The Burden of Early Arthritis in Latin America: Utility Analysis Using Patient-Level Data From the Argentinian Consortium for Early Arthritis.

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Background/Purpose: Rheumatoid arthritis (RA) is estimated to be one of the leading causes of non-fatal burden in the world. However, data from developing countries including Latin America are limited, and the real burden of inflammatory arthritis in this population is unknown. The aim of our study was to evaluate the impact of disease activity on health-related quality of life (HRQOL) using a large cohort of Argentinian patients with early inflammatory arthritis.

Methods: We included patients with diagnosis of early RA (American College of Rheumatology 1987' criteria) or undifferentiated arthritis (UA) belonging to CONAART (Consorcio Argentino de Artritis Temprana - Argentine Consortium for Early Arthritis). CONAART is a prospective cohort of Argentinian patients with diagnosis of early arthritis (_2 years of disease duration). Data are collected every 3 months, including Health Assessment Questionnaire (HAQ), Clinical Disease Activity Index (CDAI) and pharmaco-economic data. The generic EuroQoL (EQ-5D) was derived from HAQ and patient's visual analogue scale of pain using previously validated regression models. Patients were stratified and compared according to diagnosis and disease activity levels (CDAI). All comparisons were adjusted for sex, age and comorbidities.

Results: We included 777 patients (RA_628; UA_149). Mean follow-up 14.5 _ 10.1 months (990 patients-year). Mean age was 48 _ 14 years, 82% were female and disease duration was 8.6 _ 6.3 months. On baseline visit CDAI and HAQ were 24.6 _ 14.4 and 1.2 _ 0.9, respectively. Mean EQ-5D score during follow-up was 0.74 _ 0.13. No difference regarding HRQL was observed between RA and UA (0.73_0.12 and 0.75_ 0.13, respectively). EQ-5D showed a negative correlation with disease activity (rho spearman_-0.74, p_0.0001). Mean EQ-5D in patients in remission was 0.91 _ 0.04, low disease activity_0.82 _ 0.81, moderate disease activity_0.72 _ 0.09 and high disease activity_0.61 _ 0.11 (Graph 1). Considering remission as the ideal situation, patients with early RA or UA in low disease activity entail a disease burden of 0.07 (95%CI_ 0.06 – 0.08) quality-adjusted life-years (QALYs) after one year of follow-up. In similar conditions, patients with moderate disease activity lose 0.17 (95%CI_ 0.16–

0.18) QALYs, and those with high disease activity lose 0.28 (95%CI _ 0.27–0.30) QALYs.

Graph 1. Health-related quality of life stratified by disease activity and diagnosis

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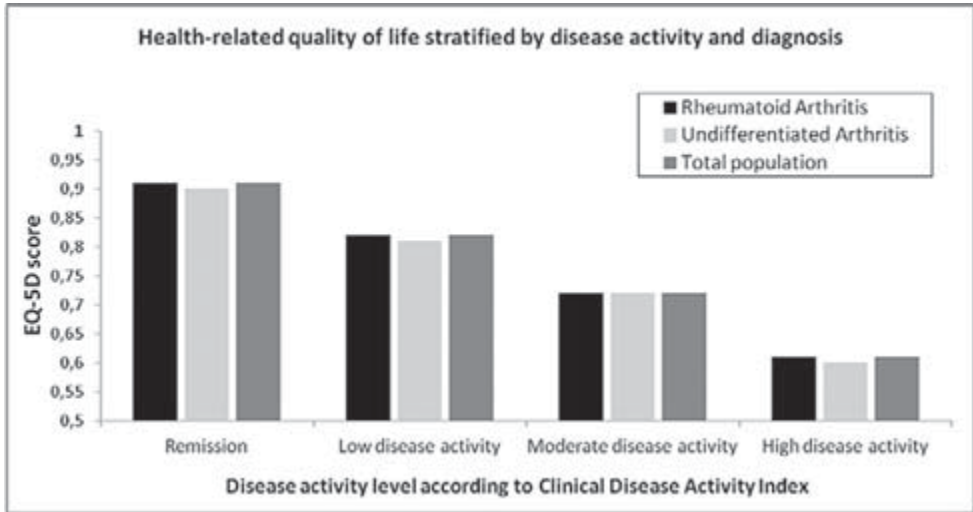
Conclusion: Regardless of the diagnosis of UA or RA, patients with early inflammatory arthritis and active disease inflict a substantial disease burden. The impact of arthritis in HRQL showed a linear relationship with disease activity level. This remarks the importance of an early and aggressive treatment in patient with this condition.