THU0385

SAFETY OF TOFACITINIB THERAPY IN HBSAG CARRIERS WITH ANKYLOSING SPONDYLITIS: A PROSPECTIVE STUDY

L. Fang¹, Z. Lin¹, Z. Liao¹, O. Jin¹, J. Gu¹. ¹The Third Affiliated Hospital of Sun Yat-sen University, Guangzhou, China

Background: Targeted synthetic DMARDs (ts-DMARDs) are becoming more available and affordable in developing countries, where the prevalence of hepatitis B virus (HBV) infection is still an important public health issue. The safety of ts-DMARDs therapy in terms of the reactivation of hepatitis B virus (HBV) infection need more concern. Rare data from a prospective study focus on the use of ts-DMARDs in patients with concurrent ankylosing spondylitis (AS) and HBV infection were available by now.

Objectives: To evaluate the influence of tofacitinib on reactivation of HBV infection in HBsAg carriers with AS.

Methods: In this 52 weeks observation, HBsAg carriers with active AS (BASDAI ≥ 4) despite failed treatment with at least two NSAIDs and sulfasalazine (for patients with persistent peripheral arthritis) were studied. Patients must be positive for HBsAg and have a normal liver function prior to study.

All patients received therapy with tofacitinib (5mg twice daily). Entecavir were prescribed preventively regardless of individual viral load. Pre-existing NSAIDs and sulfasalazine were allowed. Liver enzymes (AST/ALT) and HBV viral load were monitored every 4 weeks. Increased viral load and abnormal liver function were managed according to expert opinion.

Results: Eleven patients (9 male) were recruited. Eight patients had a baseline viral load >2000 copy/ml (group 1), and the other 3 patients had a viral load ≤ 2000 copy/ml (group 2). Two patients from group 1 discontinued tofacitinib at week 12 due to ineffectiveness, and both continued taking Entecavir for another 3 months after the discontinuation of tofacitinib.

One patients (male, 26 years old) from group 1 underwent a mild increase of both ALT and AST (67 and 56 IU/L, respectively) at week 16, but no elevated viral load ($2.1e3$ copies/ml, baseline $2.8e3$) or a HBV YMDD mutant was found. The tofacitinib treatment continued. After prescription of polyene phosphatidyl choline, the liver enzyme of this patient decreased to normal range in 4 weeks and remained normal throughout the study.

No reactivation of hepatitis B was observed in patients from group 2.

Conclusion: Tofacitinib treatment may be a safe and effective option for HBsAg carriers with AS refractory to traditional treatment. Prophylaxis strategy with effective anti-viral drugs is recommended.

References:

- [1] Chen YM, Huang WN, Wu YD, et al. Reactivation of hepatitis B virus infection in patients with rheumatoid arthritis receiving tofacitinib: a real-world study. *Ann Rheum Dis* 2018; 77:780-2.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.6445

THU0386

PREDICTORS OF MAINTENANCE OF SECUKINUMAB TREATMENT IN A MULTICENTER COHORT OF 561 SPONDYLARTHROSIS

B. Flachaire^{1,2}, J. G. Letarouilly³, C. Labadie⁴, N. Cohen¹, V. Pradel¹, B. Fautrel^{5,6}, G. Baudens⁷, P. Claudepierre⁸, C. Miceli Richard⁹, P. Dieudé¹⁰, J. H. Salmon¹¹, J. Sellam¹², E. Houvenagel¹³, M. H. Guyot¹⁴, C. D. Nguyen¹⁵, X. Deprez¹⁶, I. Chary Valckenaere¹⁷, P. Lafforgue², D. Loeuille¹⁷, C. Richez⁴, R. M. Flipo³, T. Pham^{1,2}. ¹Ap-Hm, Marseille, France; ²Aix-Marseille University, Marseille, France; ³Chu De Lille, Lille, France; ⁴Hospital Center University De Bordeaux, Bordeaux, France; ⁵Sorbonne Université, Paris, France; ⁶University Hospitals Pitié Salpêtrière - Charles Foix, Paris, France; ⁷Private Practice, Valenciennes, France; ⁸Hôpital Henri-Mondor Ap-Hp, Créteil, France; ⁹Hospital Cochin, Paris, France; ¹⁰Bichat-Claude Bernard Hospital, Paris, France; ¹¹CHU de Reims, Hôpital Maison Blanche (Traumatologie-Orthopédie), Reims, France; ¹²Hospital Saint-Antoine Ap-Hp, Paris, France; ¹³Hospital Center Saint Philibert, Lille, France; ¹⁴Hospital Center De Roubaix, Roubaix, France; ¹⁵Clinical Anne D'arbois, Béthune, France; ¹⁶Hospital Center De Valenciennes, Valenciennes, France; ¹⁷CHRU de Nancy - Hôpitaux de Brabois, Vandœuvre-lès-Nancy, France

Objectives: Secukinumab (SEC) is an interleukin-17 inhibitor used to treat patients with axial spondyloarthritis (axSpA) and psoriatic arthritis (PsA). Drug maintenance is often used as a proxy for treatment effectiveness and safety in real life settings. We aim to assess SEC maintenance in routine clinical practice and to identify survival predictors associated.

