Very Low-dose Chloroquine Treatment for Porphyria Cutanea Tarda

Sir.

A 74-year-old woman came under our observation in September 1993, with a 2-year history of recurrent vesicles and bullae occurring mainly in areas of repeated traumas and exacerbating by sunlight exposure. Her past medical history was negative for alcohol or drug intake.

Physical examination revealed some vesicle-bullous lesions on her hands and dorsum of the feet, where she also had some atrophic scars. Histopathology of a lesion showed a subepidermal bulla with a festooned base, consistent with the diagnosis of porphyria cutanea tarda (PCT). Diagnosis was confirmed by the blood tests, iron 158 mg/dl (normal values 35–160), transaminases ALT 78 U/l and AST 97 U/l (n.v. 0–40), gammaglutamyltranspeptidases 50 U/l (n.v. 10–50), and by the urine porphyrin content: total porphyrins 3,470 g/24 h (n.v. 50–200), uroporphyrins 1,760 g/24 h (n.v. 15–50) and coproporphyrins 1,710 g/24 h (n.v. 35–150).

In October, chloroquine treatment (0.5 g twice weekly) was started. After the first two doses, the patient had an acute reaction consisting of fever (39°C), malaise, nausea, vomiting, anorexia, abdominal pain, constipation and arthro-myalgias, persisting for 5 days. This symptom complex was associated

with increased serum levels of transaminases (ALT 94 U/I, AST 126 U/I) and with a massive increase in urinary porphyrin output (total porphyrins 3,750 g/24 h, uroporphyrins 2,400 g/24 h, coproporphyrins 1,920 g/24 h).

One month later, very low doses of chloroquine (62.5 mg/weekly) were resumed. Apparently, the patient tolerated them well and showed a rapid biochemical and clinical improvement. During the following months, daily urinary porphyrin excretion slowly declined, attaining values near normal in July 1994 (total porphyrins 121 g/24 h, uroporphyrins 96 g/24 h, coproporphyrins 25 g/24 h). The levels of serum transaminases and gammaglutamyltranspeptides became normal, skin lesions healed and the patient's general condition ameliorated after only a few months' treatment. No new lesions were observed and periodic ophthalmological examinations revealed no evidence of retinopathy.

Phlebotomy and antimalarials are considered the mainstay of therapy for PCT (1). Phlebotomy, however, may be contraindicant in patients with anemia, cardiopulmonary disease or HIV infection. In addition, antimalarials may be more effective than phlebotomy in the treatment of PCT (2). Chloroquine theraphy needs caution, however, as it may cause acute reactions or

previously.

produce hepatotoxicity, especially when high doses are used. Moreover, antimalarials cannot be given for a long period of time because of their ocular toxicity especially in older patients. For this reason, low doses of chloroquine (125 mg twice weekly) have been recommended (3). In our patient, even 62.5 mg weekly proved enough to obtain a clinical remission. To the best of our knowledge, so low a dosage has never been reported

REFERENCES

- Muhlbauer JE, Madhua Pathak. Porphyria cutanea tarda. Int J Dermatol 1979; 10: 767–780.
- Cainelli T, Di Padova C, Marchesi L, et al. Hydroxychloroquine versus phlebotomy in the treatment of porphyria cutanea tarda. Br J Dermatol 1983; 108: 593–600.
- Kodac V, Sembradova M. Treatment of porphyria cutanea tarda with chloroquine. Br J Dermatol 1974; 90: 95–100.

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