
Guidelines for the management of acutely disturbed patients

Rob Macpherson, Bryan Anstee & Roland Dix

The treatment of acutely disturbed patients is a stressful area of psychiatric practice. Castle *et al* (1994) found that MRCPsych Part II trainees expressed a general dissatisfaction with training in the management of violence, and in our experience junior trainees are even less confident in the treatment of the disturbed patient. A survey by Cunnane (1994) found that no consensus exists among consultant psychiatrists on which drug treatment is most appropriate for the management of the aggressive, acutely disturbed psychotic patient. There was uncertainty as to optimal management, low expectation of quick results, unwillingness to express an opinion and the use of drug cocktails of dubious rationale.

The recent Royal College of Psychiatrists' report (1993) on high dose antipsychotic treatment, gave no specific guidance in the area of managing acutely disturbed patients. However, a subsequent survey (Palmer, 1996) by the Clinical Practice Guidelines Steering Group of the Royal College of Psychiatrists, found that 50% of all professionals and service users considered "risk assessment and management of deliberate self-harm and dangerousness" to be a priority area for guideline development. In this context, and in collaboration with colleagues in the Severn NHS Trust, we have produced a general set of principles, to cover general aspects of the management of the acutely disturbed patient, as well as drug treatment. These guidelines are not intended to be a rigid protocol but represent a tried and tested line of management. They are based on a review of the literature and refer specifically to medication schedules produced by Tardiff (1992) and Dubin & Feld (1989).

Rapid tranquillisation

Rapid tranquillisation with antipsychotics has demonstrated efficacy in acute behaviour disturbance secondary to schizophrenic psychosis (Tupin, 1985), and in controlling agitation of diverse aetiology including personality disorder, alcohol intoxication and delirium (Clinton *et al*, 1987). Due to the risk of severe side-effects with high dose antipsychotics, particularly the risk of sudden death, it is best practice to keep doses as low as possible (Royal College of Psychiatrists, 1993). Doses as low as 10mg haloperidol daily have been shown to be effective in treating acute schizophrenic breakdown (Rifkin *et al*, 1991).

Sudden cardio-respiratory collapse associated with antipsychotic treatment, especially during a period of extreme physiological arousal, is well known (Lader, 1992), and a recent survey identified 15 of 206 deaths in detained patients as 'iatrogenic' (Banerjee *et al*, 1995). These authors raised concerns about the use of massive doses of medication or mixed drug combinations, in too frequent boluses, by inexperienced nurses and unsupervised trainee psychiatrists. The lack of subsequent untoward incident inquiry or agreed clinical protocol for treatment of aggression was highlighted.

Rapid tranquillisation with antipsychotics is generally effective in controlling behaviour, but the antipsychotic effect (i.e. versus delusions and hallucinations) is often delayed for several weeks (Donlon *et al*, 1980). Both benzodiazepine and antipsychotic treatment are effective in acute behaviour disturbance, the choice of treatment being determined largely by clinical presentation and drug side-effect profiles, as in Table 1.

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Table 1. The main side-effects in emergency treatment of disturbed patients

	Sedation	Postural hypotension	Parkinsonism	Neuroleptic malignant syndrome	Respiratory depression	Withdrawal syndrome	Ataxia
Chlorpromazine, thioridazine	Present	Present	Present	Present			
Haloperidol			Present	Present			
Droperidol	Present		Present	Present			
Benzodiazepine	Present				Present	Present	Present

Patients with respiratory disease who are retaining CO₂ should be treated with antipsychotics in preference to benzodiazepines, which can cause respiratory failure. A further potential problem with benzodiazepine treatment is behavioural disinhibition which may occur particularly with short-acting drugs, as the effects wear off.

