

Table S 1. US and MRI definitions of the evaluated abnormalities

Abnormality	US definition	MRI definition
Synovial hypertrophy/ Synovitis	Abnormal hypoechoic (relative to subdermal fat, but sometimes may be isoechoic or hyperechoic) intraarticular tissue that is non-displaceable and poorly compressible and which may exhibit Doppler signal [1]	An area in the synovial compartment that shows above-normal postgadolinium enhancement (signal intensity increase) of a thickness greater than the width of the normal synovium [2]
Grading	Synovitis was scored on a 0–3 semiquantitative scale according to the combined EULAR-OMERACT scoring system [3], where 0 = No GS-detected SH and no PD signal (within the synovium), 1 = Grade 1 SH and ≤ Grade 1 PD signal, 2 = Grade 2 SH and ≤ Grade 2 PD signal or Grade 1 SH and a Grade 2 PD signal, and 3 = Grade 3 SH and ≤ Grade 3 PD signal or Grade 1 or 2 SH and a Grade 3 PD signal. The presence of joint fluid was not noted.	Synovitis was scored on a 0–3 semiquantitative scale, where 0 = normal, 1 = mild, 2 = moderate, and 3 = severe, with each point representing one-third of the maximum volume of the enhancing tissue in the synovial compartment [2]. The presence or absence of the joint fluid was also noted (0 = absent and 1 = present).
Tenosynovitis	Hypoechoic or anechoic thickened tissue with or without fluid within the tendon sheath, which is seen in 2 perpendicular planes and which may exhibit Doppler signal [1]	Peritendinous effusion (high signal intensity on T1-weighted fat-saturated/STIR images) and/or tenosynovial postcontrast enhancement (signal intensity increase), seen on axial sequences over ≥ 3 consecutive slices [2]
Grading	Assessed in both longitudinal and transverse planes and quantified on a 0-3 semiquantitative scale, as follows: grade 0 = normal, grade 1 = minimal, grade 2 = moderate, and grade 3 = severe [4]	The pathological change was scored according to the presence of the fluid within the tendon sheath, the tendon sheath thickening and/or peritendinous subcutaneous contrast enhancement, seen on 3 or more axial consecutive slices, as follows: 0 = normal, 1 = mild, 2 = moderate, and 3 = severe [2]
Bone erosion	An intraarticular discontinuity of the bone surface that is visible in 2 perpendicular planes [1] OR Cortical breakage with a stepdown contour defect, seen in 2 perpendicular planes, at the insertion of the enthesis to the bone [5]	Sharply margined bone lesion, with correct juxtaarticular localization and typical signal characteristics (on T1-weighted images: discontinuity of the signal void of cortical bone and loss of normal high signal intensity of bone marrow fat), which is visible in 2 planes with a cortical break seen in at least 1 plane [2]
Grading	0 = normal cortical surface, 1 = <2 mm, 2 = 2-4 mm, and 3 = >4 mm [6]	Bone erosions were scored from 0 to 10 points, based on the proportion of the affected bone at intervals of 10%, with 0 = no erosion; 1 = 1–10% of the bone eroded, 2 = 11–20% of the bone eroded, 3 = 21–30% of the bone eroded, 4 = 31–40% of the bone eroded, 5 = 41–50% of the bone eroded, 6 = 51–60% of the bone eroded, 7 = 61–70% of the bone eroded, 8 = 71–80% of the bone eroded, 9 = 81–90% of the bone eroded, 10 = 91–100% of the bone eroded [2]
Bone marrow edema	N/A	A lesion within the trabecular bone (alone or surrounding an erosion), with ill-defined margins and signal characteristics consistent with increased water content (high signal intensity on T1-weighted fat-saturation or STIR images, and low signal intensity on T1-weighted images) [2]
Grading	N/A	Bone marrow edema was scored proportionally to amount of bone that contained edema, using a 0–3 scale, where 0 = no edema, 1 = 1–33% of the bone edematous, 2 = 34–66% of the bone edematous, and 3 = 67–100% of the bone edematous [2]
Osteophyte	Step-up of bony prominence at the end of the normal bone contour or at the margins of the joint, seen in 2 perpendicular planes, with or without acoustic shadow [7]	Abnormal bone formation in the periarticular region on T1-weighted fat-saturation images [8]
Grading	The presence or absence of the osteophytes was noted: 0 = absent and 1 = present.	The presence or absence of the osteophytes was noted: 0 = absent and 1 = present.

Enthesophyte	Step-up of bony prominence at the end of the normal bone contour, seen in 2 perpendicular planes, with or without acoustic shadow [5]	Step-up bony prominence at the end of a normal bone contour with forming a bony spur seen within the tendinous portion of the enthesis
Bursitis	An enlargement (increase in diameter of the bursa), with well-defined, anechoic or hypoechoic area inside, with or without Doppler signal [9]	Bursa distension by a fluid collection, appearing with low signal on T1 and high signal on STIR sequences
Subcalcaneal panniculitis	Heterogeneous and intense hypoechoic, compressible, with loss of the lobular structure, increased thickness (>21 mm) of the subcalcaneal hypodermal tissue with the interruption of normal hyperechoic septa [10]	Slightly heterogeneous area of mean intensity in T1-weighted sequences (isointense to muscle), heterogeneous high intensity with either poorly or well-defined margins in T2-weighted sequences [10]

N/A: non-aplicable

### References

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