Fresh stools or biopsy specimens were analysed for *Cl difficile* or its toxin, as described elsewhere.³ Isolates were identified by standard methods.⁴ Minimum inhibitory concentrations of several antibiotics were determined by inoculating 10⁴ colony-forming units on DST (Oxoid CM 261) plus 6% saponin-lysed horse blood, containing appropriate concentrations of antibiotic. *Cl difficile* 10⁴/g wet weight of faeces was isolated on the day on which rifampicin was stopped and not thereafter in three samples taken after the first course of vancomycin, in faeces and biopsy material collected during the relapse of diarrhoea, or in two samples of faeces collected during the second course of vancomycin. No toxin was detected in the only stool examined but the *Cl difficile* was toxigenic in vitro. The isolate of *Cl difficile* was resistant to tetracycline (64 mg/l), erythromycin (>64 mg/l), and rifampicin (>100 mg/l), and relatively resistant to penicillin (4 mg/l) and clindamycin (2 mg/l), but was sensitive to metronidazole (0.5 mg/l) and vancomycin (2 mg/l).

Comment

Although toxin was not detected in the faeces, this case shows all the features of pseudomembranous colitis, including the isolation of toxigenic *Cl difficile* during the episode of colitis but not after the successful use of vancomycin. The proof of the role of rifampicin was complicated by the administration of other antibiotics. During the three months before the patient developed colitis he received eight antibiotics, but all except isoniazid, ethambutol, and rifampicin were stopped at least six weeks before he developed diarrhoea—a much longer period of latency than is usually accepted.⁵ It seems unlikely that dexamethasone would have suppressed the disease. Rifampicin is the only one of the three remaining drugs likely to have been responsible, since neither isoniazid nor ethambutol has a significant effect on the large bowel flora. Furthermore, the isolate of *Cl difficile* was resistant to rifampicin. Although this resistance has not previously been reported,² it probably emerged during rifampicin treatment.

This case very much strengthens the argument for including rifampicin in the list of antibiotics that cause pseudomembranous colitis.

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⁴ Holdeman LV, Cato EP, Moore WEC. *Anaerobe laboratory manual*. 4th ed. Blacksburg, Virginia: Virginia Polytechnic Institute and State University Anaerobe Laboratory, 1977.

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Hypothermia: a possible side effect of prazosin

Prazosin is a hypotensive agent which acts by reducing peripheral vascular tone.¹ Its most important side effect is postural hypotension (first-dose phenomenon).² We describe the case of a patient who became hypothermic after taking the drug.

Case report

A 60-year-old Surinam woman was admitted to hospital for treatment of hypertension. She had first been seen four years previously, when she presented with a raised erythrocyte sedimentation rate. One year later hypertension and mild renal failure with albuminuria were noted. Nephritis was diagnosed. She was given antihypertensive treatment, but she did not comply with the medication and was temporarily lost to follow-up. Later she

Changes in body temperature and blood pressure during treatment with prazosin.

returned to the outpatient department and was again found to have hypertension. On admission her blood pressure was 250/140 mm Hg and she had a grade III hypertensive retinopathy. Otherwise, physical examination was unremarkable. Laboratory investigations showed: erythrocyte sedimentation rate 80 mm in first hour, anaemia (haemoglobin 5.5 mmol/l (8.86 g/dl)), and renal failure (serum creatinine 350 µmol/l (3.95 mg/100 ml); creatinine clearance 16 ml/min). A test for antinuclear antibody was negative but a trace amount of cryoglobulins was found.

The patient was treated with prazosin hydrochloride 0.5 mg twice daily increasing gradually to 10 mg twice daily. Before treatment her rectal temperature had been stable around 37°C, but on the third treatment day it started to fall to reach a nadir on the ninth day (figure). Thereafter it remained stable at 35.6°C. Extensive laboratory investigations showed no abnormality. Thyroid function was normal. Prazosin was stopped and her temperature rose again to normal within two days. One week later she was rechallenged with the drug and again her temperature dropped to 35°C. The oral and skin temperatures changed in parallel with the rectal temperature. Prazosin was withdrawn and she was given propranolol and hydralazine, which controlled her hypertension equally well. Her body temperature has been normal ever since.

Comment

To our knowledge hypothermia has not been described as a side effect of prazosin. This case, however, shows that it may be. The hypothermia during the first treatment period could have been fortuitous, but the result of the second challenge strongly suggests that the drop in temperature was related to the drug. The hypothermia was unlikely to have been due to the reduction of blood pressure per se, since subsequent treatment with propranolol and hydralazine did not lower temperature but similarly lowered blood pressure.

The mechanism whereby prazosin could cause hypothermia remains unknown. The absence of shivering in our patient and the fact that core temperature fell argue against a purely peripheral cause. Therefore it probably resulted from depression of the hypothalamic thermoregulatory centre. Chlorpromazine, a drug with peripheral and central α -blocking properties, also produces hypothermia,³ and the mechanism by which prazosin lowered body temperature in our patient may be similar. There is some experimental evidence that prazosin may exert a central action.⁴ A low body temperature in a patient being treated with prazosin should therefore alert the physician to this possible side effect.

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