Dr. Martin Rudwaleit, Charite´- Campus Benjamin Franklin, Berlin, Germany, provided guidelines for use of several of the assessment techniques for SpA. The Bath Ankylosing Spondylitis Disease Activity Index (BASDAI) is the standard instrument used to measure disease activity, while the Bath Ankylosing Spondylitis Functional Index (BASFI) is used to measure physical function. Both are validated patient-reported instruments and Dr. Rudwaleit believes they are appropriate for daily clinical practice, unlike the ASessment in Ankylosing Spondylitis (ASAS) response criteria, which were designed to assess treatment response in clinical trials and are not appropriate for use in individual patient care.

According to Dr. Herman Mielants, University Hospital Gent, Belgium, effective treatment strategies for SpA must go beyond the axial skeleton, joint, and enthesis. It must also have a beneficial effect on the extra-articular targets of the disease, including the skin, eye, gut and urogenital system. He reviewed several treatments.

With an average 60% response rate, NSAIDs are the cornerstone in the treatment of SpA. However, their effect on extra-articular targets is weak and they have been associated with GI side effects. Although COX-2 selective NSAIDs (coxibs) can minimize the stomach ulcers that are associated with traditional NSAIDs, they have no effect on extra-articular manifestations and have potential side effects of their own (eg, stomach upset, diarrhea, abdominal cramps, and headaches). Corticosteroids can act favorably on gut inflammation and locally on the eye, skin and joints but have no effect on axial inflammation. DMARDs (sulfasalazine, methotrexate, leflunomide) have been proven effective for arthritis, tendonitis, and skin involvement, but they have no effect on axial disease or disease progression and generally require regular blood tests to monitor side effects.

Three biologics (infliximab [*Arthritis Rheum.* 2005; 52:582-91], etanercept [*Arthritis Rheum.* 2003; 48: 3230-3236], adalimumab [*Arthritis Rheum.* 2006; 54:2136-2146]) have been approved for the treatment of SpA and all show impressive effects on locomotor and extra-articular manifestations, metrology, and quality of life. Only infliximab and adalimumab produce improvement of gut inflammation in irritable bowel disease. Infliximab significantly reduces the frequency of flares of uveitis (etanercept's effect is less positive and adalimumab's is still unknown). Recent studies show that infliximab also delays structural radiological progression compared with NSAIDs; this has not yet been demonstrated for etanercept or adalimmumab. All are associated with an increased risk of infections (e.g., tuberculosis and opportunistic infections).

The increasing interest in the spondyloarthritides, the availability of validated assessment tools, and the clinical studies being conducted in this population, hold promise for strides in early diagnosis and treatment.

For more information about the BASFI, please visit:
http://www.spondylitis.org/physician_resources/assesment.aspx

PsA Best Practices in 2006

Psoriatic arthritis (PsA) is a serious and progressive disease associated with significant morbidity and mortality. Seventeen percent (17%) of PsA patients have ≥ 5 deformed joints, 40% to 50% deforming arthritis, 20% to 40% spinal involvement, and 11% to 19% are disabled. Defining outcome measures in PsA has been challenging because of the wide spectrum of clinical presentation, perceived low prevalence, and relapsing/remitting cycle. None of the current methods for defining outcome have

been validated in PsA patients.

Beginning with Moll and Wright, several attempts have been made to develop a standard set of criteria to differentiate PsA. Recently, domains for the assessment of PsA were identified by the ClASsification of Psoriatic ARthritis (CASPAR) (*Ann Rheum Dis*. 2005;64:ii3-ii8) group and further refined through the Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA) (*Ann Rheum Dis*. 2005;64:ii1-ii2). The following were identified as important in the assessment of patients with PsA: inflammation (peripheral joints, axial skeleton, physician global assessment), other features (dactylitis, enthesitis), skin and nails, imaging, biomarkers, and patient derived indices (pain, quality of life, itch, function). These are being further refined and instruments to measure individual items are being developed.

What can imaging tell us about PsA? MRI's ability to assess both detailed changes in bone structure and synovial inflammation, combined with its multiplanar capability, makes it a potentially valuable tool for assessing patients with PsA. Possible uses include: diagnosis and classification; early assessment of bony erosions (to define patients who already have articular structural damage); quantification of primary site synovial inflammation (potentially allowing prediction of further erosions and disease progression); simultaneous assessment of synovitis and joint erosion; and long-term evaluation of treatment outcome.

Most of the clinical trials that have evaluated the efficacy and safety of DMARDs in PsA have been small, had high placebo response rates and, particularly in the case of MTX, were underpowered to assess clinical benefit. In one of the larger trials conducted with sulfasalazine (SSZ), in which 221 PsA patients were followed over 36 weeks, significantly more patients in the SSZ group achieved PsARC (57.8% vs 44.6%; p=0.05, SSZ vs placebo, respectively). SSZ patients also showed a significant (p<0.001) decrease in ESR (*Arthritis Rheum*. 1996;39:2013-20). Results from a 24-week double-blind RCT studying the safety and efficacy of leflunomide in the treatment of 139 patients with PsA were published in 2004 (*Arthritis Rheum*. 2004; 50:1939-50). In this study, significantly more patients in the leflunomide group achieved PsARC compared with the placebo group (59% vs 30%, p<0.0001, leflunomide and placebo respectively). ACR 20 was achieved in 36% of leflunomide-treated vs 20% of placebo-treated patients. PASI 50 and 75 scores (a score to assess improvement in cutaneous involvement) were also significantly improved in the leflunomide group (30% vs 19%; p=0.003 and 17% vs 8%; p=0.048, PASI 50 and 75, leflunomide and placebo, respectively).

Several biologic agents have been studied in PsA including alefacept, which targets the inhibition of T-cell activation and migration, IL-1ra (anakinra), which targets immune deviation, as well as etanercept, infliximab, and adalimumab, which block the activity of inflammatory cytokines. Additional trials, in patients with PsA, with these compounds singly and in combination are needed. Future therapies include IL-15, IL-6, abatacept, rituximab, anti-angiogenesis, FVIII therapies, and B-cell blockade. Investigations should be undertaken to determine whether genetics could assist in determining the most appropriate