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Public health, health services research, and health economics

AB0803 EXPERIENCES OF SCREENING AND DIAGNOSIS FROM THE PERSPECTIVE OF PATIENTS WITH PSORIASIS AND PSORIATIC ARTHRITIS (PSA)

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Background: Psoriatic arthritis (PsA) is an inflammatory arthritis characterised by pain, swelling and stiffness in the joints and affects approximately 0.3 to 1.02% of the UK population [1]. PsA may result in limited physical function and reduced quality of life [2] and is associated with work disability and unemployment [3]. Patients who have the inflammatory skin condition, psoriasis, are at greater risk of developing PsA than those without.
Objectives: There is no definitive test for PsA. It is usually diagnosed by rheumatologists in secondary care, after referral from primary care. Evidence suggests a delay in diagnosis results in worse outcomes for patients. This study is nested within a randomised controlled trial (RCT) of a new clinical care pathway. The RCT is testing whether screening primary care patients with psoriasis for symptoms of PsA leads to earlier diagnosis and improved outcomes, compared to usual care. This qualitative study explored the acceptability and impact of screening.
Methods: Telephone interviews were conducted with patients with psoriasis from two secondary UK care centres taking part in the RCT. The semi-structured interviews explored patients' thoughts and feelings around screening, the impact of the screening outcome and any changes they made as a result. The semi-structured format allowed flexibility to ask questions that probed more deeply and develop new lines of enquiry based on patients' responses. Patients who did and did not receive a diagnosis of PsA were interviewed.
Results: Twenty-four patients participated in the study (15 women / 9 men) ranging in age from 35 to 73 years old. The length of time patients had psoriasis ranged from 6 to 60 years. Eleven patients were diagnosed with PsA. A Framework Analysis Approach was used to analyse the data. This allowed for an exploration of the predefined areas (the screening process) as well as remaining open to capturing other related experiences and views of patients. Four main themes represent the data (Table 1).

Table 1.

Main theme	Sub-themes
1. Living with psoriasis and psoriatic arthritis:	1. Understanding of psoriasis – causes, symptoms, treatments
'It's [psoriasis] socially debilitating…makes you look a real mess'	2. Effects of psoriasis on self, personal and working life
'It's almost as if the world's on your shoulders'	3. Awareness of PsA
2. Experience of screening:	1. Thoughts and feelings prior to screening
'I was able to talk and be listened to'	2. Valuing 'high quality' care
'It's a lightbulb moment…explained why things were a bit stiff and achy'	3. Impact of screening outcome
3. Gaining control:	1. Increased awareness and knowledge of psoriasis and PsA
'element of surprise that this arthritis should be connected to it [psoriasis]'	2. Improved self-management
'You've got to learn to listen to your body'	3. Early diagnosis of PsA
4. Future screening programs:	1. Changes to questionnaires
'there weren't really any questions about were you in pain'	2. Use of case studies, sign-posting
'support groups…peer support is crucial with long-term conditions'	3. Removing barriers to screening

Conclusion: This study indicates screening was viewed as a positive and reassuring experience. Patients valued the fact that screening appointments were not rushed and felt they were being listened to. Patients valued learning about psoriasis and PsA and referred to making changes beneficial to their health. Screening enabled patients to get the help they needed if diagnosed, provided relief if not diagnosed, and sometimes led to the diagnosis of a different condition.

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AB0804 ONE YEAR FOLLOW-UP SAFETY AND EFFICACY RESULTS OF VACCINATION PROTOCOL FROM A RHEUMATOLOGY CLINIC

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Background: Patients with autoimmune inflammatory rheumatic diseases (AIIRD) have a higher burden of infectious diseases compared to the general population. This could be explained by the disturbances in their immune system response, comorbidities and immunosuppressive treatment. Vaccination is the most effective measure to prevent infections.
Objectives: To describe a cohort of patients with AIIRD referred to the infectious disease´s unit according to the vaccination protocol.
Methods: Restrospective and descriptive study of a cohort of 286 patients with AIIRD who were evaluated in the rheumatology service of a tertiary hospital in Barcelona and referred to the infectious disease´s unit according to the vaccination protocol among 1 year,between January 1rst December 31st, 2019. The vaccination protocol included serologies of human immunodeficiency virus,hepatitis A,B and C, varicella zoster,tuberculosis,measles,mumps and rubella virus.The recommended vaccines were *H.influenzae b,S.pneumonia,*influenza,hepatitis A and B(immunity absence),*meningococcus c*,tetanus – diphtheria (low antigenic load),poliomyelitis and human papillomavirus (not vaccinated).The patients included were diagnosed with a rheumatologic condition under immunosuppressive therapy. Demographic variables,diagnosis,treatment,vaccines administered,infections and adverse effects were collected.
Results: Of 286 patients reviewed the mean age was 61, 4 (±14.4) years. The characteristics of the cohort are shown in Table 1. Most of the patients used csDMARDs 149 (52.1%), 77(26.9%) patients used combined treatment. Measles and rubella are part of the triple virus vaccines included in the systematic Spanish vaccination schedule, in our cohort 20 (7%) patients had negative serologies for measles and 26 (9%) for rubella. 57 (20%) patients had latent TB with positive Quantiferon.Forty-one (14.3%) were vaccinated before receiving immunosuppressive treatment. The less administered vaccine was influenza with 44.9% (vaccination rate in Spain in healthy population, in 2019-2020 was 51.2%).No serious adverse effects were reported in relation to the vaccination. The infectious complications during the follow-up period were bronchopneumonia in a patient with RA treated with certolizumab (1), herpes zoster infection in RA on adalimumab(1), recurrent otitis in RA on adalimumab(1), mycobacterium *avium* infection in RA on etanercept(1), TB reactivation in RA with GCs and csDMARDs(1) and Papilloma virus infection in SpA on ustekinumab (1).

