LETTER TO THE EDITOR

Side Effects of Long-term Low-dosage Tetracycline for Acne

In a recent report by Delaney, Leppard & MacDonald (1), no significant abnormalities of hepatic or renal functions were found in dermatological patients treated for years with tetracyclines. This information is important as dermatologists almost daily face patients with otherwise intractable acne. In spite of recent advances in topical therapy, e.g. retinoic acid and topical antibiotics now being evaluated, it is probable that oral broad-spectrum antibiotics will still be necessary at least in severe cases such as acne conglobata. We should like to report a current investigation which supplements the study of Delaney et al.

We have examined 85 consecutive out-patients who had been treated with a low dosage of tetracycline (usually 0.25 g daily) for at least 6 months. There were 45 males and 40 females. 79 suffered from acne and 6 from rosacea. Most patients had been on tetracyclines for 2–3 yrs. (mean 2.3 yrs., range 7 months–10 years) at the time of the investigation. The following laboratory tests were performed: Hemoglobin, white blood cell count, differential white blood cell count, erythrocyte sedimentation rate, serum creatinine, serum bilirubin, thymol, serum alkaline phosphatase, S-GOT, S-GPT and plasma prothrombin time. The urine was tested for albumin and glucose. Bromsulphthalain (BSP) retention was chosen as a sensitive test of the excretory function of the liver.

No abnormalities attributable to the drug were found in any patient. One patient had slight, isolated, intermittent, unconjugated hyperbilirubinaemia which was considered an asymptomatic Gilbert's syndrome (cf. 3).

The results are probably in agreement with most dermatologists' clinical experiences from this group of otherwise healthy individuals. This does not exclude, however, the possibility of a slow asymptomatic pathologic process. The use of Methotrexate* has taught us that cirrhosis of the liver may be developing even when standard liver function tests are normal (2). Besides, the concomitant use of potential hepatotoxic agents as contraceptives and alcohol may influence the effects of tetracyclines on various organs. Further studies including liver biopsy are required if the possibility of liver damage in patients on continuous tetracycline therapy for years is to be excluded.

We must not forget that the latent period usually exceeds 10–15 years for the serious, late complications from remedies such as arsenic, estrogens in pregnancy and radiodermatitis. Tetracyclines have now been used for acne for about this length of time. A retrospective study on the prevalence of diseases in this treated group is desirable.

REFERENCES


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