Interestingly, the likelihood ratio testing showed that SpA patient with Fibromyalgia switch more frequently to another biologics than SpA without fibromyalgia, $P=0.015$.

Cramer's V test showed that there is a high statistically significant ($P=0.002$) and very strong association (>0.25) between presence of Fibromyalgia and multiple switching of biologics in SpA.

There was no difference in the exposure to prednisolone nor conventional DMARDs between SpA patients with or without FM, $P=0.64$ & 1 respectively.

Gender, Female, n (%)	175 (57.4)
Age, mean $\pm$ SD (min- max), years	44.07 $\pm$ 11.85 (18- 78)
Type of A, n (%)	117 (38.4)
Axial	188 (61.6)
Peripheral	
Fibromyalgia, n (%)	43 (14.1)
FM in axial SpA	18 (41.9)
FM in Peripheral SpA	25 (58.1)
SpA Disease duration (months)	107.7 $\pm$ 50.4
FM+, mean $\pm$ SD	86 $\pm$ 57.9
FM-, mean $\pm$ SD	
Elevated CRP, n (%)	62 (20.3)
HLA B27 in 180 patients, n (%)	32 (17.8)
Positive	148 (82.2)
Negative	
Abnormal MRI SIJ, n (%)	92 (30.2)
Bone marrow edema	33 (10.8)
Subchondral sclerosis	21 (6.9)
Fatty transformation of bone marrow	5 (1.6)
Erosion	2 (0.7)
Number of conventional DMARDs ever tired, n (%)	81 (26.6)
None	166 (54.4)
One	46 (15.1)
Two	12 (3.9)
Three	
Frequency of DMARDs usage, n, (%)	224 (73.4)
Conventional DMARDs	56 (18.4)
Prednisolone	164 (53.8)
Biologic DNARDs

Conclusion: FM coexistence with SpA might impact clinical evaluation of disease activity and possibly negatively affect self-measurement of treatment

response. In our study, SPA patients exposed to more biologics if they have coexisting FM; Moreover, they are more frequent switchers among biologics including TNFi and IL17i.

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Back pain, mechanical musculoskeletal problems, local soft tissue disorders

THU0485

THE EFFECT OF PERINEURAL INJECTION THERAPY IN PERIARTHRITIS SHOULDER

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Background: Primary adhesive capsulitis of the shoulder is a common pathology of the glenohumeral joint characterized by shoulder pain and progressive restriction of the range of motion, its treatment options either medication, local injection, physiotherapy, hydrodistension, manipulation under anesthesia, arthroscopic and open capsular release¹.

Subcutaneous prolotherapy injections can reduce vascular endothelial growth factor levels and restore effective repair processes so induce apoptosis of proliferating peptidergic nociceptors and neovessels and inhibit TRPV1 receptors resulting to reduction of pain^{2,3}.

Objectives: To assess the effectiveness of perineural injection therapy in management of pain and physical function in Primary adhesive capsulitis of the shoulder.

Methods: One hundred patients with primary adhesive capsulitis in the freezing stage were selected in this study according to the classification of Hannafin and Chiaia and had restriction of passive motion of greater than 30° in 2 or more planes of movement. Patients with previous corticosteroid injection or previous surgery in the affected shoulder, secondary adhesive capsulitis including inflammatory or infectious arthritis, previous fracture, rotator cuff lesions were excluded from this study.

Patients were randomly divided into two equal groups; Group I received 6 weekly subcutaneous injections of 0.5-1 ml of buffered dextrose 5% in each chronic constriction injury points and tender points at shoulder and along course of suprascapular, supraclavicular, axillary, musculocutaneous and radial nerves. Group II received oral NSAIDs and muscle relaxants for 6 weeks. All patients in both groups received the same stretching and exercise therapy during the period of treatment. All procedures were done after informed consent. Assessments were performed at baseline, at the end of the treatment and after three and six months using visual analog scale (VAS) for pain, range of movement measurements by goniometer, Shoulder Pain and Disability Index (SPADI) & the Western Ontario Rotator Cuff (WORC) Index.

