

REFERENCES

1. Akbayram S, Dogan M, Ustyol L, Akgun C, Peker E, Bilici S et al. The clinical outcome of 260 pediatric ITP patients in one center. *Clin Appl Thromb Hemost* 2011; **17**: E30–5.
2. Psaila B, Petrovic A, Page LK, Menell J, Schonholz M, Bussel JB. Intracranial haemorrhage (ICH) in children with immune thrombocytopenia (ITP): study of 40 cases. *Blood* 2009; **114**: 4777–83.
3. Carl GF, Hoffman WH, Passmore GG, Truemper EJ, Lightsey AL, Cornwell PE et al. Diabetic ketoacidosis promotes a prothrombotic state. *Endocr Res* 2003; **29**: 73–82.
4. Mahmud FH, Ramsay DA, Levin SD, Singh RN, Kotylak T, Fraser DD. Coma with diffuse white matter haemorrhages in juvenile diabetic ketoacidosis. *Pediatrics* 2007; **120**: e1540–46.
5. Jorgensen HS, Nakayama H, Raaschou HO, Gam J, Olsen TS. Silent infarction in acute stroke patients. Prevalence, localization, risk factors, and clinical significance: the Copenhagen Stroke Study. *Stroke* 1994; **25**: 97–104.

Ultrasound Imaging for Prompt Monitorization of the Treatment Response in Patients With Multi-joint Involvement

The Editor,

Sir,

A 23-year old male patient who was previously diagnosed with peripheral spondyloarthritis (SpA) presented to our clinic. During physical examination, pain and swelling were observed bilaterally in his knee and ankle joints. In this patient, musculoskeletal ultrasound imaging showed grade II synovitis [greater than grade 1 to < 50% of the intra-articular area filled with colour signals representing clear flow] (1) at both regions (Fig. 1A–1B).

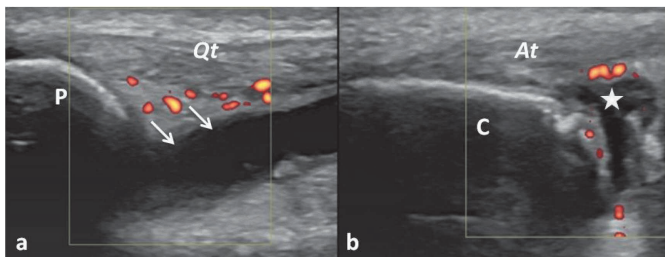


Fig. 1: Ultrasound imaging (longitudinal view with power Doppler) for knee joint synovitis (a) and enthesitis of the Achilles tendon (b). The suprapatellar (arrows) and retrocalcaneal (star) bursae are distended with anechoic effusion. Peribursal synovitis is observed at both sites. P, patella; C, calcaneus; Qt, quadriceps tendon; At, Achilles tendon

Since his current medical treatment (indomethacin 150 mg/day and sulfasalazine 400 mg/day) was considered insufficient, infliximab (5 mg/kg every 8 weeks) was commenced. On the 4th week of follow-up visit, the patient was found to be significantly improved both clinically and ultrasonographically (Fig. 2).

Ultrasound can visualize a great spectrum of pathologies regarding peripheral SpA involvement [*ie* enthesitis, bone

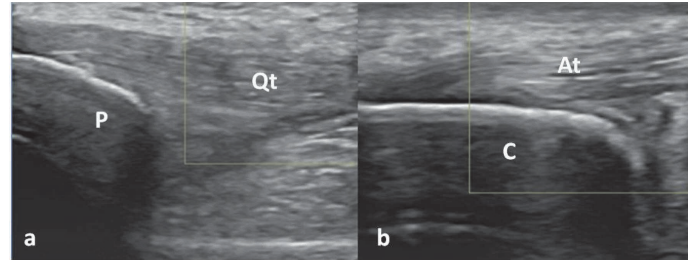


Fig. 2: A repeat imaging (4 weeks after treatment) reveals the disappearance of the effusions and the power Doppler signal at knee (a) and ankle (b). P, patella; C, calcaneus; Qt, quadriceps tendon; At, Achilles tendon

erosions, synovitis, bursitis and tenosynovitis] (2). Further, keeping in mind all of its advantages (handy, has high resolution, avoids radiation, provides dynamic imaging), ultrasound imaging of the joints and entheses can reasonably be incorporated as a complementary procedure into the overall assessment of disease activity and response to therapy (2–4). Apart from its great convenience for the clinician during patient follow-up (being as the ‘stethoscope’), the recent literature suggests that ultrasound images can be used as a visual biofeedback for the patients as well (5). Yet, it is not uncommon to have the patients comment and say, “*It is not burning any more*”, even while Doppler imaging is being performed.

Keywords: Anti-TNF treatment, enthesitis, ultrasound, synovitis

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REFERENCES

1. Backhaus M, Ohrndorf S, Kellner H, Strunk J, Backhaus TM, Hartung W et al. Evaluation of a novel 7-joint ultrasound score in daily rheumatologic practice: a pilot project. *Arthritis Rheum* 2009; **61**: 1194–201.
2. Naredo E, Batlle-Gualda E, Garcia-Vivar ML, Garcia-Aparicio AM, Fernandez-Sueiro JL, Fernandez-Prada M et al. Power Doppler ultrasonography assessment of entheses in spondyloarthropathies: response to therapy of enthesal abnormalities. *J Rheumatol* 2010; **37**: 2110–7.
3. Özçakar L, Tok F, De Muynck M, Vanderstraeten G. Musculoskeletal ultrasonography in physical and rehabilitation medicine. *J Rehabil Med* 2012; **44**: 310–8.
4. D’Agostino MA. Ultrasound imaging in spondyloarthropathies. *Best Pract Res Clin Rheumatol* 2010; **24**: 693–700.
5. Giggins MO, McCarthy U, Persson UM, Caulfield B. Biofeedback in rehabilitation. *J Neuroeng Rehabil* 2013; **10**: 60.