age between 36 and 65 (79.3%, vs 82.1%). Most of the respondents declared treating patients with CGD (93.1%, vs 79.1%). Regarding treatment modalities, physical therapy was the most prescribed in both specialties (81.5% and 48.3%, respectively). Only RTO (18.5%) prescribed manual therapy. Concerning medical treatment, anti-inflammatory were the most prescribed drugs in both groups (92.6, and 34.5%, respectively). Sixty-seven percent of RTO prescribed anti-vertigo medication. Interestingly, it was the least prescribed drug by ORL (6.9%). Only RTO (59.3%) prescribed Muscle relaxants.

Conclusion: Despite the disparities in the management of CGD, physical therapy remains the first prescribed treatment by Tunisian doctors. Further studies are needed to establish a consensus to treat CGD.

Disclosure of Interests: None declared

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POS1275 PERITENON THICKENING IS ASSOCIATED WITH THE INTENSITY OF MANUAL SPORTS ACTIVITY

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Background: Peritenon enlargement has been considered as a specific ultrasound finding associated with psoriatic arthritis based on studies in patients. Recent observations in athletes have demonstrated the existence of this finding although its relationship with the type of physical activity performed has not been determined.

Objectives: To determine to what extent manual physical activity is associated with the prevalence of peritenon thickening in the fingers of healthy athletic subjects.

Methods: Thirty-five healthy young male volunteers were recruited from a local sports centre in the community of Madrid. All of them performed sports activities with their hands for more than 12 hours a week. A digital dynamometer was used to determine the flexion strength of the fingers of the dominant hand. A single observer performed an ultrasound scan of this hand to determine the presence or absence of a hypoechoic image surrounding the extensor digitorum tendon of the 2nd, 3rd, 4th and 5th fingers, according to previous definitions. Mean flexion strengths were compared with the number of positive ultrasound findings.

Results: Fifteen volunteers (mean age 24.3 years, BMI 24.4) did not present peritenon enlargement (42.8%). The mean $\pm$ standard deviation of the fingers flexor strength according to the number of peritenon enlargement detected were 43.5 $\pm$ 6.2, 49.2 $\pm$ 3.8, 53.2 $\pm$ 1.64 and 63.0 $\pm$ 4.83 Kg for volunteers with none, 1, 2, 3 and 4 peritenon enlargements, respectively. (ANOVA $P < 0.001$; Pearson's coefficient 0.827, $P < 0.001$). Correlation between BMI, body fat percentage or training hours per week and the number of peritenon enlargement detected was not demonstrated.

Conclusion: Peritenon enlargement, also known as peritenon tendon inflammation, is detectable by ultrasound scan in healthy subjects and it seems to be associated to the physical activity intensity, indirectly measured by the flexor strength of the fingers.

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POS1276 LONG TERM OUTCOME OF MULTIPLE ULTRASOUND GUIDED SUPRASCAPULAR NERVE BLOCK IN TREATMENT OF FROZEN SHOULDER IN DIABETIC PATIENTS

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Background: Frozen shoulder is prevalent among diabetic patients, and usually has aggressive course, with more tendency to be bilateral and resistant to treatment. Suprascapular nerve block (SSNB) is used with increasing frequency by anesthetists and rheumatologists in the management of frozen shoulder. We previously introduced a protocol of nine injections for SSNB with better short term outcome than single SSNB injection (1). Long term outcome of SSNB in management of frozen shoulder is still not detected.

Objectives: To evaluate the long term effect of multiple (nine) ultrasound guided supra-scapular nerve block in treatment of diabetic frozen shoulder.

Methods: A retrospective cohort study followed up 40 diabetic patients who received a course of ultrasound guided multiple supra-scapular nerve block (9 injections) on 2014. In this study we retrospectively assessed the patients

from previously recorded data at a mean duration of 6 years after completing the 9 injection course SSNB clinically by measuring the shoulder active range of motion (using a goniometer in three planes: abduction, internal, and external rotation). Visual analogue scale and Functional assessment by shoulder pain and disability index (SPADI).

