## Consider newer antidepressants for patients who:

- are elderly, especially if cognitively impaired
- have severe disorders affecting stability or mobility
- experience persistent sedation or transient hypotension when taking tricyclic antidepressants
- require combinations of drugs with central nervous system or hypotensive effects
- misuse or are suspected of misusing alcohol or illegal drugs

antidepressants) and, rarely, drug induced cardiac arrhythmias and convulsions. Elderly people, particularly those with disorders affecting stability and mobility (for example, neurological diseases, defective vision, vertigo, and arthropathies) are especially vulnerable. Patients treated concurrently with other drugs that decrease blood pressure, such as diuretics, are also at higher risk. Falls may result in Colles' fractures and fractures of the neck of femur, although femoral fractures mostly occur spontaneously in elderly people with low bone mass (osteopenia) related to age, and the role of drugs that sedate and impair postural control in the aetiology of hip fractures has been questioned.15

In contrast to older tricyclic antidepressants, newer antidepressants are relatively free of both sedative and anti- $\alpha$ adrenoceptor effects and may therefore be less liable to cause or contribute to falls and fractures. Supporting this is the low incidence of such drug related complications found in prescription event monitoring studies of fluvoxamine16 and other selective serotonin reuptake inhibitors (J G Edwards al, unpublished findings). Comparable prescription event monitoring data on tricyclic antidepressants are not available.

Insufficient epidemiological data are available to indicate the extent to which antidepressants (particularly new drugs) cause or contribute to accidents. This is especially true in the case of traffic accidents because of the many interacting variables and the many methodological and practical obstacles to research in this field. Nevertheless, given the known pharmacological effects of the older tricyclic drugs, patients should be warned of the potential risks while driving<sup>17</sup> and while working in dangerous situations, especially when treatment is started, the dose is increased, and the drugs are taken with other substances that affect cognition and psychomotor performance. Until more data are available it is best to err on the side of safety and prescribe newer antidepressants, such as selective serotonin reuptake inhibitors and reversible inhibitors of monoamine oxidase A for those at high risk.

But pharmacological concerns need more epidemiological support before these drugs are recommended as first line treatment in all patients.18

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## Palliative care in general practice

## No longer an optional extra

Many general practitioners shy away from palliative care. They feel uncomfortable about working in teams, know little about controlling symptoms, and are reluctant to use powerful drugs in effective doses. Furthermore, some worry about demands on their time and are afraid to expose themselves to painful emotions.

A recent review of current standards of palliative care in general practice by the Royal College of General Practitioners identified deficits and tested a range of remedial measures.1 Facilitators (one from each of five faculties of the college) were selected for their experience in palliative care, postgraduate education, and, by inference, audit. Together these skills represent those available in an ideal general practice; providing them has substantial implications for staffing and attitudes.

The facilitators developed a range of methods to define

the current status of care and how it could be improved. Their conclusions were broadly similar: they confirmed that symptoms were poorly controlled, teamwork was underdeveloped, and existing palliative care services were underused. The facilitators found that the most effective educational activity was to work in small groups; practice visits were also highly valued. Joint meetings between doctors in primary and secondary care seem to merit further exploration.

To provide good palliative care for all, much is required. More in service training is needed. Although undergraduates and trainees are increasingly exposed to role play and discussion of cases, assessing the adequacy of education is difficult. Nor do we know what happens in the practices of established general practitioners who are unwilling, for

whatever reason, to disclose their management strategies to fellow professionals. Guidelines may be left unread, management protocols unheeded, and audit avoided. Patients and their relatives have no yardstick with which to measure the standard of care. Dreading a painful and undignified death, they often remain ignorant of available options.

Unnecessary suffering is likely as long as there is confusion in the lay mind between euthanasia and palliation and doctors fail to acknowledge that disease other than malignancy may require palliation. With a few exceptions, hospices currently cater for patients with a diagnosis of malignancy, but general practitioners can extend palliative care to wider groups. Ideally, clinicians whose task is to cure will have the wisdom to know when to change direction, and primary care teams will no longer regard palliative care as being "peripheral to their workload." Failure to treat the distress of terminal respiratory disease, for example, has its roots in deeply entrenched undergraduate training: opiates may "depress the respiratory centre"— but so much more is at stake than this naked physiological truth.