Methods: We conducted a retrospective, longitudinal, observational, multicenter study including all patients (pts) with axSpA or PsA who received at

least 1 injection of SEC between July 2016 and October 2019. We collected patient's demographics and clinic characteristics, SEC date of initiation and dosage and dosage modification of SEC, previous biologic Disease-modifying antirheumatic drugs (bDMARDs) and concomitant treatments. Date and reasons of discontinuation – i.e., lack of efficacy, safety issue, sustained remission or others – were collected. Several potential maintenance predictors were tested: age, gender, disease (axSpA or PsA), smoking status, bDMARDs history and concomitant treatment. Among patients with non-radiographic axSpA (nr-axSpA), evidence of MRI sacroiliitis or elevated CRP were also assessed as potential maintenance predictors. Drug maintenance was analyzed by the Kaplan-Meier method and adjusted for baseline factors were estimated by log rank analysis.

Results: The main characteristics of the 561 pts included were the following: 363 (64.7%) axSpA, 198 (35.3%) PsA, 329 (58.6%) female, mean age 45.6 $\pm$ 12 years, 221 (39.4%) smokers, 175 (31.2%) radiographic sacroiliitis, 259 (46.2%) MRI sacroiliitis, 198 (35.3%) elevated CRP, 247 (44.0%) HLA B27 positive, mean BASDAI 48.3 $\pm$ 26.8%. SEC was associated to methotrexate (MTX) in 139 pts (24.8%) and was the first line bDMARD in 55 pts (9.8%). The median drug maintenance (MDM) of SEC was 79 weeks (wk) [73-84]. At 52 wk, 245 pts (60%) SpA were still treated with SEC. During the 3-year follow-up, 264 pts discontinued SEC: 180 (68.2%) pts for lack of effectiveness, 47 (17.8%) for adverse events, 14 (5.3%) for others and 23 (8.7%). SEC prescription as first line bDMARD was associated with longer survival versus second line or more: 111 wk [83-138] vs. 69 wk [58-80] ($p=0.017$) (figure 1). MDM was not significantly different depending on gender, MTX combo, elevated CRP, axSpA vs PsA and smoking status. Among the nr-axSpA pts, MRI sacroiliitis or elevated CRP did not modify SEC maintenance ($p=0.68$) (figure 2).

Figure 1. Secukinumab maintenance according to therapeutic line

Figure 2. Secukinumab maintenance in nr-axSpA population

Conclusion: In routine clinical practice, SEC median maintenance was 79 weeks. First line administration was the only independent factor associated with improved SEC retention. Lack of effectiveness was the most common reason of discontinuation.

Disclosure of Interests: Benoît Flachaire: None declared, Jean-Guillaume Letarouilly Grant/research support from: Research grant from Pfizer, Céline Labadie: None declared, Nicolas Cohen Speakers bureau: Novartis, Janssen, Vincent Pradel: None declared, Bruno Fautrel Grant/research support from: AbbVie, Lilly, MSD, Pfizer, Consultant of: AbbVie, Biogen, BMS, Boehringer

Ingelheim, Celgene, Lilly, Janssen, Medac MSD France, Nordic Pharma, Novartis, Pfizer, Roche, Sanofi Aventis, SOBI and UCB, Guy Baudens: None declared, Pascal Claudepierre Speakers bureau: Janssen, Novartis, Lilly, Corinne Miceli Richard: None declared, Philippe Dieudé: None declared, Jean-Hugues Salmon Speakers bureau: Novartis, Janssen, Jérémie SEL-LAM: None declared, Eric Houvenagel Speakers bureau: Janssen, Novartis, Marie-Hélène Guyot: None declared, Chi Duc Nguyen: None declared, Xavier Deprez Speakers bureau: Novartis, Janssen, Isabelle CHARY VALCKENAERE: None declared, Pierre Lafforgue Speakers bureau: Novartis, Janssen, Damien LOEUILLÉ: None declared, Christophe Richez Consultant of: Abbvie, Amgen, Mylan, Pfizer, Sandoz and UCB., Rene-Marc Flipo Speakers bureau: Novartis, Janssen, Lilly, Thao Pham Speakers bureau: Novartis, Janssen, Lilly

