Managing aggressive and violent patients

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Summary

All healthcare workers, especially general practitioners and staff in emergency departments, are likely to encounter aggression and violence. This behaviour may be caused by a medical illness, a psychiatric illness or drug intoxication or withdrawal. These problems can occur in combination. It is important that a diagnosis is made, but in some cases the patient may need sedation before they can be examined. If non-drug management, such as de-escalation techniques, does not work, a benzodiazepine or antipsychotic can be considered. It is essential that sedated patients are monitored for signs of oversedation. Practice design and policies as well as staff training can help to reduce the risk of violence.

Key words: antipsychotics, benzodiazepines, de-escalation, sedation.

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Introduction

Aggression and violence may be a manifestation of underlying psychiatric disorders. These include drug psychosis, delusional states, mania and personality disorder. Some patients try to use aggression as means of achieving a particular goal, such as being seen earlier or obtaining drugs.

Medical illness may result in behaviour disturbance. It can also coexist in patients with mental health, drug and alcohol problems or other conditions (see Box 1).

Prevention

Some simple preparatory steps may be helpful in averting trouble or in dealing with difficult situations as they arise. A sign should make clear that aggression and violence are not tolerated. The practice or emergency department should have a functioning duress system and protocols for responding. Ideally the assessment area should have no dangerous objects easily at hand and should have more than one exit. Some medical practices and hospitals have systems to alert staff that a presenting patient may be difficult to manage, or pre-agreed management plans for particular patients.

A number of studies have found benefits from education and training programs to help healthcare workers develop skills and increase confidence in managing these situations. Staff should be advised that their personal safety is a priority. They should not see patients for a late appointment when they are alone. It is appropriate to avoid confrontation and to call for help if they feel at risk. Keeping patients informed of waiting times and providing a comfortable waiting area is helpful.

Clinical scenarios

An elderly woman with known mild dementia is brought in by her family as she has become increasingly agitated and is confused and aggressive. A calming low stimulus environment assists the initial assessment. The underlying cause turns out to be a urinary tract infection, dehydration and hyponatraemia. Treatment with antibiotics and appropriate fluids in hospital returns her to her usual state.

A drug-affected young man is brought in by friends as he has become increasingly irrational and aggressive. An ambulance

Box 1
Medical conditions which can cause aggression

Hypoxia, hypercarbia – pneumonia, worsening chronic airway disease

Hypoglycaemia – diabetes, malnourished alcoholic

Cerebral insult – stroke, tumour, seizure, encephalitis, meningitis, trauma

Sepsis – systemic sepsis, urine infection in the elderly

Metabolic disturbance – hyponatraemia, thiamine deficiency, hypercalcaemia

Organ failure – liver or renal failure

Withdrawal – alcohol, benzodiazepines

Drug effects – amphetamine, steroids, alcohol, prescribed medications and interactions

and police are called, a schedule is written, he is taken to the emergency department for a short-stay mental health and drug and alcohol admission, and sedated. The diagnosis is methamphetamine intoxication.

A middle-aged man with a long-standing brain injury is often threatening and disruptive while in the waiting room for his regular attendances. His future visits are always scheduled as an early long appointment and it is made clear he must be accompanied by his carer.

A 65-year-old man is tremulous, agitated and aggressive. He seems irrational and is experiencing visual hallucinations. He is admitted to hospital where the diagnosis is acute alcohol withdrawal. He is given fluids, nutrition, thiamine and diazepam in relatively high doses according to an alcohol withdrawal protocol. Antipsychotics and other drugs which lower the seizure threshold are avoided.

Managing an acute episode

Before treating the behavioural disturbance consider what may be causing it.

Assessment

Look for clues that the behaviour disturbance may be due to an organic cause, for example a previously stable elderly patient presenting with behaviour change may have sepsis, stroke, trauma or a drug interaction. The history is relevant, for example a patient with known epilepsy may present with post-ictal confusion, or a patient who is taking long-term anticoagulation may have had a head injury.

A general physical examination including neurological examination looking for higher function, orientation, meningism and localising signs should be performed as soon as possible. Measure the pulse, blood pressure, temperature, respiratory rate and if possible, oxygen saturation and blood glucose.

