arthritis, 15 (37.5%) cases with osteoarthritis and 9 (21.4%) cases with psoriatic arthritis.

Clinical parameters (VAS for calf pain and Rauschnig-Lindgren score) improved significantly in all patients at both post injection evaluation visits.

Rauschnig-Lindgren score was significantly lower after US guided injections (mean, 0; range, 0-1) than at baseline (mean, 2; range, 1-2); $p < 0.001$ (table1).

VAS for calf pain also significantly lower after US guided injections (mean, 0.5; range, 0-1) than at baseline (mean, 9.5; range, 0-10); $p < 0.001$.

Ultrasonographic features improved significantly with complete disappearance of free fluid at the calf in 35 (83.3%) cases one week after the injection.

As regards Baker cyst only 5 (11%) cases showed complete disappearance of the backer cyst and in the majority of cases 37 (88%) there were persistent Baker cysts.

No side effects were reported in all cases.

Abstract AB1121 Table 1. Clinical results of Baker cyst excision (Rauschnig and Lindgren scale and VAS for calf pain)

	Pre injection	1 week later	3 months later
grade 0	0	30	39
Grade 1	0	8	3
Grade 2	6	4	0
Grade3	36	0	0
VAS for calf pain	9.5	1.5	0.5

VAS; visual analogue scale

Conclusion: Ultrasonographic guided aspiration and intra_lesional corticosteroids injection is an effective and safe method in management of ruptured Baker cysts.

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AB1122

PREDICTION OF THE UTILITY OF ULTRASOUND EVALUATION IN RHEUMATOID ARTHRITIS BY THE CLINICAL FACTORS

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Background: It is known that ultrasound detects synovitis with higher sensitivity than physical examination in rheumatoid arthritis (RA), and the residual inflammation detected by ultrasound even in the patient achieving clinically remission well correlates with progression of erosion.¹ However, it is impossible to perform ultrasound evaluation on all the joints in all the patients in terms of time and human resource.

Therefore, ultrasound use in RA should be more focused on situations when the physical findings and ultrasound findings likely to dissociate. Hirata et al showed the concordance between swelling or tenderness joint and ultrasound-detected synovitis are low in the PIP, MCP, and wrist joint.²

Objectives: To investigate the factors that can predict dissociation between clinical and ultrasound-detected synovitis in the patient with rheumatoid arthritis.

Methods: Patients aged 18 years or older who satisfied ACR/EULAR 2010 criteria who visited St. Luke's International Hospital from June 1, 2018 to November 9, 2018 and were performed ultrasound on PIP, MCP, and wrist joints were eligible for this study. We retrospectively reviewed the electronic medical chart and ultrasound data, and analyzed the dissociation of clinical synovitis defined as existence of swelling or tenderness and ultrasound-detected synovitis defined as both of power doppler grade and gray scale grade 1 or gray scale grade 2. Clinical evaluation was done by the attending physician who ordered the ultrasound evaluation. Ultrasound evaluation was done using standard scan technic³ by the sonographers who are blinded to the clinical evaluation.

The correlation between patient's characteristics and dissociation was analyzed using χ^2 test, Mann-Whitney U test and logistic regression analysis.

Results: 51 joints in 32 patients (4 males, 28 females) were included in the study. Among the 32 patients, 18 was classified in the dissociation group (DG) and 14 in the non-dissociated group (NDG). No significant difference was observed in the patient's characteristics of DG and NDG. In the univariate analysis, the absence of swelling in the target joint had tendency to be the risk of dissociation. The same tendency was preserved in the multivariate analysis with the presence of tenderness in the target joint assigned as a covariate (OR 3.68, 95% CI = 0.85 - 15.90, $p = .08$).

Conclusion: There was a numerical tendency that no swelling on the joint is a risk factor for the dissociation between clinical synovitis and ultrasound-detected synovitis. Future study with increased number of participants may identify more sensitive risk factors for dissociation, and enable to make an effective indication of ultrasound evaluation in the care of RA.

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AB1123

SHOULDER PAIN: ARE THERE PREDICTIVE FACTORS OF RESPONSE TO TREATMENT AND OF ULTRASOUND FINDINGS?

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Background: Shoulder pain is a common cause of consultation in Primary Health Care, and may correspond to up to 30% of the reasons for consultation. Pathology of the rotator cuff is the most common cause of pain. Ultrasound is a valuable diagnostic tool in assessing shoulder disorders; it can be as effective as magnetic resonance imaging.

Objectives: To determine the predictive factors of response to treatment and ultrasound findings in shoulder pain.

Methods: We performed an analysis of the patients' cases sent to the rheumatology consultation with shoulder pain, every patients had an echography shoulder evaluation, and the rheumatologist decided treatment based on the guidelines for the treatment of shoulder tendinopathies. The use of nonsteroidal anti-inflammatory drug (NSAIDs) and muscle relaxant medications as well as the following techniques: corticosteroids local injection, barbotage, capsular distension and physiotherapy programs were some of the variables assessed. Posteriorly, the patients were clinically assessed in a follow-up visit.