Theoretically, in treating mania or acute psychosis, a two-step approach which allows initial trial of moderate dose antipsychotic treatment, and then introduces benzodiazepines in the event of non-response, allows for maximum benefits but minimises risk due to cumulative drug effects. Dubin (1988) recommends the first line use of antipsychotic treatment in schizophrenia, and where severe agitation occurs in substance abuse. Benzodiazepines have demonstrated a useful role in the treatment of mania (Chouinard, 1985), mild behaviour disturbance secondary to substance abuse (Dubin, 1988), and in treating acute schizophrenic hyperarousal (Mendoza *et al*, 1987). They may be of particular value in treating disturbed patients where the underlying diagnosis is not yet clear, pending determination of whether further treatment, aimed at psychotic symptoms, is needed. The antipsychotic side-effect akathisia has been associated with physical assault (Crownier *et al*, 1990), and the presence of this may be important in deciding between antipsychotic or benzodiazepine (or both concurrently) interventions for short-term behavioural control.

The survey by Cunnane (1994) showed that standard management in the UK in this area does not usually follow protocols suggested for rapid tranquillisation. Intermittent or fixed dosage regimes are commonly used, and in order to avoid drug accumulation with the frequent dosing regimes advocated in most rapid tranquillisation policies, it is clearly best practice to switch as soon as possible to regular, fixed-dose regimes, which can then be adjusted according to response, towards a regime appropriate for longer term treatment (in the case of schizophrenia, possibly including the establishment of intramuscular depot

medication). For similar reasons, we have included in the guidelines the schedule for administration of intramuscular Acuphase, a widely used treatment which has the advantages of lower dosing frequency.

In these authors' view, due to the risk of cardiopulmonary collapse, intravenous treatment should be avoided. It can only be given if medical staff skilled in resuscitation and resuscitation equipment are available (*Drug and Therapeutics Bulletin*, 1995).

Psychological and environmental factors

Although these factors play a crucial part in determining the outcome of treatment, there is surprisingly little research in this area. A literature review (Shugar & Rehaluk, 1990) found no empirical studies of the value of continuous observation. Most studies are completed by nurses in an area which is perhaps inappropriately viewed as representing nursing, rather than multi-disciplinary, practice. However, Davies (1989) has produced an excellent overview of the issues that are important in preventing assault on professional helpers. Stevenson (1991) recently reviewed 'de-escalation', a range of theoretical techniques which aim "by redirecting the patient towards a calmer personal space", to reduce anxiety, maintain control and avoid aggressive acting out. Attention to personal issues in staff and efforts to avoid creating guilt and shame in clinicians by discussing difficulties without laying blame, is likely to help in understanding and preventing repeated aggression (Vincent & White, 1994). Theoretical frameworks which aim to understand and predict aggressive behaviour may be of value (Boettcher, 1983), particularly in units which commonly deal with potentially aggressive or violent patients such as the Psychiatric Intensive Care Unit. Training and education in aggression management and Control and Restraint techniques is available, and nursing

staff with the ENB 956 Clinical Course in the Assessment and Management of the Acutely Disturbed Patient are likely to make a particular contribution to care planning.

These guidelines are aimed, in a climate of increasing medico-legal concern, to incorporate theory around best practice and recognise the value of practice recommended and sanctioned by a group of consultant psychiatrists, mental health professionals from other disciplines and pharmacists. The authors hope that these guidelines will be subjected to clinical audit so that it may be possible to validate particular treatments for specific subgroups of patients, and clinical situations.

Assessment of patients

Taking a full history from the patient is not usually possible in the acute situation, and it is often necessary to accept some degree of diagnostic uncertainty in the early stages of treatment. Obtain:

- (a) as full a history as possible from the patient, family, old case notes and information from the police/GP
- (b) a comprehensive mental state examination, with particular attention to hostility, aggression and withdrawal, and their relationship to manic and psychotic symptoms.

Make a provisional diagnosis of:

- (a) acute psychosis or mania
- (b) acute confusional state
- (c) acute stress reaction in a vulnerable individual.

Initial management is broadly similar, but if the diagnosis is confusional state, investigate medically and start physical treatment as well as psychiatric management.

Management of patients

Environment

Patients usually respond best in a quiet, unstimulating environment with consistent nursing staff present. Early involvement of the Psychiatric Intensive Care Unit staff (ideally including discussion prior to admission) is advisable, with a view to rapid transfer of aggressive patients.

In units which use seclusion for the management of severe aggression, a formal seclusion policy should be fully operational, and this must be understood and followed by all staff.