Results: Patients in Group I had more rapid relief of pain and better functional improvement compared with group II ($p<0.05$). There was significant improvement in both groups ($p<0.05$) after 3 and 6 months with significant difference between the 2 groups indicated that better results in perineural group. Results were summarized in table 1.

Table 1. Pre- and post-treatment clinical measurement of the patient groups

	Baseline GI	Baseline GII	After end of treatment GI	After end of treatment GII	After 3ms GI	After 3ms GII	After 6ms GI	After 6ms GII
VAS	8.7 $\pm$ 0.9	8.4 $\pm$ 1.0	5.0 $\pm$ 1.5*	5.7 $\pm$ 1.1*	4.4 $\pm$ 1.5*	5.1 $\pm$ 1.6*	3.8 $\pm$ 1.2*	4.9 $\pm$ 1.3*
SPADI	80.4 $\pm$ 9.8	78.9 $\pm$ 10.7	41.5 $\pm$ 10.2*	50.4 $\pm$ 8.8*	35.8 $\pm$ 7.5*	46.6 $\pm$ 7.9*	32.6 $\pm$ 10.2*	44.5 $\pm$ 8.7*
WORC	28.5 $\pm$ 10.6	26.5 $\pm$ 11.5	60.4 $\pm$ 9.8*	55.9 $\pm$ 10.5*	67.9 $\pm$ 9.7*	57.3 $\pm$ 10.3*	71.5 $\pm$ 12.3*	60.1 $\pm$ 9.6*

*significant improvement after treatment

* significant difference between the two studied groups

Conclusion: Perineural injection therapy is an effective modality in management of pain and physical function of Primary adhesive capsulitis of the shoulder.

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THU0486 2019 FRENCH GUIDELINES AND CARE PATHWAY ABOUT LOW BACK PAIN MANAGEMENT IN ADULTS

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Background: Low back pain (LBP) is a frequent, disabling symptom, for which the risk of chronicity is increased by heterogeneous care. Developing and implementing recommendations is likely to improve LBP management.

Objectives: To develop French guidelines and care pathway on the management of LBP, coordinated by the French National Authority for Health (FNAH) and based on previous international guidelines in addition to update literature.

Methods: A compilation report was constituted on the basis of a systematic review of guidelines between January 2013 and December 2018, and systematic reviews and meta-analysis in the field of LBP between January 2015 and December 2018. This report summarized the state-of-the-art for each predefined area of the guideline. A panel of experts including patients' representatives and 19 health professionals involved in LBP management was constituted to elaborate the guideline based on the compilation report. A care pathway was constituted to identify the trajectory and the different steps followed by a patient with LBP. Then, the compilation report and the preliminary guidelines were submitted to 24 academic institutions and stakeholders for feedback. Based on the preliminary guideline and the responses of academic institutions and stakeholders, the final recommendations were drawn up by the expert panel. The guideline was finally submitted to an independent committee of the FNAH for final validation. For each area of the guidelines, agreement between experts of the working group was evaluated through the RAND/UCLA method.

Results: The initial literature search identified 572 references of recent international guidelines or systematic reviews about LBP. After selection, the compilation report included 101 references. The compilation report was submitted to the expert group during 3 different meetings to reach a consensus on different topics. Thirty-one preliminary recommendations and a care pathway (divided in two parts to facilitate its use and readability) were drafted and submitted to academic institutions and stakeholders. Having considered their comments, final recommendations and care pathway were written. The final guideline was validated by the FNAH. Then, the consensus of the expert panel was assessed about all the final guidelines separately: 32 recommendations (including the care pathway) were evaluated as appropriate; none were evaluated uncertain or inappropriate. Strong approval was obtained for 27 of them (including the care pathway) and weak for 5 of them.

Conclusion: This new LBP guideline was based on recent scientific evidence. It introduced several concepts, including the need to identify low back pain at risk of chronicity, in order to provide quicker intensive management if necessary. This guideline should be updated in 5 years' time, in order to keep it in line with ongoing scientific evidence.

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THU0487 DIAGNOSTIC DILEMMA: WHICH CLINICAL TEST IS MOST ACCURATE FOR DIAGNOSING SUPRASPINATUS MUSCLE TEARS AND TENDINOSIS?

