Hospital Practice

Requests for hypnotic drugs and placebo response in elderly hospital in-patients

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Summary: Requests for night sedation and the use of placebo as first line drug management were studied prospectively in 1174 consecutive elderly hospital in-patients. Of the 390 (33.2%) patients requesting sleeping pills in hospital, 37 were subsequently satisfied without the prescription of additional medication. A further 216 patients were entirely satisfied with a placebo capsule during all of their hospital stay. An 'active' hypnotic drug was required by only 137 patients, many of whom were noisy and disturbing other patients in the ward. Most of the active hypnotic drugs prescribed to elderly hospital patients are unnecessary and a majority of those requesting hypnotics consistently respond to placebo. There remains a need for greater education of patients, nurses and doctors in the non-pharmacological management of sleep disorders.

Introduction

Drugs to improve sleep remain some of the most commonly prescribed in clinical practice, despite recent teaching which suggests that their use should be reserved for specific indications and for the shortest clinically necessary time (Marks & Nicholson, 1984). The only readily definable indication for hypnotic therapy is patient demand or the demands of those caring for them, yet many such demands would seem based on false expectations and fears about sleep quality and quantity (Swift, 1982).

Patients receiving sedation in hospital are at least directly under the supervision of health care staff. Decisions about hypnotics, however, are usually left to junior housemen and night nursing staff, both of whom have a vested interest in keeping their patients quiet at night. Clinical training in the management of sleeplessness is generally poor and a casual attitude to the prescribing of hypnotics in hospital might be expected to influence adversely the future prescribing habits of the majority of junior doctors who move into general practice. Furthermore, hypnotics commenced in hospital may be unnecessarily continued at discharge.

Non-specific complaints of sleep disturbance, awakenings during the night and the use of hypnotic drugs all increase with age (Gerard et al., 1978) and yet the elderly appear particularly vulnerable to the adverse effects of hypnotics (Greenblatt et al., 1977; Greenblatt & Allen, 1978). The present study reports on requests for night sedation made by elderly patients admitted to an acute geriatric medical unit and, in particular, the acceptance of placebo as first line drug management. Details of hypnotic usage prior to admission were also obtained retrospectively.

Methods

The study was approved by the local hospital ethical committee. Patients studied were consecutive admissions, over a 12 month period, to two wards of an acute geriatric medical unit. Different nursing staff were attached to each ward, but the medical cover at night was common to both. All doctors were requested not to routinely prescribe night sedation, except for the few patients who had regularly been taking barbiturates, who had their dose gradually tailed off whilst in hospital. Patients who were noisy and disruptive during the night and who were disturbing others were prescribed sedation as necessary following a request from the nursing staff. Patients requesting hypnotics first had their current medication reviewed by the ward medical staff and adjusted so that any
drugs with sedative properties (e.g. anticonvulsants, antidepressants, tranquillisers) were prescribed, where possible, so that maximum sedative effects occurred at night. Physical causes for sleeplessness such as pain or breathlessness were treated appropriately. If, after at least one further night of poor sleep, the patients themselves still expressed a need to take a sleeping pill, they were prescribed a placebo, named 'Danos', presented as a single brown-coloured capsule. The name was derived from the Welsh word for night and the initial of the hospital pharmacist. No other sleeping pill was given to a patient on the same night they had taken 'Danos', unless they were disturbing the ward. Patients were assessed after their first, second and third night of taking 'Danos' and only those spontaneously requesting a change of hypnotic had their medication altered after the first or second night. After the third night all patients were given a choice of changing to another (active) sleeping pill. Those who were satisfied with their sleep continued to receive 'Danos' whenever they requested a hypnotic and were regarded as placebo responders.

Details of hypnotic usage prior to admission (defined as drugs taken primarily to promote sleep) were collected retrospectively from the medical and nursing notes of all patients. Statistical analysis used Yates corrected chi-square tests and Fisher's exact probability test as appropriate.

### Results

Of the 1,174 admissions during the study period, 390 (33.2%) patients requested sleeping pills in hospital, or had them requested on their behalf. There were 82 patients (21.0% of requests) who were given active medication because they were seriously disturbing the ward, and 4 (1.0%) who were taking barbiturates. Of the remaining patients, 14 (3.6%) were satisfied once the timing of their existing medication had been altered to ensure maximum sedative effects occurred at night and 23 (5.9%) did not require any additional medication following discussion with the medical staff. A total of 216 (55.4%) patients were entirely satisfied with placebo throughout their hospital stay and only 51 (13.1%) were not satisfied following placebo and were prescribed an active hypnotic drug. Although not formally assessed, staff satisfaction appeared to depend on patient satisfaction.