The level of nursing supervision should be determined by multidisciplinary assessment, and reviewed at least each nursing shift. Supervision should be reduced as soon as possible, by consultation between the nurse in charge and the RMO/duty doctor. Close observation should only be carried out by nurses trained in appropriate techniques. The levels of observation are:

- level 1 – ‘special’ observation: one to one contact continuously
- level 2 – 15 minute checks (documented), plus continuous awareness of whereabouts
- level 3 – awareness of whereabouts at all times.

Prolonged ‘special’ observation can exacerbate behaviour disturbance. The value of inobtrusive monitoring as opposed to direct observation, should always be considered. Intermittent rather than regular fixed time checks may be more effective.

Staff safety

The following suggestions will help to reduce the occurrence and severity of assaults on staff.

- (a) When interviewing a patient who has a potential for aggressive behaviour, always inform nursing staff of your intentions and location
- (b) try to conduct joint medical and nursing assessments to protect interviewers and reduce stimulation to the patient
- (c) request the hand held assault alarm available on each ward and keep this on your person throughout the interview
- (d) sit at an angle to the patient, at a safe distance, in close proximity to the exit. Always avoid interviewing with the patient between you and the door.

Remember to put safety of people first. If a situation is escalating beyond the capacity of the hospital team to cope with it, call the Security Services or the Emergency Services on (9) 999. Do not attempt restraint unless there is sufficient back-up (usually a three person Control and Restraint specialist nursing team).

Psychological approaches

A calm, consistent approach by the nurses and other staff is needed. Talking down, distraction and

other de-escalation techniques are useful. Skilled, confident staff experienced in this area, ideally who already have a trusting relationship with the patient, are likely to be most effective.

Explain it is the aggressive/threatening behaviour which is the problem, and that the patient is not being punished or harmed by the treatment. Remember that aggressive patients are usually frightened and anxious so they need explanations of what is being done to them, and why. They should be involved as much as possible in their treatment plan.

Separation from stressful family relationships is often helpful in reducing anxiety and over stimulation.

Mental Health Act status

If a patient is resisting and aggressive, and refusing treatment or threatening to leave the ward, and still informal, the RMO or duty consultant should be called to make a Mental Health Act assessment. Use of Section 5 (II) may be necessary to prevent a patient from leaving the ward, although it does not allow treatment without the patient's consent.

A patient on Section 2 or 3 can be given intramuscular (IM) treatment with antipsychotics including Acuphase without consent.

In an emergency situation, a dangerous patient can be given IM medication under common law, i.e. without Section, to calm and make safe, while a Section assessment is awaited.

Drug treatment

Drug treatment is needed when behaviour is out of control, and should be given early and consistently, in sufficient doses to bring the situation under control.

It is necessary to review the drug history to find the drug of choice and any contraindications. If not available, consider the following immediate management strategies.

Option A (IM Acuphase)

In treating acute psychosis, providing no contraindications exist (these include being antipsychotic naïve), give Acuphase 100mg IM and further 50mg after 2–4 hours if no improvement. Further Acuphase up to 150mg IM may be administered the following day if sedation and acute symptom control is insufficient (maximum accumulated dose 400mg IM over 3 days).

Note: In order to judge whether a patient will maintain refusal to cooperate with oral treatment,

Table 2. Daily oral antipsychotic maximum doses

Drug	Oral maximum daily (mg)
Chlorpromazine	1000
Clozapine	900
Droperidol	120
Flupenthixol	18
Fluphenazine	20
Haloperidol	200
Loxapine	250
Methotrimeprazine	1000
Pericyazine	300
Prochlorperazine	100
Pimozide	20
Risperidone	16
Sulpiride	2400
Thioridazine	600 (800 up to 4 weeks)
Trifluoperazine	80
Zuclopenthixol	150

it is generally preferable when instigating treatment to give at least one intramuscular injection of a shorter acting drug.

Option B (rapid tranquillisation)

Oral: Give chlorpromazine 50mg test dose by mouth and observe for postural hypotension. If not a problem, give oral chlorpromazine 100mg in 30–60 minute intervals until the patient is calm or sleep is induced (maximum daily dose 600mg).

