Table 2. ROC analysis of the performance of anti-CCP using various ultrasound erosion score criteria

<table>
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<tr>
<th>Ultrasound erosion score criterion</th>
<th>Area under the ROC Curve (AUC) (95%CI)</th>
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<tbody>
<tr>
<td>≥3.2 (32 percentile)</td>
<td>0.57 (0.26, 0.87)</td>
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<tr>
<td>≥4.5 (median or 50th percentile)</td>
<td>0.68 (0.40, 0.95)</td>
</tr>
<tr>
<td>≥7 (75th percentile)</td>
<td>0.72 (0.26, 0.97)</td>
</tr>
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</table>

1Corresponding Threshold=95.2, Specificity=53.8%, Sensitivity=83.3%, Accuracy=63.2%, Negative Predictive Value=87.5%, Positive Predictive Value=45.5%.

Results: Among 510 and 680 joints examined in PsA and RA respectively, certain US features such as synovitis and erosions at the DIP were exclusively detected in PsA (p<0.001). Synovitis was frequently present at the radiocarpal joints in RA in comparison to PsA patients (52.5% vs 26.7% respectively, \( p=0.029 \)). Joint effusion was frequently detected at radiocarpal and midcarpal joints in RA in comparison to PsA (\( p=0.047 \), 0.039 respectively). Effusion at the 3rd PIP joints was more significantly present in PsA than RA (\( p=0.037 \)), while erosions were significantly detected at radiocarpal joints in RA in comparison to PsA patients (45% vs 20% respectively, \( p=0.029 \)). Tenosynovitis was significantly detected at the extensor tendons in RA and at the flexor tendons in PsA patients (\( p=0.021 \), 0.022 respectively).

Conclusion: There are significant differences in the US findings of the hand and wrist that can help to distinguish between RA and PsA.

References:

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Disclosure of Interests: None declared

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AB1135

ECHO-ANATOMY OF THE PROXIMAL TIBIOFIBULAR JOINT

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Background: The proximal tibiofibular joint (PTFJ) should be considered in the differential diagnosis of a patient presenting with complaints in the lateral aspect of the knee. However, this joint is often forgotten, yet involved in many degenerative and inflammatory pathological processes. MRI remains the imaging of choice to study the PFTJ. Ultrasound could also be useful in clinical practice to study the joint and its environment. To our knowledge, there is no systematic descriptive echo-anatomical study of PFTJ that would allow to standardize the ultrasound scanning of this joint.

Objectives: The objective of our study was to describe standardized ultrasonographic scans of the PTFJ joint and its environment starting from an anatomical study of the joint and then confirming the visibility of the different structures on a series of healthy volunteers.

Methods: We first conducted an anatomical study of the PTFJ on 3 cadavers. The different part of the joint (capsule, cartilage, ligaments) and the environment (nerves, muscles, vessels) were studied allowing an exact correlation between US images and the structures. This step led us to choose 3 scans useful for the study of the different part of the joint in clinical practice (figure 1): an anterior transverse oblique, a strict coronal, and a posterior transverse oblique. Subsequently, a TPFJ ultrasound was performed on 20 healthy volunteer patients to evaluate the feasibility and the visibility of the different structures seen on the dissection part.

Results: The different structures seen on the anterior transverse oblique scan were the anterior joint space, cartilage and anterior proximal tibiofibular ligament. The coronal approach led us to the visualization of the joint space, the collateral lateral ligament, the intertibial and tibiofibular ligaments.

Figure 1. Sixty year old male patient with RA for 5 years, presented with pain and swelling at the wrist. Gray scale ultrasound sagittal view shows sever synovial proliferation at the radiocarpal joint.

Figure 1 Sixty year old male patient with RA for 5 years, presented with pain and swelling at the wrist. Gray scale ultrasound sagittal view shows sever synovial proliferation at the radiocarpal joint.