phase III trials in Australia. Ongoing research into molecular profiling and biomarkers may assist in identifying which patients will get the greatest benefit from these new treatments.

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[R] randomised controlled trial

Dr Pavlakis has served on advisory boards for Roche (bevacizumab in colon cancer and non-small cell lung cancer) and Pfizer (sunitinib for non-small cell lung cancer).

Self-test questions

The following statements are either true or false (answers on page 171)

1. Only 2–3% of patients with asymptomatic renal cell cancer have metastatic disease.
2. Adjuvant chemotherapy of renal cell cancer improves the survival of patients after radical curative nephrectomy.

Medicinal mishap

Brand confusion with digoxin

Prepared by John Balassa, General practitioner, Marrickville, New South Wales

Case

A 74-year-old retired man attended our surgery with a five-day history of upset stomach, nausea, an aversion to food, but no diarrhoea. He blamed some takeaway chicken for his problem.

His past history included valvular heart disease (mitral and aortic), myocardial infarction, chronic atrial fibrillation and partial thyroidectomy. The patient's usual medications were:

- Lanoxin PG (digoxin 62.5 microgram) three times a day
- Coumadin (warfarin)
- Lasix (frusemide)
- Neo-Mercazole (carbimazole).

On examination the physical findings were non-specific. The patient was given a proton pump inhibitor.

The patient returned 12 days later as he was still unwell. His pulse rate was 38 and irregular. He was having visual problems and he described blurred vision with honey coloured 'lakes' in his visual field, surrounded by yellow beads and dragonfly wing coloured areas.

Xanthopsia can be a sign of digoxin toxicity so his serum digoxin was checked. It was 6.2 nanomol/L which is a toxic concentration (therapeutic range 0.6–2.6 nanomol/L).

The patient's medications were reviewed and I found that a different brand of digoxin from his Lanoxin PG had been recommended. The box had a label of Sigmaxin PG, but it contained digoxin 250 microgram tablets. The patient had therefore been taking four times his usual dose. The digoxin was stopped and the concentration returned to normal. His pulse rate increased to 48 and gradually his xanthopsia disappeared. He developed marked oedema while off digoxin.

Comment

Any person with stomach upsets needs to have their medications checked. Loss of appetite is an early sign of digoxin toxicity. It may also cause nausea, vomiting, diarrhoea and abdominal pain. Xanthopsia (yellow vision) is a rare symptom.

The proliferation of new brands for old drugs can cause confusion. The patient took the new tablets but probably would have realised that he had not received his usual 'little blue' tablets. It is therefore important to explain to patients when there is going to be a change in their brand of medication. They need to understand why the substitution is being made and that they are not being given an additional medicine.

The different brands of digoxin are marketed by different companies, however these companies seem to belong to the same corporation. The need for different brands therefore appears to be unnecessary.