Conclusion: In this post hoc analysis, LOR-treated subjects reported greater improvements in PRO threshold responses versus PBO from Week 12 through Week 24. LOR demonstrated significantly higher odds of achieving and maintaining improvements in PROs at 30% and 50% thresholds. Phase 3 studies of 0.07 mg LOR are ongoing.

References:

- [1] Deshmukh V, et al. *Osteoarthritis Cartilage*. 2019.

Figure 1. Percentage of Phase 2b trial subjects in the LOR and placebo (PBO) groups responding to treatment with 30%, 50%, or 70% threshold responses over baseline at Week 12. The Pain NRS and WOMAC Function outcomes are shown. * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$ vs. PBO by logistic regression using the Full Analysis Set and non-responder imputation.

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Infection-related rheumatic diseases

FRI0431

PROFILE OF INFECTIOUS SPONDYLODISCITIS ACCORDING TO THE SITE: UNIFOCAL VERSUS MULTIFOCAL

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Background: Infectious spondylodiscitis is a therapeutic emergency and is a current problem. It can affect the different levels of the spine. Multifocal forms, touching several floors, however remain rare.

Objectives: To compare the clinical, biological, radiological and therapeutic aspects of unifocal versus multifocal spondylodiscitis.

Methods: This is a retrospective study of 113 patients admitted to our service over a period of 20 years [1998-2018]. The diagnosis of spondylodiscitis was made on the basis of clinical, biological, radiological and bacteriological data. We have divided our population into two groups: unifocal and multifocal spondylodiscitis.

Results: Spondylodiscitis was more frequently unifocal (75.2%) than multifocal (24.8%). The average age of the patients was 55.8 years. There were 62 men and 51 women. There was no difference in age and sex between the two groups ($p=0.5$ and $p=0.8$, respectively).

Diabetes was more frequent in the group of multifocal spondylodiscitis but with no statistically significant difference ($p=0.4$). No statistically significant difference between the two groups regarding the start mode ($p=0.7$), the schedule ($p=0.3$), the presence of neurological signs ($p=0.7$), fever ($p=0.2$), impaired general condition ($p=0.6$) and biological inflammatory syndrome ($p=0.6$).

Cervical and dorsal spine involvement was more common in multifocal spondylodiscitis ($p=0.02$ and $p=0.01$; respectively). There were 11 spondylodiscitis involving 2 floors (cervical and dorsal: 2 cases, cervical and lumbar: 3 cases, dorsal and lumbar: 6 cases) and 3 spondylodiscitis involving 3 floors.

Radiologically, the presence of vertebral fracture and involvement of the posterior arch was more frequent during the multifocal form ($p=0.03$ and $p=0.001$; respectively). The frequency of para-vertebral abscesses, epiduritis and the presence of spinal cord compression were similar in the two groups ($p=0.6$; $p=0.7$ and $p=0.2$, respectively).

Tuberculosis was more frequent during the multifocal form ($p=0.05$) and brucellosis during the unifocal form ($p=0.03$). Disco-vertebral biopsy was performed in 79 cases. It was more often contributory during multifocal spondylodiscitis ($p=0.03$).

The occurrence of immediate complications was more frequent in multifocal spondylodiscitis but with no statistically significant difference ($p=0.2$).

Conclusion: Multifocal spondylodiscitis is seen mainly in immunocompromised subjects. Our study found that diabetes is the most common factor in immunosuppression. Note also the predominance of involvement of the posterior elements, tuberculous origin and immediate complications.

Disclosure of Interests: None declared

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FRI0432

INTEREST OF IMAGING IN THE DIAGNOSIS OF INFECTIOUS SPONDYLODISCITIS (ABOUT 113 CASES)

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Background: Infectious spondylodiscitis is a diagnosis and therapeutic emergency. Its clinical presentation can be insidious and standard radiographs can be falsely reassuring. This explains the interest of cross-sectional imaging and more particularly magnetic resonance imaging (MRI).

Objectives: To analyse the contribution of imaging in the diagnosis of infectious spondylodiscitis.

Methods: These are 113 cases of spondylodiscitis collected in a rheumatology department over a period of 20 years [1998-2018]. The diagnosis is made on the basis of clinical, biological, radiological and bacteriological data.

Results: Our population was divided into 62 men (54.9%) and 51 women (45.1%) ($p=0.8$) with an average age of 55 years [16-86]. Predisposing factors were found in 52.2% of cases: diabetes (23%), neoplasia (2.7%), hepatopathy (5.3%), long-term corticosteroid therapy (1.8), recent surgery (3.5%), history of tuberculosis (2.7%) and consumption of unpasteurized dairy products (28.3%).

The approximate time between onset of symptoms and diagnosis ranged from 0.23 to 24 months (median 3 months). Impaired general condition was observed in 81% of the cases and fever in 34.5% of the cases. Radiculargia was found in 46% of the cases and a neurological deficit was noted in 16% of the cases. Biological inflammatory syndrome was found in 91.2% of the cases.

