References


REFERENCES

AB1162 ARE SONOGRAPHIC FINDINGS CORRELATED WITH DISEASE ACTIVITY SCORE IN RHEUMATOID ARTHRITIS REMITTED PATIENTS?

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Background: Obtaining remission is the ultimate and now attainable goal of treatment in rheumatoid arthritis (RA). However, the definition of remission kept changing over the last decade. Several composite scores and indices are now validated to assess remitting RA such as the Disease Activity Index 28 joints (DAS28), and more recently, the Simplified Disease Index (SDAI) and the Clinical Disease Index (CDAI). Despite more stringent definition criteria, progressive radiographic damages still occur in RA patients who reached remission. Defining other criteria for remission including ultrasound (US) might help preventing such evolution.

Objectives: The aim of this study was to compare US findings and composite score results in RA patients that achieved a status of remission according to DAS28.

Methods: Thirty Tunisian patients followed up for RA with DAS28 ≤2.6 for at least three months were enrolled. Among them, we identified patients in remission according to the SDAI (≤3.3) and the CDAI (≤2.8). US (Esaote MyLab 60 machine and a 13-18 MHz linear array transducer) was performed by an experienced rheumatologist blinded to clinical and laboratory data. For each patient, 22 joints were scanned (wrists, metacarpophalangeal, and proximal interphalangeal joints) using a semi-quantitative score.

Results: Over the 26 patients in CDAI remission, ultrasonographic synovitis in B-mode were noted in 81% of patients. The average ultrasound score per patient was 4.58. In PD mode, US abnormalities were noted in 58% of patients. The average PD score per patient was 2.6.

Neither correlation between CDAI and B-mode US score (r = 0.104; p = 0.319) nor between CDAI and PD US score (r = 0.251; p = 0.217) was noted.

Table: MASEI score:

<table>
<thead>
<tr>
<th>Ultrasound Findings</th>
<th>Case (n=144)</th>
<th>Control (n=24)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of entheses changed</td>
<td>1728</td>
<td>288</td>
<td>0.001</td>
</tr>
<tr>
<td>Structure (n (%)</td>
<td>472 (27.3)</td>
<td>16 (5.6)</td>
<td>0.001</td>
</tr>
<tr>
<td>Thickness (n (%)</td>
<td>503 (28.1)</td>
<td>37 (12.8)</td>
<td>0.001</td>
</tr>
<tr>
<td>Bursitis (n (%)</td>
<td>95 (16.5)</td>
<td>05 (1.73)</td>
<td>0.004</td>
</tr>
<tr>
<td>Erosion (n (%)</td>
<td>48 (2.8)</td>
<td>02 (0.7)</td>
<td>0.035</td>
</tr>
<tr>
<td>Calcification (n (%)</td>
<td>373 (21.6)</td>
<td>34 (11.8)</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Test: Chi-Square; (PD: power Doppler).

Disclosure of Interests: None declared


AB1161 ULTRASOUND IMAGING IN EVALUATION OF ENTHESITIS: STATUS AND PERSPECTIVES

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Background: The high-frequency ultrasound is a reliable method to identify enthesitis, including subclinical and early diagnosis, in patients with psoriasis (PsO) and psoriatic arthritis (PsA).

Objectives: To establish an epidemiological profile of patients with PsO and/or subclinical and clinical PsA; to establish the ultrasound (US) profile with gray scale and Doppler in entheses in these groups.

Methods: A case control study conducted in the period from December 2015 to December 2016, at Hospital das Clínicas/UFG. It was performed in 144 patients with PsO and/or PsA and 24 healthy controls. Patients with and without arthritis/enthesis were submitted to the US. The US findings were according to the MASEI (the Madrid sonography enthesitis index). The entheses were studied bilaterally: plantar fascia, distal calcaneal tendon, distal and proximal ligament of the patella, distal quadriceps muscle, iliotibial, iliac crest, iliac ligament, lateral and medial ligament of the patella, iliac quadriceps, and tendons of the brachial triceps. In addition to the US in the 2nd and 3rd distal interphalanges. The interobserver reliability was calculated in 24 patients - kappa index (k).

Results: In the case group the mean age was 50.13 years, BMI of 28.14; duration of illness of 16 years; Mean±SD PASI: 5.34±6,03; PEST:2,21±1,66 and DLQI:4.39±5,16; 28.14; duration of illness of 16 years; Mean±SD PASI: 5.34±6,03; PEST:2,21±1,66 and DLQI:4.39±5,16.

 Patients in SDAI remission detected synovitis in B-mode were noted in 81% of patients. The average ultrasound score per patient was 4.58. In PD mode, US abnormalities were noted in 58% of patients. The average PD score per patient was 2.6.

Neither correlation between CDAI and B-mode US score (r = 0.104; p = 0.319) nor between CDAI and PD US score (r = 0.251; p = 0.217) was noted.

Test: Chi-Square; (PD: power Doppler).

Disclosure of Interests: None declared

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Disclosure of Interests: None declared

AB1163 CAN A MUSCULOSKELETAL ULTRASOUND REPORT
CHANGE A RHEUMATOLOGIST’S OPINION?
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Background: The era of musculoskeletal ultrasound (MSUS) is becoming
enormous, but the extent to which MSUS has influenced management
plans for patients with different musculoskeletal symptomsremains
questionable.

