

Publication of the Month

October 10/11: Impact of separate anti-Ro52 determination

Key messages:

- *Anti-Ro52 and anti-Ro60 should be tested separately due to their distinct autoantibodies systems.*
 - *Information on isolated or associated anti-Ro52 reactivity is crucial in clinical diagnosis.*
 - *Pulmonary manifestations are often associated with the presence of anti-Ro52 antibodies.*
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Ghillani P, Andre C, Toly C, Rouquette A.M, Bengoufa D, Nicaise P, Goulvestre C, Gleizes A, Dragon-Durey M.A, Alyanakian M.A, Chretien P, Chollet-Martin S, Musset L, Weill B, Johanet C
Clinical significance of anti-Ro52 (TRIM21) antibodies non-associated with anti-SSA 60 kDa antibodies: Results of a multicentric study
Autoimmunity Reviews 2011; 10: 509-513

Background: Recent publications have shown that anti-Ro52 antibodies are directed against a macromolecular complex (called TRIM21) different from the antigen of anti-Ro60 antibodies. Ro52-antibodies are most common in myositis, systemic sclerosis and autoimmune liver diseases. The identification of the two distinct autoantibody systems and the ability to differentiate them through serological diagnosis raises the question on the significance of Ro52 antibodies non-associated to Ro60 antibodies.

Summary: 155 sera confirmed as Ro52 positive but Ro60 negative were checked for association with other autoantibodies. While 57% of the samples showed isolated anti-Ro52 antibodies the remaining samples showed antibodies associations with mainly Sm/SmRNP or Chromatin (57%), Jo-1 (26%) and CENP-B (14%).

Out of the 155 patients, 73% had autoimmune diseases including myositis, SLE, Sjögren's syndrome and systemic sclerosis/CREST.

Anti-Ro52 positive patients mainly show pulmonary manifestations (34/155) caused by autoimmune diseases (n=25) but also with non-immune origin (n=9).

Conclusions: Separate detection of anti-Ro52 antibodies might be useful in related antisynthetase syndrome diagnosis. The presence of anti-Ro52 antibodies should probably precede development of autoimmune disease and must induce sequential follow-up of positive patients, particularly in interstitial lung disease progression.

Comment: Most Anti-SS-A/Ro tests do not distinguish between anti-Ro52 and anti-Ro60 but measure both simultaneously. However, the antibodies are independent markers and particularly when one is present without the other, it may be associated with different diseases. Therefore, the diagnosis is more precise and specific, when these two antibody populations are measured independently.