DOI: 10.1136/annrheumdis-2020-eular.4713

THU0387

THE IMPACT OF TREATMENT WITH A BIOLOGICAL DISEASE-MODIFYING ANTIRHEUMATIC DRUG ON SPINAL MOBILITY AND ITS CORRELATION WITH DISEASE ACTIVITY IN PATIENTS WITH SPONDYLOARTHRITIS

S. Garcia¹, B. M. Fernandes¹, S. Ganhão¹, M. Rato¹, F. Pinheiro¹, G. Terroso¹, M. Bernardes¹, L. Costa¹. ¹Centro Hospitalar Universitário São João, Porto, Portugal

Background: Bath Ankylosing Spondylitis Metrology Index (BASMI) is an instrument developed to assess spinal and hip mobility. The relationship between BASMI and disease activity is not always linear and, above all, the data that correlate the variation in BASMI values (Δ BASMI) with the variation in disease activity scores and response to treatment are not unanimous.

Objectives: Explore the effect of biological disease-modifying antirheumatic drugs (bDMARD) in spine mobility (as assessed by BASMI) and the associations between Δ BASMI and disease activity.

Methods: Observational retrospective study was performed including consecutive patients with the diagnosis of Spondyloarthritis (SpA) followed at our Rheumatology Department. Demographic, clinical, including Bath Ankylosing Spondylitis Disease Activity Index (BASDAI), BASMI, Ankylosing Spondylitis Disease Activity Score with erythrocyte sedimentation rate and C-reactive protein (ASDAS ESR and ASDAS CRP, respectively), and laboratory data were collected from our national database at baseline, 6 and 12 months after initiation of a bDMARD. The variation of each parameter was calculated as the difference between the levels recorded at 6 and 12 months and the reference level and presented in the form of Δ . Statistical analysis was performed using SPSS 23.0. Correlations between variables were studied using Spearman correlation analysis and comparison between groups was performed using Wilcoxon and Kruskal-Wallis tests.

Results: Median age of patients (n=178) was 42 years old [34, 50], 92 (51.7%) were males with a median disease duration of 4.9 [1.0, 10.3] years. One hundred and twenty-six patients (70.8%) had Ankylosing Spondylitis, 15 (8.4%) Inflammatory Bowel Disease related SpA and 30 (16.9%) Undifferentiated SpA. Fifty four (30.3%) patients were taking glucocorticoids and regarding conventional synthetic disease-modifying anti-rheumatic drugs use before starting the bDMARD: Sulfasalazine (52, 29.2%), Methotrexate (31, 17.4%) and Leflunomide (3, 1.7%). Regarding the bDMARD, only one patient started Secukinumab and the others a Tumor necrosis factor inhibitor (TNFi) [Golimumab (n= 64, 36.0%), Adalimumab (n=36, 20.2%), Infliximab (n= 35, 19.7%), Etanercept (n= 32, 18.0%) and Certolizumab (n= 10, 5.6%)].

The majority of the patients had very high disease activity at baseline (86.0%, n=153); median ESR was 29mm/h [15, 47], median CRP was 13.7mg/L, [6.60, 27.3], median ASDAS CRP was 7.6 [6.0, 9.0] and median BASMI was 8.0 [7.0, 9.0]. After 6 and 12 months of treatment, mean ESR, CRP, ASDAS-CRP and BASMI were significantly lower than mean baseline values (p<0.01), with median ASDAS-CRP at 12 months of 2.20 [1.50, 2.90] and median Δ BASMI of -4.10 [-5.50, -2.40].

BASMI at baseline showed a moderate correlation with ASDAS CRP (r=0.468, p<0.01), BASDAI (r=0.496, p<0.01) and patient visual analogic scale (VAS) (r=0.563, p<0.01). No correlations were found between BASMI and CRP, ESR, physician VAS or the consumption of nonsteroidal anti inflammatory drugs at baseline.

A significant positive correlation was found between Δ BASMI and Δ ASDAS at 6 months and 12 months (r=0.243, p=0.02; r=0.286; p<0.01) and also between Δ BASMI and Δ BASDAI at 6 and 12 months (r=0.183, p=0.04; r=0.291, p=0.02). No correlations were found between Δ BASMI and Δ CRP or Δ ESR. No differences were observed in Δ BASMI, regarding the bDMARD of choice.

Conclusion: In our cohort, starting a bDMARD improved BASMI scores through a 12 month period and there was a correlation between the variation of BASMI and disease activity improvement. As such, a TNFi may retard the

progression of spinal mobility dysfunction in SpA patients. We cannot draw conclusions regarding differences between TNFi and interleukin 17 inhibitors and further work is needed to clarify possible differences in their impact in improving spine mobility.