Results: A total of 119 patients were evaluated. Men presented a higher risk of distension of the subscapular bursa. There was a statistically significant relationship between the time from the beginning of the symptomatology and treatment response. Diabetes mellitus, arterial hypertension and dyslipidaemia were statistically significantly associated with some rotator cuff lesions and distention of the subscapular bursa.

Conclusion: In patients with shoulder pain, early intervention positively influences the response to treatment. Thus, it is important that these patients are evaluated more promptly.

Some comorbidities seem to be associated with a higher risk of specific rotator cuff lesions.

No relationship was found between response to treatment and age, sex, occupation, previous treatments or type of therapy selected. The associations found in this study seem to have clinical implications. Prevention of rotator cuff disease is a matter of major relevance as well as early institution of treatment.

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AB1124

PREDICTIVE VALUE OF MRI FOR CT-GUIDED POSITIVE BIOPSY IN SUSPECTED INFECTIOUS SPONDYLODISCITIS

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Background: Spondylodiscitis is a potentially life-threatening infection burdened by high morbidity rates. MRI remains the key examination in the diagnosis of infectious spondylodiscitis. The microbiological diagnosis is the main predictive factor for successful treatment.

Objectives: To evaluate the MRI characteristics associated with the detection of microbial pathogens by computed tomography (CT) guided biopsy in case of suspicion of infectious spondylodiscitis.

Methods: Retrospective study including all patients hospitalized in our department between 1999 and 2019 and who underwent MRI and CT-guided biopsy for suspicion of septic spondylodiscitis. The diagnosis was based on clinical, biological, radiological and bacteriological data. We divided the patients into two groups: patients with a non-contributory CT guided biopsy (group 1) and patients with a contributory biopsy (Group 2).

Results: We included 82 patients including 37 women and 45 men with a mean age of 56 years old [16 - 86]. The median delay of consultation was 3 months. Inflammatory back pain was reported in 78% of cases. Neurologic deficiency was noticed in 19.5% of cases. The lumbar spine was involved more than 50% of cases. Spinal MRI was performed to all patients and showed paravertebral abscess in 64.6%, epiduritis in 62.1%, intra-discal abscess in 3.6%, spinal cord compression 10.9%, and vertebral osteolysis in 6.09% of cases. The causative microorganism was mycobacterium tuberculosis in 53.6%, brucella in 24.3%, and pyogenic germs in 15.8% of cases. Disco vertebral biopsy was performed in 55 patients and was contributory in 45.4% of cases.

The presence of spinal cord compression, intra-discal abscess and vertebral osteolysis was more frequent in group 2, but with no statistically significant difference ($p = 0.65$, 1 and 0.58 ; respectively). In addition, there was no significant difference in the presence of paravertebral abscess and epiduritis ($p = 0.41$ and 0.53 ; respectively).

Conclusion: Spondylodiscitis is an emergency which must be diagnosed on time to avoid life threatening complications, neurological sequelae and spinal deformities.

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AB1125

LESS SEVERE SYNOVITIS IN PATIENTS WITH KNEE OSTEOARTHRITIS IS ASSOCIATED WITH HIGHER SELF-REPORTED PAIN INTENSITY 12 MONTHS AFTER TOTAL KNEE ARTHROPLASTY – AN EXPLORATORY COHORT STUDY

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Background: Synovitis is a pain generator in patients with osteoarthritis and associated with upregulation of pro-inflammatory cytokines, which have been found to lead to pain sensitivity and worse self-reported pain (1).

Objectives: This study aimed to investigate the association between pre- and perioperative synovitis from imaging and histology and self-reported pain 12 months after total knee arthroplasty (TKA).

Methods: Preoperative synovitis was assessed from MRI data of the knee by 11 point synovitis score a.m Guermazi (2) using contrast enhanced MRI (CE-synovitis) and heuristic time intensity curve analysis of the dynamic contrast enhanced MRI (DCE-MRI) data using the DYNAMIKA[®] software (Image Analysis group, London) providing Dynamic Enhanced MR Quantification (DEMRIQ) Indices (3). Perioperative synovitis was also assessed from biopsies of the synovium in 6 predefined places graded histologically a.m Krenn (4). Worst pain within the last 24-hours (visual analog scale, VAS, 0-100) was assessed before and 12 months after TKA. Patients were divided into a low-pain (VAS≤30) and a high-pain (VAS>30) group based on 12-months postoperative VAS.

Results: Twenty-six patients had full pre- and postoperative data and were analysed. The high-pain group had significantly lower CE-synovitis ($P=0.03$), DCE-MRI inflammation indices (DEMRIQ-inflammation) ($P<0.03$) and a trend towards lower histologically assessed synovitis grades ($P=0.077$) compared to the low-pain group at baseline. Preoperative synovitis scores were also inversely correlated with pain 12-months after TKA, CE-synovitis ($R = -0.455$, $P = 0.022$) and DCE-MRI inflammation ($R = -0.528$, $P = 0.007$), indicating that more severe preoperative synovitis is associated with less severe pain at 12-months.

Conclusion: Higher preoperative synovitis scores are associated with less postoperative pain 12-months after TKA. Further, correlation analysis revealed that less severe preoperative synovitis was associated with worse pain 12-months after TKA, suggesting that CE and DCE-MRI synovitis quantification could be used as imaging markers for prediction of good surgical outcomes.

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