Table 1. CHARACTERISTICS OF COHORT OF PATIENTS

Sex n % (women/men)	193/93 (67,5/32,5)
Age, years ± DE	61.4 ± 14.4
Diagnoses AIIRD, n (%)	
Rheumatoid arthritis n (%)	164 (57.3)
Systemic lupus erythematosus n (%)	6 (2.1)
Sjögren´s syndrome n (%)	9 (3.1)
Systemic sclerosis n (%)	1 (0.35)
Inflammatory myopathie n (%)	5 (1.7)
Vasculitis n (%)	36 (12.6)
Polymyalgia rheumatica n (%)	4 (1.4)
Spondyloarthropathy n (%)	46 (16.1)
Others n (%)	15 (5.2)
Treatment AIIRD	
GCs n (%)	116 (40.7)
csDMARDs n (%)	149 (52.1)
bDMARDs n (%)	80 (27.8)
tsDMARDs n (%)	7 (2.4)
Others[1] n (%)	12 (4.2)
GCs + csDMARDs n (%)	59 (21)
GCs + bDMARDs n (%)	14 (4.9)
GCs + csDMARDs + bDMARDs n (%)	4 (1.4)
Vaccines	
PCV 13 n (%)	283 (99)
PPSV23 n (%)	265 (93)
HiB n (%)	265 (93)
NM n (%)	247 (86.7)
Influenza n (%)	128 (44.9)
HBV n (%)	121 (42.3)
Vaccination before IS n (%)	41 (14.3)
Vaccination with IS n (%)	244 (85.3)

Other: Behcet,Adult Stills,Relapsing polychondritis,IGg4 related disease,SarcoidosisOthers[1]: Mycophenolic acid,cyclosporine and tacrolimus

Conclusion: In our cohort, the vaccination protocol proved to be a good tool to improve the vaccination rate of rheumatological patients, despite this, the vaccination of Hepatitis B and specially of influenza, continues to have a lower prevalence to general population.The vaccines were effective since none of the preventable infections occurred during follow up, despite the use of an immunosuppressant. Vaccination showed a good safety profile, without reported serious adverse effects or worsening of the underlying disease.
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AB0805 A SURVEY OF RHEUMATOLOGY PATIENTS' SATISFACTION TO SWITCHING FROM ORIGINATOR TO BIOSIMILAR AGENTS

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Background: The recent widespread switching of patients with inflammatory rheumatic conditions from originators to biosimilars has largely been driven by costs. The views of patients on switching are also important in the successful long term switching to biosimilars. We conducted a survey of patients views on patients satisfaction with the switch to biosimilar therapy.
Objectives: To assess satisfaction and response after switching from originator (Humira or Enbrel) to biosimilar (Amgevita or Benepali respectively), and to describe efficacy, side effects and reactions to biosimilar.
Methods: All patients diagnosed with an inflammatory arthritis and switched to biosimilar were identified using the Irish national HighTech electronic prescriptions system. Participants had been administered the biosimilar for > 3 months and were invited to take part via a telephone survey. This consisted of 4 questions (Question 1: satisfaction with the response to the new medication [Using 5 point Likert scale = 0: very dissatisfied; 1: dissatisfied; 2: neutral; 3 satisfied;4: very satisfied]; Question 2: overall satisfaction with biosimilar compared to originator if originator was 10 [satisfaction rating from 1 – 10 scale: 1,2: very dissatisfied; 3,4: dissatisfied; 5: neutral; 6,7,8: satisfied; 9,10: very satisfied]]; Question 3: adverse effects with biosimilars; Question 4: opinion on usage of new device [0: very difficult; 1: difficult; 2: same as previous device; 3: improvement compare to previous device).
Results: Baseline characteristics of biosimilar switch patients with disease category were:

Category	(n)
Gender	Male (39), Female (56)
Mean age (years)	56
Rheumatoid arthritis	58
Psoriatic arthritis	18
Ankylosing spondylitis	16
Reactive arthritis	1
Enteropathic arthritis	1
Juvenile idiopathic arthritis	1

48 switched from Humira to Amgevita.

