

The autoimmune/inflammatory syndrome induced by adjuvants (ASIA)/Shoenfeld's syndrome: descriptive analysis of 300 patients from the international ASIA syndrome registry

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Abstract

The autoimmune/inflammatory syndrome induced by adjuvants (ASIA) is a recently identified condition in which the exposure to an adjuvant leads to an aberrant autoimmune response. We aimed to summarize the results obtained from the ASIA syndrome registry up to December 2016, in a descriptive analysis of 300 cases of ASIA syndrome, with a focus on the adjuvants, the clinical manifestations, and the relationship with other autoimmune diseases. A Web-based registry, based on a multicenter international study, collected clinical and laboratory data in a form of a questionnaire applied to patients with ASIA syndrome. Experts in the disease validated all cases independently. A comparison study regarding type of adjuvants and differences in clinical and laboratory findings was performed. Three hundred patients were analyzed. The mean age at disease onset was 37 years, and the mean duration of time latency between adjuvant stimuli and development of autoimmune conditions was 16.8 months, ranging between 3 days to 5 years. Arthralgia, myalgia, and chronic fatigue were the most frequently reported symptoms. Eighty-nine percent of patients were also diagnosed with another defined rheumatic/autoimmune condition. The most frequent autoimmune disease related to ASIA syndrome was undifferentiated connective tissue disease (UCTD). ASIA syndrome is associated with a high incidence of UCTD and positive anti-nuclear antibodies (ANA) test. Clinical and laboratory features differ from the type of adjuvant used. These findings may contribute to an increased awareness of ASIA syndrome and help physicians to identify patients at a greater risk of autoimmune diseases following the exposure to vaccines and other adjuvants. The ASIA syndrome registry provides a useful tool to systematize this rare condition.

Keywords: ANA; Adjuvants; Autoantibodies; Autoimmune diseases; Chronic fatigue syndrome (CFS); Fibromyalgia; Silicone; Systemic lupus erythematosus; Vaccines.