Standard radiographs of the spine were abnormal in 85% of cases, showing disc space narrowing (72%), irregularity of the vertebral plates (35.5%), erosions (13.1%) and para-vertebral spindle (4.7%). CT and spinal MRI were performed respectively in 57.5% and 70.8% of cases and revealed: erosions (46.2%), mirrored geodes (16.9%), para-vertebral abscess (57.5%), epiduritis (71.3%) and spinal compression (26.3%). The lumbar spine was the most affected (55.8%), followed by the dorsal spine (30.1%) and the cervical spine (8.8%). The infectious spondylodiscitis was multifocal in 24.8% and multi-stage in 12.4% of cases.

A disco-vertebral biopsy was performed in 70% of cases and was contributory in 44.3% of cases. The causative organism was tuberculosis in 55.8% of cases, brucellosis in 12.2% of cases and pyogenic germs in 23% of cases.

Conclusion: Imaging plays an important role in the diagnosis of spondylodiscitis. MRI is considered the key examination, capable of mapping injuries and detecting potentially serious neurological complications. The importance of imaging the entire spine to detect multifocal forms should also be emphasized.

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FRI0433

HAS THE PROFILE OF INFECTIOUS SPONDYLODISCITIS CHANGED IN 20 YEARS?

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Background: Infectious spondylodiscitis represents 2 to 4% of osteoarticular infections. Their incidence is constantly increasing. Early microbiological diagnosis and targeted multidisciplinary management are the main prognostic factors for infectious spondylodiscitis.

Objectives: To compare the epidemiological, clinical, biological, radiological, bacteriological profile as well as the management and prognosis of spondylodiscitis over the last 20 years.

Methods: Retrospective study including 113 patients hospitalized in our department between 1999 and 2018. The diagnosis was based on clinical, biological, radiological and bacteriological data. Spondylodiscitis were divided into two groups: spondylodiscitis occurring between 1998 and 2008 (1st decade) and those between 2009 and 2018 (2nd decade).

Results: Of the 113 identified patients, 54 (47.8%) occurred between 1998 and 2008, with male predominance in both groups (50.2 and 59.3% respectively; $p=0.3$). The average age was 55 years ($p=0.7$). Diabetes was more frequent in the 1st decade but without a statistically significant difference ($p=0.1$). On the other hand, consumption of unpasteurized dairy products was more frequent during the 2nd decade ($p<0.001$) as well as the presence of intercurrent infection ($p=0.01$).

The estimated delay between symptom onset and diagnosis was longer between 1998 and 2008 (5.6 months and 3.2 months respectively, $p=0.005$). The presence of neurological signs was more frequent between 2009 and 2018 ($p=0.001$), especially radiculargia ($p=0.02$). The sedimentation rate was higher in the 1st decade (93mm and 72mm respectively, $p=0.002$).

We found no statistically significant difference in the location of spondylodiscitis ($p=0.4$) and the multifocal involvement ($p=0.5$).

Radiographic signs were significantly more prevalent in the 1st decade ($p=0.002$), in particular disc space narrowing ($p=0.03$) and irregularity of the intervertebral plates ($p=0.01$). Computed tomography was more often performed during the 1st decade ($p=0.008$), unlike magnetic resonance imaging, performed in 88.1% of cases during the 2nd decade ($p<0.001$). In contrast, the frequency of para-vertebral abscesses, epiduritis and spinal cord compressions were similar in the two groups ($p=0.6$; $p=0.9$ and $p=0.3$, respectively).

Tuberculosis was more frequent in the 1st decade ($p=0.009$). Disco-vertebral biopsy was more often performed in the 1st decade ($p=0.04$), but its efficiency was similar between the two groups ($p=0.1$). For pyogenic spondylodiscitis, blood cultures were more often positive in the 2nd decade but without a statistically significant difference ($p=0.6$). On the other hand, the anatomopathological aspect was more frequently suggestive of a pyogenic germ in the 2nd decade ($p=0.04$).

A surgical procedure was more frequently performed between 2009 and 2018 but with no statistically significant difference ($p=0.2$). All patients received antibiotic therapy. A change in treatment was made in 23.7% of cases between 2009 and 2018 ($p=0.01$). The prognosis was better during the 1st decade ($p=0.01$). On the other hand, the occurrence of immediate complication during tuberculous spondylodiscitis was more frequent during the 2nd decade ($p=0.03$), in particular the toxicity of anti-tuberculosis treatment ($p=0.04$).

Conclusion: In the last decade, the diagnosis of spondylodiscitis has been made earlier. However, these are more severe forms with an increased frequency of neurological complications, probably due to an increase in the proportion of virulent germs. Moreover, the effectiveness of the bacteriological investigation does not differ between the two periods studied.