Results: Thirty four patients (85% of original cohort) completed the long term follow up.

The patients were 19 (55.9%) females, 60.6 y mean age, and the mean of disease duration was 85.6 months. The majority of patients (33 patients 97.05%) continues improvement and gained within normal complete range of motions in all directions and excellent grades of shoulder function (Table 1).

Table 1.

Clinical Parameters	At base line	At 4 months	Last follow up at (72months $\pm$ 4)	**P value
SPADI pain score (100)	(68.8 $\pm$ 0.5)a	(10.3 $\pm$ 7.4)b	(0.9 $\pm$ 1.9)c	0.00*
SPADI disability score (100)	(69.2 $\pm$ 7.7)a	(6.25 $\pm$ 2.25)b	(0.4 $\pm$ 0.8)c	0.00*
SPADI total (100)	(69.1 $\pm$ 8.5)a	(8.15 $\pm$ 5.4)b	(1.1 $\pm$ 0.9)c	0.00*
Patient global assessment (100)	(90.2 $\pm$ 8.2)a	(8.2 $\pm$ 4.2)b	(0.4 $\pm$ 2.1)c	0.00*
Night pain (100)	(55.4 $\pm$ 10.2)a	(10.3 $\pm$ 4.9)b	(2.3 $\pm$ 1.1)c	0.00*
Abduction (180°)	(77.5 $\pm$ 4.7)a	(170.3 $\pm$ 10.3)b	(174.2 $\pm$ 6.2)b	0.00*
External rotation (100°)	(46 $\pm$ 12.6)a	(80.1 $\pm$ 10.2)b	(86.4 $\pm$ 10.3)b	0.00*
Internal rotation (70°)	(34.5 $\pm$ 2.4)a	(55.4 $\pm$ 10.1)b	(60.2 $\pm$ 9.5)b	0.00*

* $P < 0.05$ there was a statistical significant difference. a, b, c --- the alphabet of different symbols --- means a significant statistical difference between groups. SPADI: shoulder pain and disability index

Conclusion: The multiple injection courses for supra-scapular nerve block has an excellent long term efficacy as treatment of diabetic frozen shoulder. This method should be the treatment of choice in patients of diabetic frozen shoulder who do not respond to physiotherapy.

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POS1277 NON-CONTIGUOUS MULTIFOCAL SPONDYLODISCITIS: A CASE SERIES AND REVIEW OF LITERATURE

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Background: Spondylodiscitis is an infective process of the disc and the two adjacent vertebrae. It is quite a rare disease accounting for 2–7% of all cases of septic osteomyelitis. These spinal infections touch commonly a single level, the lumbar spine being the most affected. Non-contiguous spine level involvement is seldom reported in the literature. This last group is for the most part imputable to granulomatous organisms [1,2].

Objectives: Study the clinical, microbiological, radiological, therapeutic and evolutionary characteristics of non-contiguous multi-levels spondylodiscitis.

Methods: We conducted a retrospective descriptive study over twenty-one years in the Department of Rheumatology. The diagnosis of spondylodiscitis was based on combination of clinical, biological and radiological arguments.

Results: Eight patients had non-contiguous multi-levels infectious spondylodiscitis. There were 6 men and 2 women. The mean age was 53.3 $\pm$ 26.2 years. The mean delay from onset of symptoms to diagnosis was 134.6 $\pm$ 77.6 days. Back pain was the most common symptom. All patients had spinal syndrome. The Signs of spinal cord compression were observed in 3 patients. C-reactive protein levels were elevated in 6 patients (mean: 56 $\pm$ 30.8 mg/L). Plain radiography, performed in all cases, showed pathological pictures in 7 patients. Magnetic resonance imaging was performed in 6 patients. Vertebral levels affected were thoracic / lumbar in 6 cases, cervical/thoracic in 1 case and cervical/lumbar in 1 case. The paravertebral abscess was associated to the disc involvement in 3 cases. Epiduritis was associated in 3 cases. Pathogens were isolated in all cases. Tuberculosis was the most common cause. The leading causative agents in non-tuberculosis spondylodiscitis were staphylococcus aureus, brucella and streptococcus B. Two microorganisms combined were found in two cases (mycobacterium tuberculosis associated to Escherichia coli in one case and mycobacterium tuberculosis associated to Brucella in another). Medical treatment was adapted to the microbial culture and the sensitivity profile of the etiological agent.