Or haloperidol 10mg orally in 30–60 minute intervals until the patient is calm and behaviour is settled (maximum daily dose 60mg).

Intramuscular: Give IM haloperidol 5–10mg test dose. Observe for postural hypotension. If not a problem, give haloperidol 10mg IM every 30 minutes until the patient is calm (maximum daily dose 60mg).

Or IM droperidol 5mg test dose. Observe for postural hypotension. If not a problem, give droperidol 5–10mg IM up to 4 hourly until the patient is calm (maximum dose 60mg).

Option C (fixed dose regimes)

Repeating medication administration half hourly or hourly may only be practical if accepted orally, and if repeatedly enforced is likely to result in greater conflict, re-escalating aggression and hostility to staff, and undermining of the therapeutic relationship. In all cases, the treatment should move towards a regular, fixed dose oral/depot regime as soon as possible, and this will

often be possible from the beginning of a treatment episode.

Commonly used fixed dose regimes of the various drugs are as follows, but determining the effective treatment dosage will always depend on individual response:

chlorpromazine 50–200mg oral three times daily
haloperidol 5–10mg oral three times daily
droperidol 5–10mg oral three times daily.

Cumulative antipsychotic dose, including prn doses, should be kept within maximum daily limits, as in Table 2 (refer to *British National Formulary* if in doubt). Polypharmacy with more than one antipsychotic preparation should be avoided. As sudden, large increases in antipsychotic dose can cause serious problems, dose titration is very important.

Suggested treatment in the event of non-response to option A, B or C

Always discuss this situation with the consultant. It is necessary to review the diagnosis and environmental factors. Treatment options include:

- (a) benzodiazepines: add lorazepam oral/IM 2–4mg every 1–2 hours (maximum daily dose 10mg). Or diazepam 10mg oral 4 hourly (maximum daily dose 40mg)
- (b) barbiturates: consider only where a full trial of antipsychotic and benzodiazepine treatment has failed *and* severely disturbed behaviour persists; add Sodium Amytal 200mg IM, every 1–2 hours. Consider oral Sodium Amytal 200mg prn.

Patients treated acutely with benzodiazepines/barbiturates should be monitored for respiratory depression. If respiratory rate drops below 10 per minute while on benzodiazepine treatment, give flumazenil intravenously 200 micrograms over 15 seconds, then 100 micrograms at 60 second intervals, and seek medical support.

For elderly/debilitated patient

Reduce recommended doses by 50%. Drugs of choice for the elderly are thioridazine, starting with 10–25mg orally; or haloperidol, starting 0.5–1mg orally/IM, with careful monitoring of blood pressure and physical state.

Side-effects

See Table 1 for an overview of the main side-effects in emergency treatment.

Neuroleptic malignant syndrome (NMS) usually presents with muscular rigidity, pyrexia and confusion, but partial syndromes are common. If suspected, substitute benzodiazepines for antipsychotics and check white cell count and creatinine kinase (both usually raised in NMS). NMS is a medical emergency and requires urgent medical advice/admission.

Physical support

Ensure balanced diet and adequate fluids are offered to the patient. Consider charting fluid intake if problematic. For patients on recently increased high dose antipsychotics, six hourly temperature, pulse and respiration should be checked, and consider serial ECGs. A screen of blood tests is helpful, to exclude serious coexisting or underlying pathology.

Staff support

Inform consultant early and discuss regularly thereafter. Multidisciplinary team meetings are an essential focus for management planning. Regular, daily review of drugs/environmental regime is necessary. Involvement of the patient's family may be useful, particularly to ensure that the frequency of visiting is not causing problems of excess stimulation.

Remember the stress of being exposed to aggression and paranoid criticism/hostility, and try to support colleagues and admit to personal frailties, anxieties and feelings of helplessness.

Management after an aggressive incident

Despite preventative and coping strategies, incidents will nevertheless happen, and there is a risk of compounding difficulties by unhelpful criticism. Victims need sympathy, support and reassurance, not just in the short term. Support may helpfully involve the spouse in some cases, and in a severe reaction the possibility of professional counselling should be considered. The issue of whether to prosecute the aggressor is one for the victim, who may be helped by talking this through with colleagues or managers.

