Drug points

Orlistat associated with hypertension

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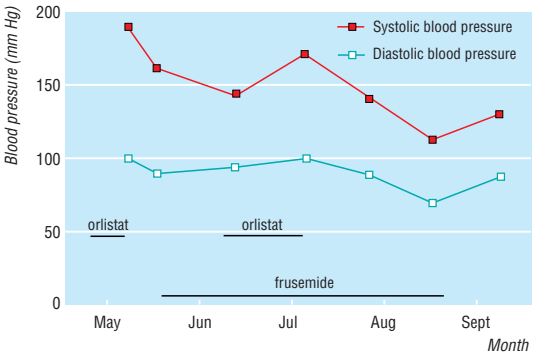
The latest drug for weight reduction, orlistat (Xenical, Roche, Sweden), was approved for use in Sweden in July 1998, and by September 1999 13 million defined daily doses (360 mg per defined daily dose) had been sold. Steatorrhoea and other gastrointestinal disorders were the most frequently reported adverse reactions in clinical trials.[1] Adverse reactions indicating systemic effects have also been reported for orlistat. We report on a case of hypertension associated with the drug.

At the beginning of 1999, a 40 year old previously healthy woman commenced orlistat treatment because of obesity. She took sporadic doses for some months and then increased the dosage to 120 mg three times daily during one week in May 1999. She experienced dizziness, peripheral oedema, and pulsating headache and stopped the treatment. On medical examination her blood pressure was 190/100 mm Hg on three different occasions. Her heart rate was regular, at 60 beats/min. She was advised to stop taking orlistat, and a few days later her blood pressure had decreased to 160/90 mm Hg and the oedema had regressed. Laboratory tests, including measurement of thyroid hormone concentrations, were all normal. Treatment with frusemide (furosemide) 30 mg orally daily was started, and the blood pressure decreased to 145/95 mm Hg (figure). The patient restarted orlistat treatment in July 1999. Headache and peripheral oedema recurred, and her blood pressure increased to 170/100 mm Hg. Again, orlistat was discontinued. Her symptoms disappeared, and her blood pressure decreased to 140/90 mm Hg. After another month she experienced dizziness, and her blood pressure was 110/70 mm Hg. After cessation of diuretic treatment her blood pressure stabilised at 130/90 mm Hg, and this remained stable after three months.



Blood pressure in relation to orlistat and frusemide treatment

Orlistat was considered causal to the hypertension in this patient owing to a positive dechallenge and rechallenge. The mechanism for this reaction is not clear. Fluid retention may be a possibility.

Overall, 13 cases of hypertension associated with orlistat have been reported to the manufacturer, but information on blood pressure measurements and follow up was limited in these cases. Although some of the patients had a history of hypertension, others, as in our case, had not. We have informed the Medical Products Agency, which is the Swedish regulatory body overseeing the safety of medicines.

Competing interests: None declared.

1 Tonstad S, Pometta D, Erkelens DW, Ose L, Moccetti T, Schouten JA, et al. The effect of the gastrointestinal lipase inhibitor, orlistat, on serum lipids and lipoproteins in patients with primary hyperlipidaemia. *Eur J Clin Pharmacol* 1994;46:405-10.

Word association: hepatitis, eh?

"Hello, it's Dr Riley here," said the friendly public health consultant, asking for some background to our patient's diagnosis of hepatitis A. The health board's press office had sought Dr Riley's advice, having been contacted by the local authority, fortunately before it wrote to the parents of every child at a primary school in a nearby affluent area because of Mrs McB's illness. She was a teacher. Closure of the school seemed a little excessive to Dr Riley and to me.

The notes read, "Tel: hepatitis. C.14," dated two days before. My partner's note signified that the patient had telephoned asking for a certificate, telling him that she had hepatitis. The previous entry was by another partner, who had seen her five days before regarding abnormal liver function tests. The outcome of that consultation was a referral to a surgeon for investigation. I guessed, in fact wrongly, that the patient had not yet been seen by a surgeon and I promised to make inquiries.

Mrs McB had been seen urgently in the surgical outpatient department and had telephoned the surgery the next day to ask about the wisdom of going to work, saying that she'd been told that the most likely diagnosis was hepatitis. My partner had said that there were numerous causes of hepatitis, some of which were viral infections, and provided the certificate.

The word "hepatitis" was immediately associated by the education authority with epidemic hepatitis A. Moves were afoot that might close the school, and a press release was being prepared, hence Dr Riley's involvement. He telephoned later that afternoon, the crisis averted, to tell me that as yet no blood samples had been tested for hepatitis A, B, C, or other, and that as he'd suspected it had all been a storm in a teacup. That storm had so far touched two consultants, three general practitioners, a receptionist, a health board press offficer, a local authority, a school, and very nearly hundreds, perhaps thousands more.

As it happened no children missed schooling, no press reporters had a field day, no serology laboratories were overloaded, no surgery telephones overheated, no world experts in hepatitis were decorated, no water authority's shares plummeted, no farmers whose cattle had inadvertently lived nearby were victimised, and Mrs McB didn't have infectious hepatitis.

What we say, write, and mean is frequently misunderstood, misinterpreted, and misassociated. We get used to it but most often don't realise that it has happened. This instance almost led to public alarm. We as doctors must attempt to avoid ambiguous terms.

Sadly, Mrs McB had metastatic breast cancer and has since died. She is very much missed by her family, pupils, and colleagues.

I would like to thank Dr Riley.

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