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FRI0434

PREDICTIVE FACTORS OF SERIOUS INFECTIONS IN PATIENTS WITH CHRONIC INFLAMMATORY ARTHRITIS ON TREATMENT WITH TNF INHIBITORS: REAL LIFE DATA

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Background: Serious infections are one of the most feared adverse events in patients treated with biologics. To this regard data coming from randomized and long-term extension studies may not totally applied to the usual clinical practice due to the different profile of the treated patients. To study the associated factors for serious infections in patients with inflammatory arthritis treated with TNF inhibitors

Objectives: To study the associated factors for serious infections in patients with inflammatory arthritis treated with TNF inhibitors

Methods: All the medical records of the patients with inflammatory arthritis being treated with TNF inhibitors at the beginning of 2016 were retrospectively reviewed. All serious infections suffered for these patients until the end of 2018 were recorded. Serious infections were defined as those which required to admitted at the hospital for intravenous treatment. Potential variables associated with the development of these infections including: demographic and clinical characteristics, concomitant treatments or comorbidity (by Charlson index) were studied. Standard statistical tests for descriptive and univariate analyses were used

and a multivariable logistic regression model was built to check independent associations.

Results: Overall 334 patients (50.3% women) with a mean age of 56.67 (± 12.853) were studied: 140 (41.92%) Rheumatoid arthritis (RA), 55 (16.46%) psoriatic arthritis (PsA) and 138 (41.62%) spondyloarthritis (Sp). Forty-five serious infections were observed in 30 patients, being respiratory (40%) and urinary (8.8%) the most frequent localizations. Only one patient died. By univariate analysis, disease duration, age, concomitant use of glucocorticoids (GC) (but not of synthetic DMARDs), Charlson index and specifically Diabetes Mellitus were associated with infection ($p<0.05$). The type of arthritis was not associated and the results in the subset of RA patients were overall similar. In the multivariate analysis the use of GC [OR: 5.31 (1.98,14.26)] and the Charlson index [OR:2.48 (1.70;3.60)] were found to be independently associated to infection.

Conclusion: In patients with inflammatory arthritis and treated with TNF inhibitors around a 10% developed any serious infection along three years of follow up. Use of GC and comorbidity emerged as the main risk factors for this complication.

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FRI0435

THE CLINICAL SIGNIFICANCE OF SERUM AUTOANTIBODIES AND HLA-B27 MOLECULE TESTING IN UYGUR PATIENTS WITH HUMAN IMMUNODEFICIENCY VIRUS INFECTION

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Background: AIDS is a deadly infectious disease caused by the HIV. When HIV infects a host, it may induce production of autoantibodies due to the structural antigen similarity between viral proteins and selfantigens. The molecular mimicry between HIV protein and self-antigens could cause antibody cross-reactions and lead to development of autoimmune disease.

Objectives: To explore the clinical value of serum autoantibodies and human leukocyte antigen (HLA-B27) molecular testing in Uygur patients with human immunodeficiency virus (HIV) infection.

Methods: A total of 727 HIV-infected Uygur patients who visited Kuche Infectious Diseases Hospital during May 2016 to March 2017 were include in this study. The other 390 healthy people were enrolled as controls. Serum antinuclear antibodies (ANA) and ANA Profile, anti-cyclic citrullinated peptide (CCP) antibody, and HLA-B27 molecule were tested.

Results: Among 727 HIV-infected Uygur patients, 317 were males and 410 were females with mean age (35.52 ± 13.44) years old. The mean duration of disease was (6.34 ± 3.05)years. There were 697(95.87%) patients receiving Highly active antiretroviral therapy (HAART) with mean duration of treatment (6.34 ± 3.05)years. Rheumatic manifestations were recorded in 238 (32.74%) HIV-infected Uygur patients, mainly with dry mouth and dry eye (15.41%), alopecia (9.90%), arthralgia (8.94%), ect. Compared with the health controls, positive ANA was more common in HIV infected Uygur patients (33.42% vs. 17.43%, $P<0.001$) with low titers (ANA titer:1:100). HIV-infected Uygur patients had higher positive anti-u1-RNP antibodies positive rate (1.10%), but lower anti-SSA antibodies positive rate (0.14%) and anti-CCP antibodies positive rate (0.28%). Patients with positive ANA in HAART group were significantly less than that in non-treatment group (38.72% vs. 50.00%, $P=0.049$). Only one female patient was HLA-B27 positive (0.14%), which was significantly lower than that in healthy controls (3.08%) ($P<0.001$). Also, only one patient was diagnosed with rheumatoid arthritis (RA).

Conclusion: Rheumatic manifestations are common in HIV-infected Uygur patients. Several autoantibodies are positive, but the coincidence of rheumatic diseases is rare. It's noted that patients with Rheumatic manifestations and low titre positive ANA should be considered as a differential diagnosis of HIV infection.

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FRI0436

ARTICULAR AND PERIARTICULAR INFECTIOUS DISEASES: REVIEW AND ANALYSIS OF A COHORT IN A 3RD LEVEL HOSPITAL

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Background: Infectious diseases in Rheumatology are still a prevalent health-care issue nowadays. Microbiological tests and early beginning of antibiotic