

March 03/11: Anti-Rib-P probably impacts renal disease course in SLE

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Antibodies to ribosomal P proteins in lupus nephritis: A surrogate marker for a better renal survival?

Autoimmun.Rev. 2011; 10: 126-130

Background:

Kidney involvement is a major predictor of poor outcome in systemic lupus erythematosus with 5–10% progression to end-stage renal disease in spite of immunosuppressive therapy. Currently, anti-dsDNA is probably the best available biomarker for lupus nephritis since it correlates well with renal activity, worse prognosis and histology severity. This antibody is not, however, a universal finding in patients with lupus nephritis and therefore there is a need to search for other surrogate markers for long-term outcomes.

Anti-ribosomal P antibodies have emerged as a possible parameter for lupus renal disease since its levels seems to fluctuate in parallel with renal flares and also with disease activity. On the other hand, the authors of this study have reported earlier that SLE patients with isolated anti-P may have a better long-term renal prognosis.

Therefore, the aim of the study was to validate the single antibody specificity of anti-Rib-P as an independent serological marker of good prognosis in renal involvement of SLE.

Summary: Beneath 60 SLE patients with biopsy-proven nephritis 11 (18%) were positive for anti-Rib-P. All 11 were negative for anti-dsDNA. 28 patients (47%) were positive for anti-dsDNA (but negative for anti-Rib-P).

The comparison of the anti-Rib-P-positive group with the anti-Rib-P-negative group revealed a trend to improved renal impairment parameters like lower mean creatinine levels, lower frequency of dialysis, and higher frequency of normal renal function.

Patients with positive anti-dsDNA showed a worse renal survival than double negative SLE patients.

Conclusions: The isolated presence of anti-Rib-P antibodies during nephritis flares is a valuable marker to predict a better long-term renal outcome in lupus patients compared to patients with isolated anti-dsDNA antibodies or absence of both antibodies. Serum creatinine at biopsy is a significant risk factor for end-stage renal failure but anti-Rib-P was more accurate to identify a more favourable prognosis. The anti-dsDNA antibody is able to discriminate lupus renal severity at biopsy and a worse long-term outcome.

Comment: This publication shows that both anti-dsDNA and anti-Rib-P are important markers for the detection of renal involvement in systemic lupus erythematosus and that both markers may give necessary information for an assured prediction of disease course and outcome. This indication enables clinicians to create individual lupus treatment strategies.