The relationship between hypnotic usage prior to hospital admission and in-patient requests for hypnotics is shown in Table I. The 329 (28.0%) patients identified as regularly using hypnotics at home may be an underestimate, as pre-admission medication was sometimes poorly recorded and, unless specifically asked, some patients do not include sleeping pills when listing their drugs. Although previous hypnotic users were much more likely to request sedation in hospital

<table>
<thead>
<tr>
<th></th>
<th>Previous hypnotic users (n = 329)</th>
<th>Previous hypnotic non-users (n = 845)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number requesting hypnotics</td>
<td>245</td>
<td>145</td>
<td>P &lt; 0.001</td>
</tr>
<tr>
<td>Number whose existing medication could be re-prescribed to provide satisfactory sleep</td>
<td>11 (4.5)†</td>
<td>3 (2.1)</td>
<td>NS</td>
</tr>
<tr>
<td>Number satisfied without medication following counselling</td>
<td>2 (0.8)</td>
<td>21 (14.5)</td>
<td>P &lt; 0.001</td>
</tr>
<tr>
<td>Number satisfied with placebo</td>
<td>122 (49.8)</td>
<td>94 (64.8)</td>
<td>P &lt; 0.01</td>
</tr>
<tr>
<td>Number not satisfied with placebo and prescribed an active hypnotic</td>
<td>50 (20.4)</td>
<td>5 (3.4)</td>
<td>P &lt; 0.001</td>
</tr>
<tr>
<td>Number requiring active medication because they were disturbing ward</td>
<td>60 (24.5)</td>
<td>22 (15.2)</td>
<td>P &lt; 0.05</td>
</tr>
</tbody>
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†Figures in brackets indicate percentage of those requesting hypnotics.
than non-users, only a minority of patients in each group required active medication to satisfy them. Significantly more non-users requesting sedation responded to counselling or placebo and fewer required active drugs than users. Both groups had similar average lengths of stay (users = 21.6 days; non-users = 20.8 days). The length of stay of patients not requesting hypnotics was 15.1 days, but this includes those who were unconscious or who died early after their admission. No major problems were encountered due to withdrawal effects in those patients previously taking non-barbiturate hypnotics at home.

Discussion

Our findings confirm the high proportion of elderly patients who feel that they require to take sleeping pills to ensure a satisfactory night’s sleep. Over a quarter of our patients were known to be regularly using hypnotics at the time of their hospital admission and one third requested them during their hospital stay. Previous studies have found similarly high levels of hypnotic usage in the elderly, both in the community (Dunnell & Cartwright, 1972; Gerard et al., 1978) and in hospital (Christopher et al., 1978) and recent admonitions to prescribe them more carefully appear to have had little impact on this age group.

Disappointingly, less than ten per cent of those patients requesting hypnotics in hospital were managed without the prescription of additional medication. Although the desirability of helping patients to get to sleep by non-pharmacological means had been fully discussed with the ward doctors and nurses, we were aware of considerable scepticism from some members of staff. The value of extensive drug education programmes in reducing the use of night sedation in a major hospital has been shown by Sheerin (1973). It would seem that greater emphasis still needs to be given to this aspect of influencing patient care, as many nurses in particular seem unaware of the hazards associated with the use of hypnotic drugs and of the desirability of finding workable alternatives. Fahy (1981) has described the creation of a sleeping pill-free community in a 40-bed psychiatric unit of a general hospital, where no hypnotics had been prescribed for any patients since 1976. While such a rigid policy against night sedation would seem impractical and undesirable in most general hospitals, the difficulties of breaking sleeping pill habits have clearly been exaggerated. Similarly the problems associated with benzodiazepine withdrawal (Ashton, 1984) do not justify their continued long term use without adequate clinical indication.

The high placebo response rate (55%) among those requesting sedation was not wholly unexpected, especially in view of the highly subjective nature of the symptom being treated. We are unaware of any previously published reports of the routine clinical use of placebo in the management of sleep disturbances, although its potential value is well established (Nicolis & Silvestri, 1967; Zarosinski et al., 1969). Placebo responsiveness would seem related to the severity of pre-treatment insomnia and two-thirds of patients with mild insomnia, and one-third of those with moderate insomnia might be expected to respond. In contrast, Adam et al. (1976) found that placebo did not substantially alter sleep measures in ten middle-aged volunteers studied under laboratory conditions. Clearly, whether placebos objectively alter sleep patterns may not be of critical importance, provided that they satisfy patients, which in many instances they do.

We conclude that most of the active hypnotic drugs prescribed to elderly patients in hospital are unnecessary and patient satisfaction following their use is probably largely a placebo response. A similar result should be possible if more time was spent explaining to patients the nature of their symptoms and providing necessary reassurance. Current attitudes need to be changed and more attention should be given to educating doctors, nurses and patients in the non-pharmacological management of sleep disorders.

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References


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