Urinary lipocalin-2 levels may be a useful biomarker for detecting renal disease activity in patients with lupus nephritis, according to the results of a study.

Researchers studied 50 adult patients with systemic lupus erythematosus (SLE) who met 1997 American College of Rheumatology (ACR) criteria and 20 matched healthy participants.

All participants underwent clinical and serological evaluation. Systemic Lupus Erythematosus Disease Activity Index (SLEDAI) scores were calculated for patients with SLE. Urinary lipocalin-2 was measured in all participants.

Patients with SLE had significantly higher levels of urinary lipocalin-2 compared to healthy participants (13.2 /mL vs. 1.7 /mL), and patients with lupus nephritis had significantly higher levels of lipocalin-2 than all participants (22.95 /mL). Renal SLEDAI scores correlated positively with increased levels of lipocalin-2, but the levels did not correlate with other symptoms of disease unrelated to renal involvement.

Of 25 patients with 1-year follow-up data available, a significant difference was seen in urinary lipocalin-2 levels between patients with and without lupus nephritis. An association between the change in the total and renal SLEDAI scores and urinary lipocalin-2 levels was noted but it did not reach statistical significance.

The authors concluded that the levels of urinary lipocalin-2 may be useful in predicting renal disease activity in patients with SLE. – *by Shirley Pulawski*

Reference:

Gamal NM, et al. Paper #SAT0413. Presented at: European League Against Rheumatism Annual European Congress of Rheumatology. June 10-13, 2015; Rome.

Disclosure: The researchers report no relevant financial disclosures.

...