

Spondyloarthritis - clinical aspects (other than treatment)

POS0650

FACING THE ISSUES OF CHANGE IN ENTRY VISIT DIAGNOSIS AND LOST OF FOLLOW-UP OVER TIME IN INCEPTION COHORTS: DATA FROM THE AXIAL SPONDYLARTHRTIS (AXSPA) DESIR COHORT

Keywords: Spondyloarthritis, Epidemiology

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Background: Inception cohorts can be defined as long term follow-up of patients suffering at entry visit from a recent onset disease. Despite their huge advantage to better approach the truth in terms of long term prognosis of the disease, they are usually facing 2 issues: a) the possibility of a change in the entry visit (initial diagnosis b) the missing data due to patients lost of follow-up.

Objectives: To evaluate both the frequency and the baseline predisposing factors of a) a change in the initial diagnosis b) the risk of loss of follow-up in the DESIR axSpA cohort.

Methods: *Study design:* DESIR is an ongoing (10 year follow-up completed for all the patients) multicenter cohort of recent onset axSpA. *Diagnosis:* At entry visit and during the 10 year follow-up period, this diagnosis was based on the opinion of the treating rheumatologist with the requirement of a highly suspected diagnosis of axSpA at entry visit and after the first 2 years of follow-up the possibility to exclude the patients in case of a change in the initial axSpA diagnosis. *Statistical analysis:* Multiple imputation was used to address missing data and estimates the probabilities of a change in initial axSpA diagnosis for each patient lost of follow up. Predisposing factors of an unchanged initial axSpA diagnosis were then evaluated using a multivariate logistic regression model on imputed data sets. A multivariate cox survival analysis exploring factors associated to the overtime risk of loss of follow-up was also performed.

Results: Of the 708 enrolled patients, 45 were excluded from the cohort because of a documented change in the initial axSpA diagnosis (mechanical low back pain n = 30, fibromyalgia n = 13, chronic inflammatory rheumatic disease (n = 1 and no information n = 1). The classification criteria were fulfilled by 16/45 (36%) versus 413/663 (63%) and 21/45 (47%) versus 522/663 (81%) patients with a documented change versus no change in their entry visit diagnosis according to the ASAS ax-SpA and the AMOR criteria respectively. During the 10 year follow-up period, 300 patients were lost of follow-up. Based on imputation, among these 300 patients, 19 patients were systematically suspected to have a change in their initial axSpA diagnosis in all imputations while 173 patients were never "suspected" for this change; 42 patients were considered as suspected for a change in their initial axSpA diagnosis in at least 70% of imputations. Predisposing factors of an unchanged initial axSpA diagnosis were (odds ratio [95% CI]): radiographic SIJ structural damage: 17.0 [4.1; 71.0]; past or present psoriasis: 5.3 [2.0; 14.3]; CRP \geq 6 mg/l: 2.7 [1.3; 5.3]; good response to NSAID: 2.5 [1.5; 4.2]; HLA B27 positivity: 2.0 [1.3; 3.3]; anterior chest wall pain: 2.0 [1.2; 3.3] and female gender: 1.9 [1.2; 3.0]. Predisposing factors of the risk of loss of follow-up were: Age at back pain initiation < 45 years old: 1.8 [1.2; 2.9]; CRP < 6 mg/l: 1.5 [1.1; 1.9]; HLA B27 negativity: 1.4 [1.1; 1.8]; educational level < university: 1.4 [1.1; 1.8]; smoker: 1.3 [1.0; 1.6].

Conclusion: These data suggest that a) a change in the entry visit diagnosis and the risk of follow-up have to be considered in inception cohorts b) statistical models including multiple imputations could facilitate the evaluation of long term prognosis of the disease.

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VACCINATION RATE AND FACTORS ASSOCIATED WITH NON-VACCINATION IN AXIAL SPONDYLARTHRTIS: A CROSS SECTIONAL PROSPECTIVE MULTICENTRIC OBSERVATIONAL STUDY

Keywords: Vaccination/immunization, Spondyloarthritis, COVID

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Background: Patients receiving biological therapy for auto-immune diseases are considered immunodepressed and multiple recent recommendations highlight the need for vaccination against influenza and pneumococcal infections.

Objectives: To evaluate influenza and pneumococcal vaccine coverage in patients receiving biological therapy for spondyloarthritis (SpA), and to identify factors associated with vaccination completion in this population.

Methods: We conducted a prospective cross-sectional study of a cohort of 500 patients taking biological therapy for axial spondyloarthritis between June 2021 and June 2022 in five teaching hospitals in France (university hospital centers Bordeaux, Clermont-Ferrand, Limoges, Montpellier-Nîmes and Toulouse). Influenza and pneumococcal vaccine coverage rates were collected using a self-administrated questionnaire. Patients were queried about knowledge and opinions about these vaccines. We also investigated the respective role of physicians and rheumatologists in the care and reasons for not proposing the vaccines. SARS-COV 2 impact and vaccine rates were also assessed. To identify factors associated with influenza vaccination and with pneumococcal vaccination, we performed a univariate and multivariate analysis.

Results: Influenza vaccination was received by 46.8% (n = 234) of patients. Pneumococcal vaccine had been previously administered to 61.7% (n = 307) of patients. Vaccination coverage against SARS-CoV-2 was high with 91.8% of vaccinated patients. Overall vaccine coverage rates were 34.6% for patients who received both influenza and pneumococcus vaccines and were 33% for those who received influenza, pneumococcus and Sars-COV2 vaccines. Factors associated with vaccinated status were a higher level of education (OR = 1.66 (1.03-2.68), p=0.038) and taking part in educational therapy session (OR = 1.85 (1.12-3.06), p= 0.016) for pneumococcus, affiliation to a patients' association (OR=4.10 (1.10-15.2), p=0.035) and intravenous administration of bDMARD (OR = 3.12 (1.76-5.54), p=0,0001) for influenza. Patients reported that they did not seek vaccination (influenza, pneumococcus or both) because (1) they did not receive appropriate information on vaccination and (2) fear possible side effects.

Conclusion: This study showed insufficient vaccine coverage rates in a population at high risk because of exposure to biological therapy. Reasons for not being vaccinated included fear of adverse effects and lack of information and recommendations. Patient information by healthcare professionals about influenza and pneumococcal vaccination has a major impact and physicians should inform patients about vaccination as often as possible.

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