The clinical scenario will determine the extent of investigation required to exclude an organic cause or contributing comorbidity. Initial basic blood tests such as a full blood count, chemistry, blood sugar, liver and renal function are appropriate if results can be quickly obtained. Further tests including blood alcohol level, urine drug screen, urinalysis and culture and cerebral CT scanning may be required if the patient is hospitalised.

Common clues that a psychiatric cause is likely include past history of mental illness, drug use or alcoholism, current medications, general physical appearance including self-care, appropriateness of mood and engagement, manner and content of speech, posture and movement. Wherever possible collateral and corroborating history should be sought from family, friends and healthcare providers.

Box 2

De-escalation

- Use an empathic non-confrontational approach, but set boundaries
- **Listen** to the patient, but avoid giving opinions on issues and grievances beyond your control
- Offer food, drink and a place to sit
- Avoid excessive stimulation
- Avoid aggressive postures and prolonged eye contact
- Recruit family, friends, case managers to help
- Address medical issues especially pain and discomfort
- Try to ascertain what the patient actually wants and the level of urgency

Non-pharmacological management

Some basic verbal de-escalation and distraction techniques can be used (see Box 2). It is often safer to call for help early and to remain at a safe distance until support, such as police and ambulance, arrives. A show of force may persuade the patient to cooperate.

Suspected or identified medical problems must be addressed before treating the behavioural disturbance. If the patient is uncooperative they may need to be scheduled if they are a danger to themselves or others and mental illness is suspected. While there are state by state differences in the Mental Health Act the principles are very similar. When involuntary care is needed, an initial schedule is written to allow safe care and transport to a mental health unit (this may be an emergency department, psychiatric unit or hospital). It should be remembered that in some jurisdictions a Mental Health Schedule can now be written by police and ambulance officers as well as by a doctor, and that it is a legal order that a patient be taken to a place where they can be assessed by a mental health specialist. If there is a potentially serious medical emergency it may be necessary to provide treatment without immediate scheduling of an uncooperative patient. Restraint and forced sedation should be considered a last resort.

Pharmacological management (Table 1)

In some situations sedation may be appropriate. The choice of drug and dosage used is influenced by the patient's age, size, other prescribed or non-prescribed drugs taken, known illness such as long-term benzodiazepine abuse, alcoholism, liver or renal failure.

Physical signs such as hypotension and hyperthermia indicate a need for resuscitation as well as adjustment of drug choice and dosage. Position the patient appropriately, for example lay them

Table 1

Drugs for sedation

Drug	Usual adult dose	Adverse events and management
Diazepam	5–10 mg oral or intravenously. Max 30 mg per event. Longer acting than midazolam.	Oversedation – maintain airway, coma position, provide oxygen Hypotension – lay down, intravenous fluids Airway or respiratory compromise – support airway, give oxygen Parodoxical reactions
Lorazepam	2 mg. Max 10 mg in 24 hours.	
Midazolam	5–10 mg intramuscularly. Max 20 mg per event. Rapid onset.	
Olanzapine	5–10 mg oral. Max 30 mg per event.	Hypotension – lay down, intravenous fluids Seizure – coma position, clear airway, benzodiazepines
Haloperidol	5–10 mg intramuscularly. Max 20 mg per event.	Acute dystonia – benztropine 2 mg oral or intramuscularly or intravenously Hypotension – lay down, intravenous fluids

Note: Lower doses (titrate to effect) should be used in those who are elderly, have low body weight, are dehydrated, have significant other medical illnesses or have ingested significant amounts of alcohol or other drugs. All sedatives can cause oversedation.

flat, elevate their legs if hypotensive, and ensure a safe airway position if they are post-ictal. When possible administer oxygen, intravenous fluids and glucose (plus thiamine if Wernicke's encephalopathy is a possibility). Gather information, continue to manage clinically and arrange transfer if indicated.

For disturbed patients, in the first instance an oral sedative should be offered in a non-threatening collaborative way: 'I know you feel very distressed and this will help while we work out what to do next'. Oral diazepam 5 mg or olanzapine 5 mg are common choices.

The dosage should be titrated to clinical effect whilst watching for over-sedation and other adverse effects such as hypotension in the patient who has ingested other drugs or alcohol, is dehydrated or has a medical illness.

