Interestingly, the antibody has been cleared out of the circulation after induction of disease remission with methotrexate. Although the occurrence of any autoantibody in a single case is difficult to ascribe to a defined association, this report might bring about new similar associations.

The Golgi autoantigens look pleomorphic and complex (3). Nowadays, standardization of ANA techniques with HEp-2 cells supposedly facilitates the identification of anti-Golgi cytoplasmic patterns. Nevertheless, the refined specificities of anti-golgin antibodies by molecular methods,as well as clear-cut clinical associations, are yet to be set in patients with CTD.

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Drug-induced systemic lupus erythematosus associated with etanercept therapy in a child with juvenile idiopathic arthritis

Sirs,

Biological cytochine inhibitors are considered to be an important recent therapeutic advance (1). Such inhibitors are utilized in several immune-mediated diseases that are not responsive to conventional treatments. In particular, biological agents such as anti-tumor necrosis factor alpha (TNF-α) has proved to be effective and safe both in rheumatoid arthritis (RA) and juvenile idiopathic arthritis (JIA). Nevertheless, evidence of their potential toxicity needs to be considered and evaluated (2). Recently, Shakoor *et al.* (3) report 4 cases of a syndrome resembling systemic lupus erythematosus (SLE) induced by etarnecept. All of these patients were adult females suffering from refractory RA. Symptoms resolved spontaneously in all patients 2-6 weeks after etanercept withdrawal. The autoantibody status (ANA and anti-dsDNA) before the onset of the syndrome was not reported for any of these patients.

At our tertiary referral center for rheumatic disease 13 paediatric patients with JIA have been treated with etanercept. One of these, a 12-year old boy with a 10-year history of polyarticular JIA, developed a drug-induced syndrome resembling SLE. After the failure of all conventional treatments for JIA, he had started treatment with etanercept at a dosage of 25 mg twice week. He was ANA positive (1:80-1:160) and negative for anti-dsDNA before etanercept was started. ANA and anti-dsDNA measurements were carried out using an indirect immunofluorescence method on Hep-2 cells; the cut-off for positivity in our laboratory is 1:80 for ANA and 1:40 for anti ds-DNA. The boy was seen monthly for clinical and laboratory follow-up including autoantibody measurements.

During treatment his ANA titre progressively rose to 1:2560, while C3 and C4 remained within the normal range. Seventeen months after starting the drug, the child developed daily fever peaks, urticaria involving the face and abdomen, and swelling of the hands. Anti-dsDNA antibody levels were found to be significantly elevated (1:320). Etanercept was stopped but the symptoms cleared only after corticosteroid treatment (1mg/kg/day) was started. After a few weeks ANA had decreased to 1:320 and anti-dsDNA disappeared. Steroid therapy was tapered and stopped after 2 months.

To our knowledge only 6 cases of SLE-like syndrome have been described in adult patients receiving etanercept (4). ANA and anti-dsDNA increases have been reported in 11% and 15% respectively of the cases treated. Our case represents the first paediatric patient with an SLE-like syndrome attributable to etanercept. Although ANA positivity is not specific for SLE,a progressive rise in ANA to very high titres, as occurred in our patient, might be considered an early sign of drug-induced SLE.

We suggest that ANA and antiDNA should be evaluated in all patients before starting therapy with etanercept and then monitored during treatment. A progressive increase in the ANA and/or anti-dsDNA titre may be predictive of the risk of developing an SLE-like syndrome due to TNF-α inhibitors and in these cases the suspension of etanercept treatment should be considered. Studies to gather reliable follow-up data in paediatric patients are warranted to define the type and incidence of adverse reactions related to etanercept and to identify the indications for its suspension (5).

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