

Drug management of disturbed behaviour by psychiatrists

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The aggressive, acutely psychotic patient may present in many medical settings. Drugs are usually necessary to avert or abort a crisis yet specific guidance on such management is lacking from standard psychiatric texts. Consultant psychiatrists have a crucial advisory role in these situations but information on their prescribing habits has not been published. This study aims to determine whether there is any consensus on the drug management of the aggressive, acutely psychotic patient by consultant psychiatrists.

The study

All consultant psychiatrists within the Oxford region, excluding those specialising in psycho-geriatrics, mental handicap and child psychiatry, were contacted. They were asked to read the following clinical vignette.

A 30-year-old male, of average build, was admitted for the first time yesterday with a diagnosis of acute paranoid psychosis, with symptoms suggestive of schizophrenia. There is no family history, no suggestion of drug abuse and he has no medical problems. Overnight he had become very agitated, threatening staff, kicking doors, overturning furniture, breaking windows, refusing medication. You have been asked to see him urgently because the nursing staff are very concerned and feel unable to manage him.

The psychiatrists were asked to specify how this patient would be managed pharmacologically by indicating the drug, dosage, route and frequency. They were asked how their management would alter if the patient had not improved after six, 12 and 24 hours; was the desired end-point of their management the patient asleep, sedated but mobile, or non-sedated but calm?; did they expect to attain this within one hour, six hours, 24 hours or longer than this?

Findings

Fifty psychiatrists were contacted. Thirty-four (68%) replied. Five of the respondents stated that

they did not feel competent to give an opinion. One said that he was too busy to reply. This left twenty-eight respondents who completed the questionnaire.

Initial management

The drug of choice was chlorpromazine for 14 respondents (50%), followed by haloperidol with eight (29%), haloperidol/chlorpromazine in combination two (7%), droperidol one (4%), 'neuroleptic' one (4%), haloperidol/diazepam one (4%), and haloperidol/lorazepam one (4%).

The mean dose of chlorpromazine was 128.6 mg (s.d. 42.6, range 100–200), and of haloperidol 781 mg chlorpromazine equivalent (s.d. 598.5, range 250–5000).

The mean frequency could not be established due to variation in completing this section but the range was from continuous to six-hourly.

Twenty-six respondents would administer the dose intramuscularly and the remaining two intravenously. Of the latter, one would give a bolus injection and the other a slow continuous injection until the patient was asleep.

Further management

Fifteen respondents would change their drug management if there was no improvement after six hours, a further six would wait 12 hours and another two 24 hours. When changes to drugs other than neuroleptics were specified, seven mentioned benzodiazepines, four paraldehyde and two anticonvulsants. Overall, 23 respondents would between them make 42 changes to their initial management. Two respondents felt it inconceivable that such a problem could last for as long as 12 hours with their management.

Desired end-point

The expressed aim of seven respondents was to put the patient to sleep, 12 wished him sedated but mobile and the remaining nine wished him non-sedated but calm.

The preferred end-point would be attained by six respondents within one hour; by eight between one and six hours; by six between six and

12 hours and by three between 12 and 24 hours. Four respondents expected to take more than 24 hours to achieve their goal. One did not complete this section.

Comment

I found no clear consensus among consultant psychiatrists on the drug management of the aggressive, acutely psychotic patient. Chlorpromazine, 100 mg intramuscularly, repeated one to six-hourly, was the most frequent suggestion. This was followed by haloperidol, which was recommended at a far higher equivalent dosage. Most respondents would change their initial management, sometimes repeatedly, if rapid improvement did not occur. Fourteen per cent did not expect to resolve the situation within 24 hours. Fifteen per cent did not feel competent to give an opinion even though performing emergency on-call duties.

The extensive literature on rapid tranquillisation favours the use of high-potency neuroleptics such as haloperidol for the lower incidence of immediate and dose-limiting side-effects such as sedation and hypotension. This relative safety can lead to much higher equivalent dose of haloperidol, as found here and described elsewhere, which may increase the risk of distressing and dangerous sequelae (Baldessarini *et al.*, 1984 and 1988). Many studies have found that higher initial doses do not lead to more rapid symptom resolution (e.g. Rifkin *et al.*, 1991) and are therefore unjustified for routine use (Kane, 1987). Chlorpromazine may be widely used for its sedative effect, as a majority (68%) wished to sedate the patient; but there is no evidence that sedating drugs are more effective than non-sedating drugs in controlling disturbed behaviour (Kane, 1987). Some authorities no longer recommend chlorpromazine by intramuscular injection because it crystallises in the tissues.

Uncertainty as to optimal management is suggested by the number of changes of management, low expectation of quick results, unwillingness to express an opinion, the use of drug cocktails of dubious rationale, and the use of

paraldehyde which most authorities would consider to be obsolete. Possible reasons for this may include variations in nurse staffing levels and nursing practice, availability and use of seclusion and intensive care, previous training in and experience of managing such patients, and patient variation. The wording of the vignette and covering letter for this study was intended to exclude such variables but may not have succeeded. As with any questionnaire those who respond may not be typical and in this case may have responded to reflect their uncertainty.

Rapid tranquillisation using frequent small doses of high-potency neuroleptics is widely practised elsewhere and felt to be both highly effective and safe across all diagnostic categories presenting disturbed behaviour (Dubin & Feld, 1989). That it was rarely suggested by the study sample despite the management difficulties that they anticipated is worthy of further investigation.

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References

- BALDESSARINI, R.J., KATZ, B. & COTTON, P. (1984) Dissimilar dosing with high-potency and low-potency neuroleptics. *American Journal of Psychiatry*, **141**, 748-752.
- , COHEN, B.M. & TEICHER, M.H. (1988) Significance of neuroleptic dose and plasma level in the pharmacological treatment of psychoses. *Archives of General Psychiatry*, **45**, 79-91.
- DUBIN, W.R. & FELD, J.A. (1989) Rapid tranquillization of the violent patient. *American Journal of Emergency Medicine*, **7**, 313-320.
- KANE, J.M. (1987) Treatment of schizophrenia. *Schizophrenia Bulletin*, **13**, 133-156.
- RIFKIN, A., DODDI, S., KARAJI, B., DORENSTEIN, M. & WACHSPRESS, M. (1991) Dosage of haloperidol for schizophrenia. *Archives of General Psychiatry*, **48**, 166-170.
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