Disclosure of Interests: Salomé Garcia: None declared, Bruno Miguel Fernandes: None declared, Sara Ganhão: None declared, Maria Rato: None declared, Filipe Pinheiro: None declared, Georgina Terroso: None declared, Miguel Bernardes Speakers bureau: Abbvie, Amgen, Biogen, Eli-Lilly, Glaxo-Smith-Kline, Pfizer, Janssen, Novartis, Lúcia Costa: None declared

DOI: 10.1136/annrheumdis-2020-eular.1321

THU0388

UVEITIS IN AXIAL SPONDYLOARTHRITIS: FREQUENCY AND RELATIONSHIP TO BIOLOGICAL THERAPY. SINGLE CENTER UNIVERSITY STUDY OF 255 PATIENTS

I. González-Mazón¹, L. Sanchez-Bilbao¹, J. Rueda-Gotor¹, D. Martinez-Lopez¹, M. A. González-Gay¹, R. Blanco¹. ¹H. U. Marques de Valdecilla, Santander, Spain

Background: Uveitis is one of the most frequent extra articular manifestation of spondyloarthritis (SpA). Biological therapy, especially monoclonal TNF inhibitors, may be useful to prevent and to treat uveitis. However, other biologics had been related to paradoxical uveitis.

Objectives: Our aim was to assess a) the epidemiological and clinical features of uveitis associated to SpA and b) its relationship with biological treatment used in SpA.

Methods: An observational study of patients who developed uveitis form a cohort of 255 consecutive unselected patients with axial SpA (axSpA) classified according to the ASAS criteria. They were divided into: a) ankylosing spondylitis (AS) according to New York modified criteria (n= 193) b) non-radiographic axSpA (nr-axSpA) (n= 62). All these patients were followed in a single reference University Hospital.

Results: We studied 255 patients with axSpA (151 men/104 women); mean age 37.8±10.6 years. In 36 (31 in AS; 5 in nr-axSpA) (14.2%) patients at least one episode of uveitis was observed after a follow-up 12.4±4.5 years. The mean age at onset of uveitis was 45.7±14.2 years. The diagnosis of uveitis preceded SpA diagnosis in 5 patients, but most of them occurred after a median of 6 [2-15] years of follow-up. Pattern of uveitis was anterior and acute in all cases, and unilateral in 83%. Median of anterior chamber cells was 1 [1-2] cells. Comparison of baseline characteristics and clinical features between patients who developed uveitis and those who did not is shown in table. Almost all patients who developed uveitis were HLAB27 positive. In these patients a lower frequency of enthesitis and inflammatory bowel disease was observed.

Table.

	Uveitis N= 36	Non uveitis N= 219	p
Baseline general features			
Age, years (mean±SD)	45.7 ± 14.2	44.7 ± 12.1	0.49
Sex, n (m/w) (%)	21/15 (58.3/41.7)	130/89 (59.4/40.6)	0.91
HLAB27, positive n (%)	35 (97.2)	130 (59.4)	0.00
Anti-TNF, n			
Adalimumab	3	53	0.06
Certolizumab	1	4	0.79
Golimumab	1	11	0.87
Infliximab	1	29	0.13
Etanercept	0	12	0.31
Disease Characteristics			
Follow-up of AxSpA, year (mean±SD)	13.64 ± 7.6	12.16 ± 9.73	0.33
AS, n (%)	31 (86.1)	162 (74.0)	0.12
nr-AxSp, n (%)	5 (13.9)	57 (26.0)	0.12
Peripheral arthritis, n (%)	9 (25.0)	67 (30.6)	0.49
Hip affection, n (%)	3 (8.3)	15 (6.8)	0.97
Enthesitis, n (%)	9 (25.0)	81 (37.0)	0.16
Dactylitis, n (%)	2 (5.5)	14 (6.4)	0.85
Psoriasis, n (%)	4 (11.1)	24 (11.0)	0.79
Inflammatory bowel disease, n (%)	1 (2.8)	15 (6.8)	0.57
Family history, n (%)	12 (33.3)	58 (26.5)	0.39

6 patients with uveitis received anti-TNF therapy and suffered from 7 episodes of uveitis after 5.6±4 years of treatment, meanwhile only 1 out of the 3 patients who were treated with anti IL-17 did a single episode of uveitis after 4.2±1.9 of follow-up. Patients treated with secukinumab developed 2.72 episodes of uveitis/100 patients/year, meanwhile those who received monoclonal anti TNF presented 2.53 episodes/100 patients / year.

Conclusion: The most frequent clinical pattern of uveitis was acute unilateral anterior. Almost all of them were HLA B27 positive. No differences were found in cumulative incidence between secukinumab and monoclonal anti-TNF.