After therapy, 7 patients had regression of symptoms and 1 patient had a permanent neurological impairment.

Conclusion: Multilevel spondylodiscitis involving non-contiguous spine segments is rare. Although atypical organisms are generally held to be responsible, the common bacteria such as *Streptococcus B* or *Staphylococcus aureus* should not be overlooked.

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POS1278

THE PREVALENCE AND CLINICAL SIGNIFICANCE OF ULTRASONOGRAPHIC FINDINGS OF DISTAL MEDIAL HAMSTRING TENDONS IN PATIENTS WITH POSTEROMEDIAL KNEE PAIN

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Background: Periarticular abnormalities are common ultrasonographic (U/S) findings in individuals with knee pain. Incidental U/S observations, including thickening of the distal hamstring tendons, require explanations for their clinical importance. Tendon thickness may be a good indicator of tendinopathy and tendon dysfunction. Also, it is uncertain whether these tendon changes are correlated with knee pain or not?

Objectives: The aim of this study was to determine U/S findings of distal medial hamstring tendons in patients with posteromedial (PM) knee pain and assess the diagnostic values of tendon thickness in predicting tendinopathy.

Methods: We studied distal medial hamstring tendons (semimembranosus [SM] and semitendinosus [ST]) of 104 patients (104 knees) with non-traumatic unilateral PM knee pain and 118 healthy controls (236 knees). U/S evaluations included tendon thickness, echogenicity, the presence of intrasubstance tears, calcification, and vascularity.

Results: The mean age (standard deviation) of the patients and control groups were 51.7 (10.4) years and 49.8 (9.9) years, respectively. The mean visual analogue scale (VAS) for pain among patients was 5.1 and 58.6% of them located the pain at medial joint line. The studied patients had significantly higher mean SM thickness (7.17 mm vs. 5.46 mm, respectively) and ST thickness (3.93 mm vs. 3.45 mm, respectively) than the controls. U/S abnormalities among patients were hypoechoogenicity (62.5%), intrasubstance tears (31.7%), loss of fibrillar pattern (23.1%), Baker cyst (20.2%), calcification (18.3%), Anserine bursitis (11.5%), and neovascularization (6.7%). We found significant correlations between tendon thickness and VAS ($r=0.752$, $p=0.004$), and pain location ($r=0.680$, $p=0.008$). SM thickness had higher accuracy to predict tendinopathy than ST thickness (80.6% vs. 68.9%, respectively).

Table 1. Diagnostic values of tendon thickness in predicting tendinopathy.

Tendons	Cutoff	Sensitivity	Specificity	+PV	-PV	Accuracy	AUC
SM	>6.6	70.2	89.8	85.7	76.8	80.6	0.835
ST	>3.7	56.7	79.6	71.1	67.6	68.9	0.696

SM: semimembranosus, ST: semitendinosus, +PV: positive predictive value, -PV: negative predictive value, AUC: area under curve.

Conclusion: U/S changes are frequently present in patients with PM knee pain. Tendon thickness is an accurate predictor of tendinopathy. These findings suggest that U/S screening of all individuals with PM knee pain is a useful tool for improving patients' outcomes and decreasing tendon-related disability.

Disclosure of Interests: None declared

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POS1279

ADVERSE DRUG REACTIONS IN TUBERCULOSIS AND MANAGEMENT

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Background: Around 10 million people worldwide contract tuberculosis (TB) every year. According to the World Health Organization (WHO), approximately one-quarter of the world's population is latently infected with *Mycobacterium tuberculosis*. Its treatment is extremely long and patients may experience a variety of adverse reactions.

Objectives: The aim of this study was to assess the different adverse drug reactions (ADRs) in patients treated with first-line anti-tubercular drugs.

