Ultrasonography in pSS group is superior to that of parotid gland radionuclide imaging, which can effectively reduce the complication of invasive operation.

Conclusions: The diagnosis of pSS by parotid gland ultrasonography is superior to that of parotid gland radionuclide examination. For patients with atypical clinical manifestations who are negative for anti-SSA and/or anti-SSB antibodies, there is no need for a labial biopsy of the labial glands to reduce the number of complications associated with unwanted invasive procedures.

Disclosure of Interest: None declared

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FRI0658 | **LEG ELEVATION DOES NOT SUBSTANTIALLY AFFECT TBS RESULTS**

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Background: Lumbar spine dual energy X-ray absorptiometry (DXA) scans are typically acquired with the patient's legs elevated on a positioning block thereby flattening the normal lumbar lordosis. With GE densitometers it is also possible to acquire lumbar spine scans with the legs down. BMD values obtained with legs down vs. legs elevated does minimally differ, however it is unknown if leg elevation affects trabecular bone score (TBS) results.

Objectives: The purpose of this study is to assess the effect of leg position on TBS.

Methods: Lumbar spine (L1-L4) DXA scans were acquired in legs up and legs down positioning using GE Healthcare Prodigy and iDXA densitometers. The "OneScan" feature mode was not used. These scans were analyzed with enCORE software v 12.3 or 14.1. All scans were re-processed using Medimaps TBS Calculator v2.3 or TBS iNsight v3.0.2 to obtain TBS results. Linear regression and Bland-Altman analyses were performed to compare TBS results in the legs up vs. legs down position.

Results: Sixty-four women, mean age and BMI 65.1 years (range 28.2–86.6) and 26.4 kg/m^2 (range 18.1–34.8) were studied on three Prodigy densitometers. Fifty women, mean age and BMI 68.6 years (range 15.2–92.5) and 26.2 kg/m^2 (range 19.9–35.1) were studied on a iDXA densitometer. With Prodigy and standard legs up positioning, the L1-L4 BMD ranged from 0.738–1.549 g/cm^2 and was highly correlated with legs down positioning, R^2 =0.99. TBS results ranged from 1.072–1.632 and were also highly correlated, R^2 =0.93 with a mean bias of -0.005 TBS units between leg positions (Figure). With iDXA and standard legs up positioning, the L1-L4 BMD ranged from 0.753–1.622 g/cm^2 and was highly correlated with legs down positioning, R^2 =0.97. TBS results ranged from 1.040–1.455 and were also highly correlated, R^2 =0.90 with a mean bias of 0.00 TBS units between leg positions (data not shown).
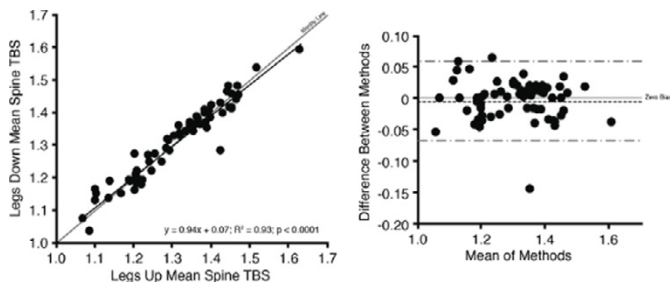
Conclusions: Leg positioning minimally affects TBS results with GE Healthcare Prodigy and iDXA densitometers but the difference from legs up to legs down is likely of no clinical significance.

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FRI0659 | **INCLUSION OF THE ASSESSMENT OF CERVICAL FACET JOINTS IN THE M-SASSS SCORE IN PATIENTS WITH ANKYLOSING SPONDYLITIS. IMPROVING SENSITIVITY TO CHANGE**

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Background: Ankylosing Spondylitis is characterized by axial involvement, especially of sacroiliacs and the vertebral bodies, although we also know that other such as facet joints (Fj) are affected. These joints can be seen with a simple x-ray, especially in the cervical spine. Despite their involvement, the different rates of radiographic progression do not assess their alteration.