For professionals who are assaulted, it is advisable to return to work as soon as possible (perhaps taking no time off), to prevent the 'incubation of fear', which can occur.

In the management of a severe aggressive incident, immediate safety must be secured prior to any investigation. The investigation should attempt as sensitively as possible to compile detailed reports around the incident so as to understand its causes, context and consequences, in staff and patient groups. The aim should be to generate a positive, constructive atmosphere, in which the incident can be reviewed honestly and openly, and constructive lessons learned for the future.

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Multiple choice questions

- Neuroleptic malignant syndrome has been reported with the following treatments:
 - lithium
 - ECT
 - carbamazepine
 - benzodiazepines
 - clozapine
- The following are BNF (1995) maximum doses:
 - oral chlorpromazine 1000 mg daily
 - IM Clopixol Acuphase 300 mg daily
 - oral lorazepam 6 mg daily
 - oral Depixol 10 mg daily
 - IM Depixol 100 mg weekly
- The following treatment can be given by compulsion to a patient purely under Section II of the Mental Health Act, 1983:
 - IM depot medication
 - ECT
 - Clopixol Acuphase
 - oral diazepam
 - antibiotics for a chest infection causing confusional state
- The following treatments should not be combined or should be used with caution due to possible drug interactions:
 - Triludan and antipsychotics
 - diazepam and alcohol
 - lithium and maxolon
 - clozapine and carbamazepine
 - lorazepam and Acuphase

5. The following are commonly associated:
- a sedation and treatment with chlorpromazine
 - b neuroleptic malignant syndrome and treatment with chlorpromazine
 - c antipsychotic treatment and respiratory depression
 - d droperidol treatment and akathisia
 - e IM antipsychotic treatment and sudden unexplained death

MCQ answers

1	2	3	4	5
a T	a T	a T	a T	a T
b F	b F	b F	b T	b F
c T	c F	c T	c T	c F
d F	d F	d T	d T	d T
e T	e F	e F	e F	e F

Comment

Trevor Turner

There has long been considerable individual variation in the regimes for managing acutely disturbed patients, in terms of the drugs used, routes of administration and the dosages given. We all tend to learn from 'accepted' practice in the units in which we train, and the lack of good-quality controlled trials, published in leading and accessible journals, compounds the problem. Given the importance of this issue, when concerns about sudden death in the context of high dose regimes are generating considerable publicity (for example, MIND is calling for a blanket ban on dosages greater than those given in the BNF), the need for rigorous research has never been greater. Guidelines have, however, become established in a number of units, and this clear summary by Macpherson *et al* is therefore to be welcomed.

The authors have, understandably, concentrated on medication issues but their comments on staffing and environment are equally pertinent. There is evidence that increased proportions of agency staff are associated with increased levels of violence on a unit. Training and experience, as well as personal knowledge of patients (and vice versa) when they are well, can often prevent outbursts or alleviate disturbed situations. Being aware of predictors of violence in terms of previous history,

symptoms, and levels of arousal (e.g. posture, sweating/respiration, eye-contact) can ensure appropriate staffing levels and the early use of medication. We probably also undervalue the impact of environment. In Hackney our untoward incident rates on the wards, and the use of Section 5 (2), dropped by up to 50% when we moved from an old workhouse unit to new, purpose-built wards built around the principles of 'space' and 'light'.

In terms of the practical aspects of what to do, it may often seem impossible to carry out a true mental state assessment on a mute or screaming patient who is being restrained in a side room. Inexperienced trainees may feel that trying to clarify symptoms, while frustrated nurses are hanging on to the patient and expecting something to be done, is not worth the delay. Such assessments need a fine judgement, and an immediate clarification of who is in charge of a disturbed incident. Explaining to all, amidst a *mêlée*, what you are doing, why you are doing it, and what the treatment plan will be, can ensure good team work and coordinated activity. Visitors, other patients and family usually need to be kept out of the way. The straightforward act of constantly reassuring the patient that you are doctors and nurses and here to help, seems obvious but is often forgotten.

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