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IN BRIEF

RHEUMATOID ARTHRITIS

MMP-3 levels predict 8-year joint damage

Besides serological status and existing damage, the strongest independent predictor of radiographic progression of early rheumatoid arthritis (RA) is baseline serum matrix metalloproteinase-3 (MMP-3) level. Follow-up data obtained for 58 of 118 patients initially involved in a 2-year study now extend the original findings to the prediction of 8-year outcomes. An odds ratio of 8.25 (95% CI 2.54–26.78) for erosive progression with elevated baseline MMP-3 indicates the potential prognostic utility of this biomarker of tissue destruction in early RA.

Original article Houseman, M. *et al.* Baseline serum MMP-3 levels in patients with rheumatoid arthritis are still independently predictive of radiographic progression in a longitudinal observational cohort at 8 years follow up. *Arthritis Res. Ther.* 14, R30 (2012)

LUPUS NEPHRITIS

Histological assessment using urinary biomarkers

Urinary biomarkers can be used to non-invasively diagnose specific tissue changes in the kidneys of patients with lupus nephritis. In 76 patients, non-parametric analyses were used to compare histological features, such as capillary proliferation, with urinary biomarker levels. Differential increases in the levels of such markers—including neutrophil gelatinase-associated lipocalin—predicted specific histological kidney biopsy findings, especially when used in combination with established markers of renal function.

Original article Brunner, H. I. *et al.* Non-invasive renal protein biomarkers are associated with histological features of lupus nephritis. *Arthritis Rheum.* doi:10.1002/art.34426

SPONDYLOARTHRITIS

Psoriasis predicts worse outcome of oligoarthritis

Although bone marrow edema and HLA-B27 predict poor prognosis in axial spondyloarthritis (SpA), a study in 44 patients with SpA-related oligoarthritis involving the knees (mean disease duration at baseline 9.75 months), 26 of whom were followed up after 10 years, found that neither of these factors was significantly predictive of subsequent knee morbidity. Of the parameters measured, only the presence of psoriasis at baseline predicted worse 10-year outcome in this SpA subtype.

Original article Bennett, A. N. *et al.* Ten-year follow-up of SpA-related oligoarthritis involving the knee: the presence of psoriasis but not HLA-B27 or baseline MRI bone oedema predicts outcome. *Rheumatology (Oxford)* doi:10.1093/rheumatology/ker420

OSTEOARTHRITIS

'Optimal massage dose' determined

In 125 adults with knee osteoarthritis, a randomized, controlled trial of massage regimens suggests that a 60-min, once-weekly dose is optimum and should be used in future trials of efficacy. Outcomes including pain, disease scores and range of motion were assessed at 8, 16 and 24 weeks after the initiation of 8 weeks of Swedish massage therapy. Significant improvements in all areas except range of motion were recorded at the primary 8-week endpoint in comparison with standard care, but no significant effects persisted to 24 weeks. A dose-response curve suggested that the benefits of longer therapy time plateau at 60 min per week.

Perlman, A. I. *et al.* Massage therapy for osteoarthritis of the knee: a randomized dose-finding trial. *PLoS ONE* 7, e30248 (2012)