Objectives: To assess the changes in the provisional diagnosis and treat-
ment questions of patients with different musculoskeletal symptoms
remains questionable.

Methods: This study has been carried out at Rheumatology & Rehabili-
tation outpatient clinic Zagazig University Hospitals in Egypt. This is
an observational study on 101 patients with musculoskeletal complaints
who have been referred by rheumatologists for an MSUS scan at Zagazig
University MSUS Unit in the same department. The patients mean age
was 41.5 ± 15.67, including 70 females (69.3%) and 31 males (30.7%).
Patients included 29 patients with hand/wrist complaints (28.7%), 2
patients with elbow pain (2%), 36 patients with shoulder pain (35.6%), 7
patients with ankle/foot pain (6.9%), 10 patients with knee pain (9.9%),
and 17 patients with polyarticular pain (16.8%). The rheumatologists
were asked to set a provisional diagnosis and treatment plan before the
MSUS scan and to reconsider their own plan for any adjustments
afterwards.

Results: Regarding all 101 patients, the diagnosis & treatment decisions
were changed in 37% and 65% respectively after the MSUS scan as shown in
figure (1). Fifty percent of the changes in treatment were classi-
fied as minor in the form of adding/altering the type of NSAIDs, adding/
changing the dose of steroids, changing the dose of DMARDs and add-
ing/modifying physiotherapy while the other 50% were major in the form
of initiating/adding DMARDs, interventional treatment referral to surgery.
Ten patients out of 29 with hand/wrist complaints encountered changes in diagno-
sis (34.5%), 1 patient out of 2 with elbow pain (50%) and 11 patients out
of 36 with shoulder pain (30.6%). In patients with knee pain and ankle/foot
pain, changes occurred with 4 patients for each representing 40% and
42.9% respectively. Regarding patients with polyarticular complaints 8
patients representing 47.1% were categorized to different disease entities.
Treatment decisions were much more frequently changed as more pathologi-
cal details were clarified by MSUS. Treatment decision changes occurred
in 83.3% of patients with shoulder pain 70% of which were minor mainly
due to better evaluation of rotator cuff syndromes grading tears and
detecting bursitis. While for knee pain 50% of treatment decisions were
changed of which 60% were major as in knee osteoarthritis detection of
significant synovitis & Baker’s cysts lead to interventional treatment.
Regarding patients with hand/wrist polyarticular complaints, 44.8% and 68.8% of treat-
ment decisions were changed respectively of which 75% and 90.8% were
major owing mainly to changes in diagnosis & detecting subclinical activity.
Finally regarding ankle/foot pain, treatment changes happened in 71.4%, of which 80% were minor.

Conclusion: MSUS scans have a great impact on rheumatologists’ deci-
sions in clinical practice. Remarkable changes in diagnosis with subse-
quent significant major changes in treatment plans were due to the
ability of MSUS to differentiate between different disease entities. Changes
in treatment decisions were very frequent even without changing the
diagnosis owing to a more detailed look into the diseased joint and sur-
rounding structures.

Disclosure of Interests: None declared

AB1164 EDUCATION ON PEDIATRIC MUSCULOSKELETAL
ULTRASOUND: A SYSTEMATIC LITERATURE AND
EVENTS REVIEW
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Background: Recently some Pediatric musculoskeletal ultrasound (PedM-
US) courses have been held on national and international ground. Nonetheless, content, conduct and format of PedMSUS courses have
never been investigated and shared.

Objectives: To perform a systematic literature and events review on
PedMSUS educational initiatives.

Methods: Educational material/events on PedMSUS were extensively
searched on websites/networks (PubMed, Cochrane, Embase, ERED, MED-
line, CINAHL complete, Google, Yahoo, Ask, Baidu, Bing, Lycos, Duck-
duckgo). The keywords were: "musculoskeletal", "ultrasound", "sonography",
"course", "education", "training", "children", "paediatrics", "pediatrics": Only
courses/events, articles and books in English were considered. Descriptive
analysis was performed on the documentation retrieved.

Results: No articles neither books on educational recommendations for
PedMSUS courses were found. A total of 13 PedMSUS courses were
identified. Two online courses and three residential ones were not consis-
tent with the purpose and were excluded. Eight courses were finally
included for the analysis (Figure 1). Seven were endorsed by EULAR
and followed the recommendations for the content and conduct of EULAR
MSUS courses. No requirements/skills should be fulfilled for registration;
only one level of competency was proposed. The courses were residential
of 2-3 days and included theoretical and practical lessons. Lectures
were on MSUS examination techniques, physiological musculoskeletal
(MSK) anatomy and basic pathology in pediatric rheumatology. Hands-on
scanning of healthy models/patients with pediatric rheumatic diseases was
generally organized in groups supervised by tutors, and included optimiza-
tion of the machine settings, identification of pediatric MSK sonoanatomy,
correct acquisition of images, and identification of basic pathological find-
ings in children. A competency assessment was performed at the end of
only three courses.

Figure 1

Number of patients

Not changed

Minor changes

Major changes

Diagnosis

Change

Scientific Abstracts