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Background: Supraspinatus tears and tendinosis are the most common pathology that cause shoulder pain to approximately half of the patients presenting clinically.¹

Objectives: To investigate the diagnostic accuracy of five clinical tests in the diagnosis of supraspinatus tears and tendinosis compared with magnetic resonance imaging (MRI).

Methods: A total of 116 painful shoulders of 106 consecutive patients were examined. Patients were assessed using the most commonly used special clinical tests including the Jobe test (empty can), Neer test, drop arm test, Hawkins test and full can tests to identify supraspinatus tears and tendinosis. A visual analogue scale (VAS) was used for pain detection, and the Shoulder Pain and Disability Index (SPADI) questionnaire was administered. MRI examinations were performed on 1.5 Tesla MR system and images were assessed by a blinded radiologist. The primary outcomes were to determine the sensitivity, specificity, and accuracy of the five clinical tests, and to establish their correlation with MRI for supraspinatus tears and tendinosis.

Results: The mean age was 55.10 ± 10.20 years, and 32.08% of the patients were female. The Hawkins test had a higher sensitivity and accuracy in tears (sensitivity 89.66%, accuracy 56.03%, respectively) and higher sensitivity in tendinosis (79.07%). The drop arm test had a lower sensitivity but higher specificity in both tendinosis and tears (sensitivity 0%, 12.07%, respectively, and specificity 87.67%, 96.5%, respectively).

Conclusion: The Hawkins test was the most sensitive in both supraspinatus tendinosis and tears compared with MRI findings.

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THU0488 PSYCHIATRIC SYMPTOMS, TEMPERAMENT PROFILE, STRESS PERCEPTION AND SLEEP QUALITY IN THE PATIENTS WITH CHRONIC SHOULDER PAIN: RELATIONSHIP WITH PAIN, DISABILITY, AND FUNCTIONAL CAPACITY

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Background: Shoulder pain is very common in general population. Psychiatric symptoms and poor sleep quality related with chronic pain and disability may be present in these patients.

Objectives: The aim of this study was to investigate the psychiatric symptoms, perceived stress, temperament profile and sleep disturbance in the patients with chronic shoulder pain (CSP) and also to evaluate the relationship with pain, disability, and functional capacity.

Methods: We prospectively evaluated 150 patients (M/F=41/109) (60.46±10.59 years) who have had shoulder pain for at least 3 months and 120 healthy controls (M/F=35/85) (58.35±8.52 years). Pain was evaluated with Visual Analog Scale (VAS), disability with Shoulder Disability Questionnaire (SDQ), functionality with The University of California-Los Angeles (UCLA) Shoulder Scale and range of shoulder motion, temperament profiles with TEMPS-A, stress perception with Perceived stress scale (PSS), psychiatric symptoms with Symptom Checklist-90-R (SCL-90R), Rosenberg self esteem with Self-Esteem Scale (RSES) and sleep disturbance with Pittsburgh sleep quality index (PSQI).

Results: The mean VAS pain score, SDQ score, and UCLA score of the patients with shoulder pain were 4.34±1.79, 61.98±26.88, and 58.90±17.78, respectively. SCL-90-R total and all subscale scores except interpersonal sensitivity, psychoticism, paranoid, and phobia were significantly higher in the patient group than the control group (p<0.05). Also PSQI total and sleep quality and latency subscale scores were significantly higher in the patient group (p<0.05). There was no significant difference between the patient and control groups in terms of RSES and PSS. The study identified 28 depressive temperament in the patient group which was statistically different from the control group (p<0.05). There were no significant differences between two groups in terms of cyclothymic, irritable, anxious, and hyperthymic temperaments (p>0.05). When the patient group is evaluated according to functionality, the patients having fair/poor shoulder function had more psychiatric symptoms except hostility, poor sleep quality, decreased self-esteem and increased stress perception. Also, anxious and depressive temperaments were found more common in the patients with fair/poor shoulder function. Psychiatric symptoms (somatization, obsessive-compulsive, interpersonal-sensitivity, depression and anxiety) and total PSQI were positively correlated with SDQ (p<0.05). There was positive correlation between PSS and SDQ (p>0.05). SCL90R total score, subscale of depression and anxiety, total PSQI and PSS were significantly correlated with VAS score (p<0.05).