7.3 and median disease duration time of 8.5 (3-18) years. At baseline, the mean±SD DAS28 score was 3.7±1.4 and thirty percent of the RA patients (30/90) were treated with bDMARDs. After 12 months, the use of bDMARD did not change (p>0.05), however, mean DAS28 increased over time (mean and SD of 4.0±1.3; p<0.05). Eleven RA patients (12.2%) showed low ALMI/FMI for age (Z-score < -1) at baseline, and 13 (16.0%) after 12 months. After 12 months, ALMIZ/FMIZ was inversely associated with HAQ (r=-0.3; p<0.05). At baseline, women in remission had higher ALMI, lower FMIZ and higher ALMIZ/FMIZ, while men had lower ALMIZ, lower FMIZ and higher ALMIZ/FMIZ. In men, remission was associated with decreases in FMIZ (p<0.05). The use of bDMARDs was not related with alterations in ALMIZ, FMIZ and ALMIZ/FMIZ (p>0.05).

Conclusion: Low skeletal muscle mass relative to adiposity was common in RA patients. This condition was associated with low physical function and its changes over time are associated with disease activity status. The observations that skeletal muscle mass relative to adiposity was affected by remission state stresses and that associated negatively with poor physical functioning demonstrate the importance of adequate control of disease activity in RA established. In addition, from our results, further studies are necessary to elucidate the direct impact of bDMARDs on body composition in RA patients.

REFERENCES:

Acknowledgement: We thank the Coordination for the Improvement of Higher Level Personnel (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior—CAPES) institution, the Foundation for Research Support of the Rio Grande do Sul State (Fundação de Amparo à Pesquisa do Estado do Rio Grande do Sul—FAPERGS), the Research and Events Incentive Fund (Fundo de Incentivo à Pesquisa e Eventos—FIPES) of HCPA and Technological Development (Conselho Nacional de Desenvolvimento Científico e Tecnológico—CNPq).

Disclosure of Interests: Rafaela Cavalheiro do Espírito Santo: None declared, Jordana Miranda de Souza Silva: None declared, Joshua Baker: None declared, Vanessa Haas: None declared, Claiton Brenol Shareholder of: Has participated in clinical and/or experimental studies related to this work and sponsored by AbbVie, BMS, Janssen, Pfizer and Roche; has received personal or institutional support from AbbVie, BMS, Janssen, Pfizer and Roche; has delivered speeches at events related to this work and sponsored by AbbVie, BMS, Janssen, Pfizer and Roche, Grant/research support from: Has participated in clinical and/or experimental studies related to this work and sponsored by AbbVie, BMS, Janssen, Pfizer and Roche; has received personal or institutional support from AbbVie, BMS, Janssen, Pfizer and Roche; has delivered speeches at events related to this work and sponsored by AbbVie, BMS, Janssen, Pfizer and Roche, Consultant for: Has participated in clinical and/or experimental studies related to this work and sponsored by AbbVie, BMS, Janssen, Pfizer and Roche; has received personal or institutional support from AbbVie, BMS, Janssen, Pfizer and Roche; has delivered speeches at events related to this work and sponsored by AbbVie, BMS, Janssen, Pfizer and Roche, Speakers bureau: Has delivered speeches at events sponsored by AbbVie, Janssen, Pfizer and Roche, Lidiane Filipin: None declared, Priscila Lora: None declared, Ricardo Xavier Consultant for: AbbVie, Pfizer, Novartis, Janssen, Lilly, Roche

OP0272-HPR FITNESS STATUS OF PEOPLE WITH AXIAL SPONDYLOARTHRITIS (ASXPA): FIRST RESULTS AFTER IMPLEMENTATION OF FITNESS ASSESSMENTS IN AXSPA EXERCISE GROUPS

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Background: Public health recommendations for physical activity (PA) advice that exercise programs include all four fitness dimensions, i.e. cardiorespiratory, muscle strength, flexibility and neuromotor exercise training at well-defined