SURVEY OF POTENTIAL DRUG INTERACTIONS IN ACUTE HOSPITAL INPATIENTS RECEIVING SPECIALIST PALLIATIVE CARE (SPC)

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Aim Polypharmacy is common in palliative care and is associated with an increased risk of potentially harmful drug interactions. In order to identify common interactions and explore the SPC approach to polypharmacy we surveyed hospital inpatients receiving input from an SPC advisory service.

Methodology The notes and drug charts of 50 consecutive patients referred to the SPC team between May and August 2012 were retrospectively reviewed. Potential interactions were identified and classified according to their clinical significance as minor, moderate or major using the website http://www.drugs.com/

Results The median number (range) of medications per patient at the time of initial assessment was 12 (5–23). In total, there were 628 potential interactions, 53 major, 505 moderate and 70 minor. Potential interactions were seen in 90% of patients and 62% had a major potential interaction. The median number (range) of major, moderate, and total potential interactions per patient was 1 (0–5), 8 (0–28), and 11 (0–32) respectively. There was a positive correlation between the number of medications and the number of potential interactions (p<0.0001). Common interactions in the major group were: QT interval prolongation (26%), enhanced serotonergic activity (18%), cytochrome P450 inhibition (16%), increased bleeding risk (12%), and reduced seizure threshold (5%). Common drugs implicated include haloperidol, cyclizine, levomepromazine, metoclopramide, opioids, benzodiazepines and ondansetron. Although at risk, none of the patients included in the study had evidence of major or moderate adverse events due to drug interactions. In only 14% (5/37) of patients taking potentially unhelpful medication, like antihypertensive, antiplatelet, and cholesterol lowering agents had SPC advised the medicines to be stopped.

Conclusion This study demonstrates that majority of acute hospital inpatients receiving SPC are at risk of clinically significant drug interaction although the clinical importance is less clear. The study highlights the need for SPC teams to be vigilant for common interactions and to minimise polypharmacy by stopping medications of little benefit.