The majority of the patients had positive view towards the effectiveness of the biosimilar: 36% very satisfied; 28% satisfied; 13% neutral; 10% dissatisfied; 13% very dissatisfied.
45% of the patients gave score of 9 and 10 in the survey of overall satisfaction to biosimilar if originator was given a score of 10, followed by 32% of them gave a score from 6 to 8, 4% of the patients gave a score of 5 and 7% of them gave a score of 3 and 4. The rest of them gave a score of 1 and 2.
12 participants switched back to originator (Humira, n=5; Enbrel, n=7) for the reasons of unable to use the device, anxiety, hemoptysis, nose bleeding, tongue swelling, neck pain, lethargy and generalized itchiness.
The most common complaints were (12 patients) systemic side effects (tiredness, headache, nausea, skin rashes, hair loss, muscle ache, tongue swelling, mood swing, dizzy, nose bleed, erectile dysfunction, hypertension, hemoptysis and red sclera).
17% of the patients find the biosimilars device easier to use compare to originator and 55% of the patients find both device are similar. 24% and 4% of them find the new device is difficult to very difficult to use respectively.
Conclusion: 69% of patients from Amgevita group and 60% of patients from Benepali group were satisfied with the change. Only 28% of the patients found the new device difficult to use. Overall conclusion from the study showed less than one quarter of the participants showed dissatifaction towards biosimilar and less than 12 % experienced systemic side effects and whether biosimilar could be a next cost effective biologic therapy to replace originator in future requires a longer duration of study.
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AB0806 THE JOURNEY OF AXIAL SPONDYLOARTHRITIS IN SPAIN: FROM THE GENERAL PRACTITIONER TO THE RHEUMATOLOGIST

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Background: The delay in the diagnosis of axial spondyloarthropathies (AxSp), with the morbidity and economic burden that this entails, is well known[1,2]. According to the 2017 Atlas of axial spondyloarthritis in Spain[3], the mean diagnostic delay was 8,5 years, with an average total cost per patient of 659,8€ including medical consultations and complementary tests until diagnosis. However, nowadays there are still many patients who are incorrectly referred from the general practitioner (GP) despite showing typical features of AxSp.
Objectives: To describe the AxSp journey until diagnosis and treatment. To analyze additional costs of either a wrong or a delayed referral of the patients with AxSp to rheumatologists.
Methods: Type of study: observational, retrospective, descriptive. We included all the patients who were referred to our Department of Rheumatology from Jan-2019 to Dec-2020 and whose final diagnosis was AxSp. All the data since the first contact to the GP until the final diagnosis and initiation of treatment in Rheumatology were collected, including consultations to our emergency department (EmD) and other specialists. The number of consultations, complementary tests (analytical and imaging), as well as the direct costs of all of them were also collected4. A descriptive and associative analysis of these data was carried out using the SPSS software. We used median and interquartile range (IQR) for descriptive analysis and a significant p value < 0,05.
Results: From Jan-2019 to Dec-2020, 15 patients with AxSp and a median age of 43 (Interquartile range (IQR) 34-51) years were diagnosed, 10 women and 5 men. The main reason for referral was inflammatory low back pain (66.7%). The 60% of the patients were referred from the GP, followed by the EmD (20%). Despite typical symptoms, 4 patients (26,7%) were initially referred to Traumatology, and 3 out of them returned to the GP without the right diagnosis.
The median delay for referral from the GP to the rheumatologist was 47 (IQR 20-173) days. A wrong referral of the patient was associated with a delayed diagnosis (p 0,018) and higher direct costs of management (p 0,034). The average cost (including medical consultation and complementary tests) of the patient referred directly to Rheumatology was 267,71 (IQR 193,7-462,3) €, while the average cost of patients referred to other specialists was 578,83 (IQR 368,32-898,7) €. The extra cost of a wrong referral of a patient with AxSp was 311€ on average per patient in our sample (Table 1).

Table 1.

Women/men	10/5
Median age (years; IQR)	43; 34-51
Median diagnostic delay (days; IQR)	45; 20-173
Median cost of patient referred initially to Rheumatology (€; IQR)	267,71; 193,7-462,3
Median cost of patient referred initially to another specialist (€; IQR)	578,83; 368,32-898,7
Extra cost of wrong referral per patient(€)	311

Conclusion: AxSp is still a disease with a not negligible diagnostic delay, but it seems to be lower than previously reported. A wrong referral of the patient to other specialists, mainly Traumatology, is associated with this delay and can double the cost of managing these patients. This demonstrates the still unmet need of improving the management and referral of the patients with AxSp from the GP to the rheumatologist, ensuring an early diagnosis and treatment at the lowest cost for the system. Our study has limitations due to its small sample size, but preliminary results indicate that a larger-scale study would be necessary to correctly assess the magnitude of this problem.
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AB0807 TOAST-STUDY: TREATMENT AND OSTEOARTHRITIS, WHAT ARE PEOPLE SAYING ON TWITTER?

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