

Nature Reviews Rheumatology 9, 696 (2013); published online 5 November 2013;
 doi:10.1038/nrrheum.2013.170;
 doi:10.1038/nrrheum.2013.172;
 doi:10.1038/nrrheum.2013.171

IN BRIEF

PERFORMANCE MEASURES

A comparison of PsA measures of disease activity

A new study has compared a range of composite measures used for assessing disease activity in patients with psoriatic arthritis (PsA). The measures included the Arithmetic Mean of the Desirability Function (AMDF), the Composite Psoriatic Disease Activity Index (CPDAI) and the Psoriatic Arthritis Disease Activity Score (PASDAS), with the Disease Activity Score for 28 joints (DAS28) used as a comparator. All measures were able to distinguish a response in patients with PsA who were treated with golimumab, although the PASDAS and AMDF measures, which incorporate more facets of PsA, including skin, enthesitis and dactylitis, performed better than traditional joint-only measures.

Original article Helliwell, P. S. & Kavanaugh, A. Comparison of composite measures of disease activity in psoriatic arthritis using data from an interventional study with golimumab. *Arthritis Care Res. (Hoboken)* doi:10.1002/acr.22204

DIAGNOSIS

Dual-energy CT and ultrasound compared for gouty arthritis

Dual-energy CT (DECT) and ultrasound are both comparable for detecting gouty arthritis, according to results from a new study. DECT is a new noninvasive imaging technique that allows direct visualization of uric acid crystal deposits and bone structures. Both imaging methods were performed across 37 joints in 21 patients suspected of having acute or chronic gout. DECT and ultrasound findings correlated in 32 of 37 joints ($P < 0.001$), although ultrasound findings correlated slightly better than DECT with results from synovial fluid aspiration. DECT can diagnose gout in some locations where ultrasound is limited and can also differentiate between pseudogout and gout. However, ultrasound is more cost effective than DECT and does not expose patients to radiation. The authors conclude that DECT has a high sensitivity for detecting crystal deposits and is a promising tool for the early diagnosis of gout.

Original article Gruber, M. *et al.* Dual-energy computed tomography compared with ultrasound in the diagnosis of gout. *Rheumatology (Oxford)* doi:10.1093/rheumatology/ket341

PAEDIATRIC RHEUMATOLOGY

Etanercept caution for patients with refractory JDM

A new study has evaluated the efficacy of etanercept in patients with juvenile dermatomyositis (JDM) who are refractory to standard therapy. Nine patients, who received 0.4 mg/kg twice weekly alongside baseline medication for 12 weeks, were evaluated using measures including a validated disease activity score, serum muscle enzymes, childhood myositis assessment scale and nailfold capillaroscopy. The authors report that although the majority of patients did have a mild improvement in disease activity, two patients worsened while on etanercept—interestingly both of these patients had the same polymorphism in the *TNF* gene (308G>A). However, the effects of this genetic polymorphism on TNF blockade in patients with JDM are currently not well understood. The authors conclude that caution should be taken when recommending TNF receptor inhibitors and patients should be followed up closely.

Original article Rouster-Stevens, K. A. *et al.* Pilot study of etanercept in patients with refractory juvenile dermatomyositis. *Arthritis Care Res. (Hoboken)* doi:10.1002/acr.22198