Biennial report

Study Groups

Title of the study group: EULAR Lupus Nephritis Trials Study Group

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Summary of last year's activities

The Lupus Nephritis Trials Network (LNTN) was launched in July 2012. As described in its original mission statement, the goal of the LNTN "is to improve outcomes for patients with lupus nephritis through: (1) the conduct of clinical trials designed to prevent chronic kidney disease and end-stage kidney failure, and (2) the development of clinical trial methodologies that improve and simplify the assessment of therapeutic agents."

Over the last two years, the group has mainly focused on outcome research in the field of lupus nephritis, in an attempt to develop a treat-to-target approach.

We have been able to demonstrate that proteinuria measured after one year of treatment is the best predictor for long-term renal outcome and that the addition of the results of urinalysis (especially the presence of hematuria) to the target jeopardizes the prognostic value of the proteinuric target. These conclusions have a major impact on clinical trials. Many have changed their primary endpoint accordingly.

We are on the verge of launching a prospective per protocol repeat kidney biopsy trial (*REBIOLUP*) based on our retrospective observations that the results of repeat kidney biopsy display better predictive values than the initial biopsy. Thus, the persistence of an activity index (≥ 3 according to NIH) at one year predicts further clinical flares and the presence of chronicity (especially in the tubulo-interstitium) predicts long-term renal impairment. Based on these results, and of those of two other groups, we have decided to embark on a prospective trial aimed at evaluating the value of a per protocol repeat kidney biopsy in patients with incident lupus nephritis treated for one year according to current standards of care. At baseline, they will be randomized into two groups, undergoing - or not - a per protocol control kidney biopsy. The control group, without re-biopsy, will be treated according to clinical parameters whereas histologic findings will drive treatment decisions in the re-biopsy group. Thus, if the activity index at re-biopsy remains high, immunosuppressive therapy will be intensified. The aim is to demonstrate that: *i)* the percentage of patients in complete renal response at 2 years (primary endpoint) will be higher in the re-biopsied group; and *ii)* conversely, that the percentage of patients with decreased kidney function at 5 years will be lower. Should these hypotheses be confirmed, a systematic one-year control kidney biopsy would become integral part of LN management, hopefully with a significant decrease in the number of patients suffering from chronic kidney disease.

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