Conclusion: This study showed that compared with patients admitted on weekdays, patients with SANJ admitted on weekends had increased mortality rates but similar length of stays and total hospital charges. However, patients who received an early arthrocentesis had significantly lower length of stay and hospital charges regardless of the day of admission. This results add weight to the hypothesis of negative outcomes in weekend admissions. Moreover, we believe that our findings require further investigation to establish the role of early arthrocentesis in the management of septic arthritis.

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THU0632 A POPULATION-BASED STUDY OF TUBERCULOSIS INCIDENCE AMONG RHEUMATIC DISEASE PATIENTS UNDER ANTI-TNF TREATMENT

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Background: Tuberculosis (TB) is an infectious disease caused by *Mycobacterium tuberculosis*, with a high incidence in the general population of Brazil. The advent of immunobiologic therapy with anti-TNF agents for rheumatic diseases, despite achieving substantial efficacy in controlling disease activity, has been associated with a significant increase in incident cases of tuberculosis in this population due to blockade of TNF, which is responsible for maintenance of granuloma structure.

Objectives: Estimate the incidence of tuberculosis in Public Health System patients receiving anti-TNF therapy for rheumatic diseases. As secondary objectives, we sought to evaluate mortality and the influence of screening for latent tuberculosis infection on clinical outcomes in this population.

Methods: This retrospective cohort study included all Public Health System patients from the Brazilian state of Rio Grande do Sul (RS) who received prescriptions of anti-TNF agents for treatment of rheumatic diseases between 2006 and 2016. All data were obtained from official government records (drug dispensing, tuberculosis reporting, and mortality) where notification was mandatory. For a subset of patients, latent tuberculosis screening data were obtained through a review of medical records.

Results: A total of 5853 patients were included from 2006 to 2016, out of which 3653 (62.4%) had rheumatoid arthritis, 1150 (19.7%) had ankylosing spondylitis, 872 (14.9%) had psoriatic arthritis, and 123 (2.1%) had juvenile idiopathic arthritis. Overall, 43 cases of TB were found, with an incidence of 734.7 cases per 100,000 exposed, which corresponds to 2.86 per 1000 person-years exposed. Two hundred and fifty deaths occurred in this cohort. In a subgroup of patients recruited from the outpatient rheumatology clinic of Hospital de Clínicas de Porto Alegre (n = 268), screening for latent tuberculosis infection (LTBI) was performed in 86% of patients before initiation of anti-TNF therapy; 30.1% had a positive tuberculin skin test. LTBI treatment was administered to 74 patients. In this subgroup of patients, 5 cases of TB were diagnosed, 2 in patients who had previously completed LTBI treatment.

Conclusion: In this population-based study, a high incidence of tuberculosis among patients with rheumatic diseases exposed to anti-TNF agents was found, reinforcing the need for screening and treatment of LTBI to reduce the risk of reactivation of granulomatous disease. No significant impact on mortality was demonstrated.

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THU0633 ECONOMIC IMPACT OF HEALTHCARE RESOURCE UTILIZATION AND WORK DISABILITY IN PORTUGUESE PATIENTS WITH ANKYLOSING SPONDYLITIS: RESULTS FROM THE ASSESSMENT OF RESULTS IN ANKYLOSING SPONDYLITIS (AREA) STUDY

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Background: Ankylosing spondylitis (AS) has a significant burden upon the individual, family and society. Understanding the economic impact of AS is crucial to substantiate policies that promote early referral, diagnosis and treatment.

Objectives: To assess the economic impact of AS in Portugal concerning healthcare utilization and work disability.

Methods: The Assessment of REsults in Ankylosing spondylitis (arEA) study was developed by the NOVA-Information Management School (Lisbon) in collaboration with the Portuguese Society of Rheumatology, the Portuguese Association of Family Physicians, the National Association of Primary Care Units, the National Association of AS Patients and the Portuguese League Against Rheumatic Diseases. The arEA aimed at assessing reasons for delayed diagnosis of AS, as well as disease impact in patients' lives, global health and work. A comprehensive online survey was developed and sent to AS patients. Data on demographics, lifestyle habits, daily life activities, working habits, disease indexes and healthcare utilization was retrieved. Costs of the disease for patients resulting from the use of health systems was obtained thorough patient's declaration, the cost for the national health service (SNS) was obtained combining primary data and secondary data related with the average costs of service use. Finally, the impact over the economy was also estimated through the participation of patients in labor market and using as mediator variables the absenteeism and presenteeism. A set of generalized linear models were used to identify the factors with significant effect over health status, SNS costs and impact over economy.

Results: 354 patients responded the survey, 42.1% female, more frequently from the 35-44 year-old age group. In the previous 12 months, 76% reported using the National Healthcare System (SNS) for AS-related reasons (85% outpatient visits; 74% diagnostic exams; 48% ER visits; 8% inpatient admissions). During that period, estimated SNS expenditure with AS patients reached €47 million, excluding costs with medication (ongoing analysis), distributed as: outpatient visits €25 million, diagnostic exams €7 million, ER visits €3 million and inpatient admissions €12 million. Adding to this, patients spent on average €84 million out of their own pocket on AS-related expenses (€1.786 per patient: outpatient visits €245, diagnostic exams €151, ER visits €48, inpatient admissions €415, medication €593, travelling expenses €334). Regarding work disability, working AS patients reported an average of 12 days on leave of absence and 25 days on sick leave per year, with an estimated cost of €28 and €57 million, respectively. Presenteeism led to a loss of 73 working days with a cost of €165 million. Taking also into account patients with prolonged leaves of absence (€72 million), permanent leaves (€18 million), unemployed (€50 million) and family medical leaves (€47 million), the overall costs with work disability in AS reached €437 million in one year.