Can pharmacists help prevent adverse drug interactions from newly prescribed drugs?

Sir,

Pharmacists tend to see the majority of prescriptions emanating from a particular practice. Thus they are well placed to identify the potential for adverse interactions when a new medication is added to long-term medication.

A case in point is the adverse interaction between trimethoprim, a drug with amiloride-like activity (Schlanger et al, 1994), capable of generating hyperkalaemia even in standard doses (Alappan et al, 1996), and angiotensin-converting enzyme inhibitors (Marinella, 1999). Hyperkalaemia is a recognized complication of the interaction between angiotensin-converting enzyme inhibitors and amiloride-like drugs such as spironolactone (Wrenger et al, 2003).

The adverse interaction between newly prescribed standard dose trimethoprim (in this instance 160 mg/day) and angiotensin-converting enzyme inhibitors was exemplified by the occurrence of hyperkalaemia, namely serum potassium 7.4 mmol/litre after 20 days and serum potassium 6.3 mmol/litre after 4 days, in the two of the nine cases of mean age 77.6 years reported in one review (Wrenger et al, 2003). In primary care, the risk of this complication might be mitigated by an early warning system triggered by pharmacists themselves.

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Trauma Online: a computer database for managing trauma load

Sir,

Clinical governance aims to offer best possible clinical care and address the shortcomings in order to continually improve the standards of clinical care. It is thus important to monitor doctors' workload and performance from time to time. Elective work in trauma and orthopaedic departments is closely monitored and assessed but the same is not true for trauma admissions (Deimel, 1999).

Elective orthopaedic admissions are easy to manage because they are planned and all the hospitals have a database in place which can track the workload of the department. On the other hand trauma load is difficult to manage because of its unpredictability, complexity of management, trauma-related complications and lack of a suitable database (Dick, 1996). This lack of a database makes it difficult to assess the workload and performance of trauma service in most hospitals within the UK.

Trauma load is currently not the main criteria in trust assessment but in future it is likely to become a major indicator of the efficiency of a hospital. To keep track of the trauma workload and to collect data for research the authors set up a trauma database (Trauma Online) based on Microsoft Access. It enabled the authors to collect data electronically which could be accessed from any computer terminal in the hospital by surgeons, theatre staff and the trauma coordinator.

The introduction of this in April 2006 overcame the limitations of the old manual system which required on call junior doctors to liaise effectively with multiple staff members to pass the necessary information, limiting the speed of work and increasing the risk of miscommunication. Trauma Online has given valuable feedback with regards to the workload, efficiency and limitations of the department. Data collected on the database have helped members of the department to carry out audit and research projects.

In the authors' opinion, Trauma Online is an indispensable study tool which gives real-time feedback of the performance of a department. A validated nationalized trauma registry should be formulated and implemented soon to improve clinical practice.

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