Objectives: To evaluate the sensitivity to the change of the m-SASSS radiographic score by including the assessment of the cervical Fj.

Methods: The patients come from a Spondyloarthritis Unit (Hospital U. Virgen de la Arrixaca de Murcia, Spain). All patients are diagnosed of Ankylosing Spondylitis (New York Modified Criteria)

The usual radiographic study was performed to calculate the m-SASSS and a lateral cervical radiograph at two different times to calculate the difference between the scores. The score used for Fj (only one score is given for each intervertebral segment) is:
– 0: normal.
– 1: pinching (narrowing of joint space).
– 2: sclerosis in the joint margins.
– 3: joint fusion.

We will analyze the mean of the two m-SASSS radiographic score, with (m-SASSS + Fj) and without the inclusion of the Fj, and the difference between those means. We will also analyze the correlation with the rest of the radiographic scores and with the clinical patient's parameters.

Results: We included 47 patients (81% male and 19% female) with a mean age of 48 (± 8) years and a mean duration of symptoms of 18 (± 8.5) years. The mean time between the two radiographic studies was 3 (± 1.5) years.

In the following table we show the difference of means of the radiographic scores over time:

	First mean (standard deviation)	Last mean (standard deviation)	Significance (p)
Radiographic evaluation of FJ	6±5,2	8,8±6,8	0,0001
m-SASSS	9,3±11,6	10,1±11,7	0,1
m-SASSS+Fj	15,4±13,4	19,3±13,5	0,0001

After comparing △ mSASSS with △ mSASSS+Fj, we found significant differences in favor of inclusion: 2.6 (± 2) vs 4.9 (± 4.7), p=0.04.

Conclusions: The inclusion of the evaluation of cervical Fj improves sensitivity to change of m-SASSS.

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FRI0660 | **IMPACT OF ULTRASOUND IN TREATMENT DECISION OF RHEUMATOID ARTHRITIS**

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Background: Ultrasound (US) is an important tool to support the clinician in the diagnosis and treatment monitoring of rheumatoid arthritis (RA). The EULAR recommended it for the follow up of RA patients. In spite of the evidence supporting the value of US, the real impact in treatment decisions is not clearly defined.

Objectives: To investigate the impact of US findings in the treatment decisions of rheumatologists in patients with RA in a real-life setting. Additionally, to verify the US findings that play a role in change of treatment, types of changes and their distribution.

Methods: RA patients were included. As a first step, the rheumatologist performed a clinical examination (including DAS28) and recorded the treatment approach suggested according his clinical evaluation (i.e. starting, changing or stopping pharmacological medication as well as local injection). In the same day, after the clinical assessment, the patients were sent for an US examination using the 7-joint score, which was performed by an independent rheumatologist sonographer who reported the US findings to the same rheumatologist that previously evaluated clinically the patient. This last decided, according to the US findings to maintain or change the previous suggested therapy. Additionally, the clinical rheumatologist reported the reasons which induced to change or not the treatment after the US examination

Results: A total of 128 RA patients were included [female 117 (91.4%), male 11 (8.59%)], with mean ± SD disease duration of 9.88±8.22 years. Ninety-four patients (73.4%) had active disease according the DAS 28, whereas 34 (26.5%) were considered in remission.

US findings influenced a change in the treatment in 56 cases (43.7%) (47 with clinical active disease and 9 in remission). Among the main reasons that induced a change in the treatment based on the US examinations were: grade of synovitis (25%), higher number of synovitis than clinical examination (16.6%) and presence of power Doppler (PD) (16.7%). The most frequent treatment changes were increasing dose or start a new combination of DMARDs [39 patients (69.5%)]. The multiple logistic regression analysis showed that synovitis of 2nd metacarpophalangeal joint (MCPj) was the US finding with more influence in the decision to change treatment (p=0.016).