Identifying and correcting poor practice are no easier in palliative care than in any other branch of medicine. Exposing ignorance is never comfortable. Sadly, critical self awareness and the ability to live with uncertainty and imperfection are not yet on the curriculum of all our medical schools (although many would agree that this is what medical education should be about).

There may come a time when a diploma in palliative care is a necessary qualification for aspiring general practitioners and all patients will have access to comprehensive community based services. The availability of such services, however, depends on the decisions of commissioners who may lack appropriate experience. Academic departments of general practice have much to offer (not least in the development of evaluative tools) and are a valuable resource for both those who plan and those who deliver community care. The royal college's report is an ambitious, honest document full of enthusiasm for the monumental task of supporting the principles of good palliative care and effective teamwork in the community. It makes encouraging reading.

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## Chemotherapy for non-small cell lung cancer

A meta-analysis suggests that the benefits are small

See p 899

For some cancers, treatments are so effective that the question of whether to treat does not arise. For many others, however, while gratifying responses sometimes occur, there are also substantial toxicities related to treatment, and benefits of any kind may be small. The toxicities, inconvenience, and expense of chemotherapy are endured by both patients whose tumours do and do not respond. When faced with such imperfect treatments, clinical trialists must determine, within the limitations of biological variability, whether these treatments result in statistically significant benefits and at what cost. Doctors then have to decide whether these benefits are clinically important and whether they outweigh potential risks for a particular patient.

With the relatively small absolute survival benefits observed for chemotherapy of non-small cell lung cancer, large numbers of patients are required to draw conclusions with confidence. In this issue of the Journal Albertini et al report the results of a meta-analysis of updated data from 9387 patients participating in 52 randomised clinical trials comparing chemotherapy with no chemotherapy in non-small-cell lung cancer (p 899). They analysed trials in three clinically relevant disease settings: early, locally advanced, and advanced disease. In early disease treated with surgery and chemotherapy, mortality was 15% higher in patients treated with alkylating agents (treatments in vogue 10 years ago). In contrast, significant survival benefits were found among patients in several of the subgroups given more modern regimens containing cisplatin.

How large were the benefits? When combined with surgery or radical radiation in early or locally advanced disease, chemotherapy increased survival at two and five years (deaths fell by 13% in the radiotherapy and chemotherapy groups). In advanced disease chemotherapy produced 27% fewer deaths than in the group managed with best supportive care, equiva-

lent to a 10% absolute improvement in survival at one year. The median survival, however, was prolonged by only 1.5 months.

While statistically significant, these benefits have only modest clinical impact. But given the number of people with lung cancer, these results indicate that, if chemotherapy were applied to appropriate patients, tens of thousands of people world wide would be alive at one year (or two and five years in patients eligible for radical radiotherapy) who would not be alive without chemotherapy. This extrapolation confers another level of importance to these findings. In fact, the size of the effect when compared with that of best supportive care is equivalent to that observed for adjuvant chemotherapy for breast cancer with spread to the nodes, which is considered to be the standard of care for that disease.<sup>2</sup> Nevertheless the aggressive nature of lung cancer, with its propensity for early metastases, suggests that only a subset of patients with non-small cell lung cancer may benefit from chemotherapy.

Any mechanism allowing the identification of this chemotherapy responsive subset could dramatically improve the risk benefit ratio of chemotherapy for the entire population. Interestingly, for all the groups analysed in this paper, there was no evidence that any group specified by age, sex, histological findings, performance status, or stage benefited more or less from chemotherapy. It should be noted, however, that participants enrolled in randomised trials are usually fully ambulatory, and thus the data derived from this study, apply only to this subset. Molecular biological characteristics of the tumour (for example, p53 immunostaining, ras mutation, bcl-2, and Her2/neu overexpression or as yet undiscovered markers) may provide part of the answer as well.34 We suggest that the question of testing for drug sensitivity in vitro should be reopened as resistance of many tumours in vitro seems to correlate with resistance in vivo.<sup>56</sup>