Minocycline-induced autoimmune syndromes: an overview.


Source

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Abstract

OBJECTIVE:

To increase awareness of minocycline-induced autoimmune syndromes.

METHODS:

Review of relevant publications from the American and European literature.

RESULTS:

Four minocycline-induced syndromes have been described in 82 patients: serum sickness, drug-induced lupus, autoimmune hepatitis, and vasculitis. Aside from sporadic cases of serum sickness, all other syndromes occurred in patients treated for acne. Drug-induced lupus and hepatitis were by far the most common events (66 cases). Except for serum sickness, which presented shortly (mean, 16 days) after minocycline, the autoimmune syndromes manifested after protracted use (mean, 25.3 months). As expected, the patients with acne were young (mean, 19.7 years). The most frequent symptoms were arthralgia, followed by arthritis, fever, and rash (73, 45, 38, and 29 patients, respectively). Serologically, antinuclear antibodies were the most common finding (63 positive of 68 tests); perinuclear anti-neutrophilic cytoplasmic antibodies (pANCA), when assayed, were similarly frequent (20 of 24 tests). Surprisingly, anti-histone antibodies were uncommon, even among patients with drug-induced lupus (4 of 31 tests). The clinical and serological features of the separate syndromes may overlap. The diagnostic value of pANCA, as well as its possible role in minocycline-induced autoimmunity, are discussed.

CONCLUSIONS:

Minocycline has the potential to evoke a variety of clinical and serological autoimmune expressions. The number of published reports may underestimate the frequency of this
condition, which should be suspected and investigated in young patients with autoimmune manifestations.

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