Nature Reviews Rheumatology | Published online 3 Mar 2016; corrected online 9 Mar 2016

IN BRIEF

OSTEOARTHRITIS

Glucosamine plus chondroitin sulfate: long-term therapy could retard progression of knee OA

Combined glucosamine and chondroitin sulfate therapy has long-term protective effects in patients with knee osteoarthritis (OA). Raynauld *et al.* analysed data from 1,593 patients from the OA Initiative who had joint space >1 mm and for whom information on this type of therapy was available. The 429 patients who had medial meniscal extrusion at baseline were classified according to duration of exposure to the therapy (1 year, 2–3 years and 4–6 years). The researchers compared MRI-assessed cartilage volume at baseline and at 6 years of follow-up. The treatment was associated with a significant reduction in loss of cartilage volume. Furthermore, the protective effects of treatment were significantly greater in patients who received the therapy for 2 years or longer.

ORIGINAL ARTICLE Raynauld, J. P. *et al.* Long-term effects of glucosamine/chondroitin sulfate on the progression of structural changes in knee osteoarthritis: 6-year follow-up data from the osteoarthritis initiative. *Arthritis Care Res. (Hoboken)* http://dx.doi.org/10.1002/acr.22866

VASCULITIS SYNDROMES

Do PR3-ANCA levels predict relapse?

Fussner *et al.* used data from 93 patients with anti-neutrophil cytoplasmic antibody (ANCA)-associated vasculitis (AAV) from the RAVE trial who had ANCAs targeting proteinase 3 (PR3-ANCAs) to investigate the association between PR3-ANCA levels and the likelihood of AAV relapse. In the 55 patients in whom the disease relapsed, rises in PR3-ANCA levels were observed by direct ELISA in 25 patients and by capture ELISA in 21 patients. The rises in PR3-ANCA levels detected by direct ELISA were significantly associated with severe relapse, especially in patients with renal involvement and alveolar haemorrhage. An increased risk of relapse associated with rises in PR3-ANCA levels was identified in patients treated with rituximab, but not in those treated with cyclophosphamide or azathioprine. The findings show that the association between PR3-ANCA levels and risk of relapse is affected by disease phenotype and type of treatment, and also by the way PR3-ANCA levels are measured.

ORIGINAL ARTICLE Fussner, L. A. *et al.* Factors determining the clinical utility of serial measurements of antineutrophil cytoplasmic antibodies targeting proteinase 3. *Arthritis Rheumatol.* http://dx.doi.org/10.1002/art.39637

RHEUMATOID ARTHRITIS

App uses handgrip strength to assess RA activity

A hand dynamometer connected to a smartphone could be used by patients with rheumatoid arthritis (RA) to self-assess disease activity, the results of a new study suggest. This approach was assessed in 82 patients with RA. Three types of handgrip strength — power, pinch and tripod — were tested and captured by an interactive mobile application. The three measures of grip strength at baseline were negatively correlated with the DAS28 score of RA disease activity. Power grip strength was negatively correlated with the DAS28 score in a longitudinal analysis of 32 patients. An independent correlation of power grip strength with male sex was also found, whereas this measure was inversely correlated with disease duration, patient global assessment and levels of C-reactive protein.

ORIGINAL ARTICLE Espinoza, F. *et al.* Handgrip strength measured by a dynamometer connected to a smartphone: a new applied health technology solution for the self-assessment of rheumatoid arthritis disease activity. *Rheumatology (Oxford)* http://dx.doi.org/10.1093/rheumatology/kew006

CORRECTION

App uses handgrip strength to assess RA activity

Nat. Rev. Rheumatol. doi:10.1038/nrrheum.2016.32 (2016)

In the version of this Research Highlight originally published online, the DOI of the original paper by Espinoza *et al.* was incorrect. This error has been corrected for the print, HTML and PDF versions of the article.