Methods: This retrospective study included 45 cases of TB followed in the Rheumatology department of Farhat Hached hospital in Sousse, Tunisia, over a period of 22 years (1998–2020).

Results: The mean age was 52.2 ± 17.72 years [14–95 years]. These were 19 men (42.2%) and 26 women (57.8%). The different locations of tuberculosis were as follows: pulmonary for 5 patients (11.1%), spinal for 26 patients (57.8%), articular for one patient (2.2%), urinary for two (4.4%), and multifocal for 8 patients (17.8%). An anti-tuberculosis treatment (based on quadrytherapy: Rifadine (R), Isoniazide (I), Pyrazinamide (Z) and Ethambutol (E)) during 2 months, followed by biotherapy based on (R) and (I) was prescribed for an average duration of 10.85 months [6–24 months]. ADRs were observed in 53.33% of patients. Abdominal pain and nausea were detected in 5 cases (11.1%). Hepatic cytolyse was noticed in 8 cases (17.8%) under (R). Cholestatic hepatitis occurred in 9 cases (20%) under (R). Asymptomatic Hyperuricemia was detected in 15 cases (33.3%) with (E). Two cases of toxidermia were detected: the first under (E) and the second under (E) + (Z). Ethambutol was responsible for a case of DRESS syndrome and a case of drug-induced hepatitis. One case of hemolytic anemia had occurred under (R). A sensorineural hearing loss was noted under streptomycin in one case. No fatal side effects were observed. These ADRs were reversible in all cases.

Conclusion: The treatment of TB can cause a variety of ADRs. Early recognition by active surveillance and appropriate management of these ADRs might improve adherence and treatment success.

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POS1280

SPINAL LOCATION OF TUBERCULOSIS: WHAT HAS CHANGED OVER THE LAST YEARS?

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Background: Tuberculosis (TB) is no longer a disease limited to developing nations and is still a major cause of significant morbidity and mortality worldwide. It can affect the different parts of the spine.

Objectives: The aim of this study was to determine the preferred spinal location of TB.

Methods: We conduct a retrospective and descriptive study in a single rheumatology department. Data were collected from observations of patients hospitalized in the past 20 years (2000–2020) who have been diagnosed with tuberculous spondylodiscitis (TS).

Results: Fifty-two patients were included (37F/15M). Their mean age was 55.21 ± 17.79 [19–91]. TS was more frequently unifocal (75%) than multifocal (25%). Lumbar spine involvement was the most common (57.7%) and more frequent in women (63.3%) but with no statistically significant difference ($p=0.2$). Other localizations were described such as: dorso-lumbar (21.2%), dorsal (15.4%), lumbosacral (3.8%) and cervical (1.9%). Lumbar pain was present in 34 patients (65.4%) and 29 patients (55.8%) suffered from segmental lumbar stiffness. Imaging was contributive by showing the vertebral location using standard X-rays, computed tomography and magnetic resonance imaging. Disc pinch, erosion of vertebral plateaus and vertebral collapse were the major signs (82.7%, 65.4% and 67.3%, respectively).

Conclusion: TS is a rare but serious clinical condition which may lead to severe deformity and early or late neurological complications. Spinal involvement is often unifocal and mostly diagnosed with lumbar pain or stiffness. Multifocal forms, touching several parts of the spine, however remain rare. Our findings remain consistent with those of the literature.

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POS1281

HOW DOES OBESITY INFLUENCE THE FEATURES OF KNEE OSTEOARTHRITIS?

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Background: Knee osteoarthritis and obesity are both major health problems. It is now admitted that the prevalence of knee osteoarthritis gets higher with obesity and that weight loss helps knee function and allows patients to avoid surgery.

Objectives: The aim of this study was to study the influence of obesity on knee osteoarthritis features.

Methods: A cross-sectional study was conducted in the university hospital Taher Sfar of Tunisia over a period of 6 months. Patients who had knee osteoarthritis confirmed by radiographs were included. Sociodemographic, clinical, radiological and therapeutic data were collected from medical records and visits. Obesity was