Anaphylactoid Symptoms due to Oral Minocycline

Sir.

Minocycline is a semisynthetic derivative of tetracycline and is bacteriostatic. It has been widely used as an antibiotic drug, with an antimicrobial spectrum of activity against a broad range of gram-positive and gram-negative organisms. There have been several reports of adverse reactions to minocycline, including headache (1) and blurred vision (1) as well as acute renal failure (2), pigmentation of the skin and mucous membranes (3) and serum sickness (4). However, this drug has been generally thought not to cause anaphylactoid reactions. We here report an actual case of anaphylactoid symptoms due to minocycline, which is extremely rare.

A housewife aged 27 years visited us with a 3-day history of lower abdominal pain, which was diagnosed as salpingitis. Minocycline (Minomycin®) and mefenamic acid (Pontal®) were prescribed. The patient took one 100-mg capsule of Minomycin® and one 250-mg capsule of Pontal®. Within half an hour she developed dyspnea. After 15 min she started to itch and burn from the cervix, chest and back, and later generalized wheal and erythema developed. She was also distressed because of palpitation and returned to us by ambulance approximately one and a half hours after her intake. On examination, a fall in blood pressure was noted. The symptoms cleared after careful observation, in about 4 h. The patient was not sure if she had received minocycline previously. She did not have a history of sensitivity to aspirin or other nonsteriodal anti-inflammatory drugs. Several days later, a scratch test was performed on her forearm with Minomycin® and Pontal®. Only Minomycin® revealed a positive reaction. with a large wheal measuring 13×16 mm and erythema (40 × 40 mm) in 15 min. Pontal® showed a negative reaction. Afterwards, a second scratch test was carried out with Minomycin® and its vehicle on her forearm in the same manner. Minomycin® reacted positively and its vehicle gave negative results. A scratch test for a normal control was both negative for Minomycin® and its vehicle. An oral challenge test for Pontal® was negative. Routine laboratory analyses revealed no apparent abnormal data. It was uncertain whether

these symptoms were IgE-dependent or not. A diagnosis of anaphylactoid symptoms due to minocycline was made.

Although anaphylactoid reactions due to penicillins and cephems are well known, those to tetracyclines are uncommon. There have, however, been several papers describing anaphylactoid symptoms to tetracyclines such as tetracycline (5) and doxycycline (6). Since minocycline is one of the tetracyclines, one might expect to find descriptions of the occurrence of anaphylactoid symptoms due to minocycline in the medical literature. However, there appears to have been no report of an actual case of anathylactoid reactions to minocycline. This is, to our knowledge, the first report describing anaphylactoid symptoms due to minocycline in the English literature.

In view of the world-wide use of this antibiotic and the untoward effects of oral administration in our case, clinicians should be aware of the potential of minocycline to provoke anaphylactoid reactions.

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