

## Disease Activity Assessment in Polymyalgia Rheumatica (PMR)

The EULAR response criteria for polymyalgia rheumatica (PMR) and the PMR-disease activity score (PMR-AS) were developed to measure improvement after treatment with corticosteroid therapy. A diagnosis of PMR is based on the amount of pain and stiffness in the shoulder and pelvic girdle, muscle tenderness in the upper and lower limbs, non-specific somatic complaints, frequently occurring fever, weight loss, and fatigue. The EULAR response criteria includes the erythrocyte sedimentation rate (ESR), C-reactive protein (CRP) level, VAS pain score, Physician's Global assessment, morning stiffness (MST), and the ability of the patient to elevate the upper limbs (*Ann Rheum Dis* 2004;63:1279-83).



Although corticosteroid treatment has been shown to result in rapid and dramatic improvement and a return to previous functional status (*Arch Intern Med* 1999;22:577-84), long term use is associated with significant adverse events. In this diagnostic criteria validation study the initial mean dose of corticosteroids was tapered from 24.68 mg prednisolone equivalent to 7.68 mg or from 27.35 mg to 4.23 mg at week 24. Along with the reduction of corticosteroids, almost all parameters of disease activity showed significant improvement indicating decrease of inflammatory activity, reduction of pain, and amelioration of functional status of the patients (*Ann Rheum Dis* 2003;62:1189-94). Internal consistency for the PMR-AS scoring system was high as indicated by the Cronbach's alpha composite scores of 0.914 and 0.881, while each single item contributed significantly to the total score.

The PMR-AS can be calculated as  $CRP \text{ (mg/dl)} + VAS \text{ p (0-10)} + VAS \text{ ph (0-10)} + [MST \text{ (min)} * 0.1] + EUL \text{ (3-0)}$ . PMR-AS values below 7 indicated low disease activity, 7 to 17 medium activity, and >17 high activity. Further, the PMR-AS was proven to be highly correlated to the patient's global assessment, patient satisfaction and ESR ( $p < 0.001$ ) (*Ann Rheum Dis* 2004;63:1279-83). Remission can be defined PMR-AS <2 and a VAS score of <10, regardless of the therapeutic intervention.

It is anticipated that monitoring disease activity, as well as increased re-estimation of treatment schedules, e.g. corticosteroids, will improve clinical decision-making and care for PMR patients.

Highlights from the  
**European League  
Against Rheumatism  
2006 Annual  
Meeting**