Parenteral sedation is more difficult although a number of patients may accept this if it is offered: 'You will feel better far more quickly if I can give you this now'. Forced parenteral sedation is not usually possible outside hospital. It requires trained staff in numbers (usually five or more) to either convince the patient to accept without violent struggle or to restrain the patient while medication is given. This needs training and equipment such as gowns, gloves and face masks and requires some skill to avoid injury to the patient or staff.

All patients who have been given parenteral sedation will require a level of monitoring and ambulance transfer to hospital should be arranged as soon as possible. The need for transfer and monitoring becomes even more urgent when higher doses of benzodiazepines are used or when other drugs such as haloperidol have also been given.

Benzodiazepines

Increasing doses of benzodiazepines produce a progressive spectrum of effect from anxiolysis and anticonvulsant effects to amnesia, sedation and eventually hypnosis and anaesthesia. Toxicity is usually related to very high doses and results in excessive sedation and airway obstruction. While benzodiazepines are essentially safe drugs, at very high doses or when given to a patient with hypovolaemia or other significant physiological compromise, they may contribute to cardiovascular and respiratory depression. Extra care should be taken if there is a possibility that the patient has consumed other sedating drugs (for example methadone).

Diazepam is used as an oral or intravenous preparation (not for intramuscular injection). It is quickly absorbed, but has a long half-life (up to 36 hours or more) so it can accumulate after repeated doses. Lorazepam has a shorter half-life (12–16 hours).

Midazolam is water-soluble and can be given intravenously or intramuscularly. It has a rapid onset, an elimination half-life of 2–4 hours and a much steeper dose-response curve than diazepam.

Antipsychotics

Olanzapine is an 'atypical antipsychotic' which can be given orally or as an intramuscular injection. It has a rapid onset of action with a half-life of about 30 hours. In clinical trials doses of 5–10 mg have been effective. A second dose should not be given for at least two hours. Olanzapine should not be given with benzodiazepines because of the risk of cardiorespiratory

depression. Extrapyramidal effects may occur but are less likely than with typical antipsychotic drugs. Other potential adverse effects include excessive drowsiness, hypotension and tachycardia.

Haloperidol can be given as an intramuscular injection. It has a rapid onset of action with effects lasting two to four hours. Toxicity manifests as over-sedation or hypotension. There may be extrapyramidal adverse effects such as dystonia (or even neuroleptic malignant syndrome) and it may lower the seizure threshold.

Post-sedation management

In almost all circumstances the patient will need to be transferred for further medical and then psychiatric assessment as soon as possible. After sedation the patient must be closely observed and monitored. They should be managed in a safe position with a clear airway and if possible supplemental oxygen given. The degree of sedation (for example as assessed by the Glasgow Coma Score), pulse, temperature, blood pressure, respiratory rate and pupils should be checked. If equipment is available check the blood glucose (or give glucose if hypoglycaemia is possible but glucose cannot be checked), ECG rhythm and oxygen saturation. A physical examination looking for possible organic medical illness should be performed.

Arranging urgent transfer and managing a patient post-sedation is critical. An awareness of the potential adverse effects and possibility of overdosage is essential. Documentation including recorded observations is required.

Conclusion

Preparedness involves a level of awareness and some planning for the possibility of aggression and violence, in particular facility design, policies and procedures and staff training. It should always be remembered that organic illness can mimic or coexist with psychiatric illness and that both may cause behaviour disturbance. Verbal de-escalation is a useful technique.

In the uncommon situation that sedation is needed in a non-hospital setting, an early call for police and ambulance assistance should be made. Oral sedation can be effective, but intramuscular or intravenous medication is needed in some cases. Post-sedation physical assessment and monitoring is essential. A review of practice preparedness and staff debriefing should be undertaken after an event.

Further reading

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Conflict of interest: none declared

Self-test questions

The following statements are either true or false

(answers on page 123)

5. When sedation is indicated for an aggressive patient, an oral drug should be considered first.
6. Parenteral diazepam should not be used intramuscularly to sedate a disturbed patient.

Anaphylaxis – new wallchart with this issue

Included with this issue, for Australian readers, is a laminated A3 wallchart titled 'Anaphylaxis: Emergency management for health professionals'.

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