



Acute behavioural disturbance (ABD): guidelines on management in police custody

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The medico-legal guidelines and recommendations published by the Faculty are for general information only. Appropriate specific advice should be sought from your medical defence organisation or professional association. The Faculty has one or more senior representatives of the MDOs on its Board, but for the avoidance of doubt, endorsement of the medico-legal guidelines or recommendations published by the Faculty has not been sought from any of the medical defence organisations.

This guidance is written in the following context:

This guidance represents the view of the Faculty of Forensic and Legal Medicine, which was reached after careful consideration of the evidence available. Forensic health care professionals (HCPs), doctors, nurses and paramedics, are expected to take it fully into account when exercising their clinical judgement.

However, as with any clinical guideline, recommendations may not be appropriate for use in all circumstances. It is recognised that a limitation of a guideline is that it simplifies clinical decision making and is not a substitute for clinical judgement. It is the HCP's responsibility to ensure that recommendations are appropriate to the circumstances of the individual patient, in consultation with the patient, the detainee in these circumstances, and/or any guardian or carer.

Decisions to adopt any particular recommendation must be made by HCPs in the light of:

- available resources
- local services, policies and protocols
- the patient's circumstances, safety, dignity, privacy, wishes and human rights
- the age of the patient
- available personnel
- the risk to personnel including the practitioner
- clinical experience of the practitioner
- knowledge of more recent research findings.

The assessment of risk should be as full as possible in circumstances where information may be limited and time of the essence.

Cases of suspected ABD should be taken directly to the Emergency Department (ED) of the local hospital.

If a detainee exhibits any of the following signs:

- Tactile hyperthermia (hot to touch)
- Constant or near constant physical activity
- Extreme agitation/aggression

THIS IS A TIME CRITICAL MEDICAL EMERGENCY

What is Acute Behavioural Disturbance (ABD)?

Acute behavioural disturbance (ABD) is not a formal diagnosis. It is the 'umbrella' term for the clinical presentation of a number of conditions. Therefore, it is essential to consider the range of differential diagnoses. ABD may be associated with fatality even when appropriately treated, but the likelihood of successful treatment is increased with immediate appropriate medical interventions.

It is essential that commissioned providers liaise with the local ambulance service to ensure that services work together

in recognising ABD/ExDS as a medical emergency so that delayed transfers to the ED are avoided.

The differential diagnosis of ABD includes:

- Psychiatric disorders
- Sepsis
- Substance misuse (acute intoxication and withdrawal)
- Serotonin syndrome
- Neuroleptic malignant syndrome
- Heat exhaustion
- Anticholinergic syndrome (e.g. antihistamines)
- Head injury/seizures
- Hypoglycemia
- Hypoxia
- Thyroid storm
- Akathisia

The terms ABD and 'excited delirium', or 'excited delirium syndrome' (ExDS), are sometimes used interchangeably but only about a third of cases of ABD present as ExDS.¹

ExDS has been defined as 'a state of extreme mental and physiological excitement, characterised by extreme agitation, hyperthermia, hostility, exceptional strength and endurance without apparent fatigue'.²



It has been estimated that upwards of about 10% of detainees with a high number of ExDS features could be at risk of sudden arrest-related death.¹ It is therefore necessary for the Healthcare Professional (HCP) to recognise the significance of the clinical features of ExDS:

1. Tactile hyperthermia ('hot to touch')
2. Does not fatigue
3. Naked/inappropriately clothed
4. Rapid breathing
5. Sweating profusely
6. Superhuman strength
7. Increased pain threshold/tolerance
8. Constant/near constant activity
9. Glass attraction-destruction
10. Not responsive to others' presence (e.g. the police)
11. Violent behaviour

As hyperthermia suggests severe physiological disruption, probably resulting from high levels of endogenous catecholamines released in response to stress or physical exertion, this should be recognised as a particularly ominous sign necessitating hospitalisation as a medical emergency.

Clinical experience in the UK suggests that the same applies to detainees exhibiting either constant, or near constant physical activity, extreme agitation, or aggression, insensitivity to irritant sprays, and other forms of restraint, such as conducted electrical weapons (CEW).

ExDS may have a similar pathophysiology to delirium tremens which has an untreated mortality in the order of 15 – 30% and for which dehydration, seizures, hypotension, and hyperthermia are poor prognostic signs.

Repetitive requests asking for help, expressions such as "I'm dying", paranoid ideation (i.e. staff are imposters, the police not real police) and intense fear are manifestations of a severe episode of ABD.

If it is concluded that the differential diagnosis includes a serious underlying medical condition, as outlined below immediate transfer to hospital as a medical emergency should be the priority.

Individuals considered to have ABD/ExDS should never be taken to a custody suite but directly to the ED. However, on occasions, individuals with possible ABD/ExDS will be detained by the police and taken to a police station. At the police station the HCP, who will be an appropriately trained doctor, nurse or paramedic, will be called for advice. In such circumstances, the HCP should advise that immediate hospitalisation is required and tell the police to telephone 999 for an ambulance. In the meantime, and especially if there is likely to be any delay in the attendance of the ambulance, an HCP should attend and assess the detainee.

In such circumstances, the HCP may need to take advice from a senior colleague if any form of tranquillisation is considered necessary and if other approaches have failed to de-escalate the acutely disturbed behaviour.

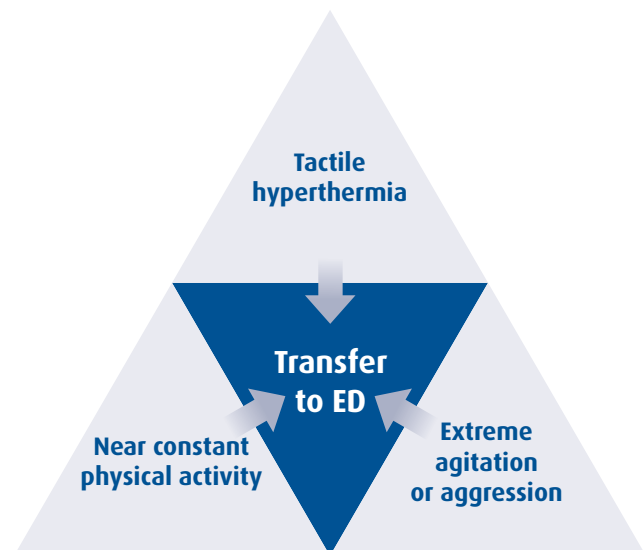
Preliminary steps – diagnosis and causation

The HCP should endeavour to establish the underlying diagnosis behind the ABD before making any treatment decision **but delay to definitive treatment (hospital transfer) should be avoided. Anyone with altered mental status and ABD requires formal medical assessment at the hospital.**

If a detainee exhibits any of the following signs:

- Tactile hyperthermia (hot to touch)
- Constant or near constant physical activity
- Extreme agitation/aggression

Then immediate transfer to the ED is mandatory.



Preliminary steps: De-escalation

De-escalation is a collaborative process involving verbal and non-verbal techniques designed to reduce agitation and distress.³ It is important to note that for severe ABD, de-escalation (and medications) may be ineffective, and the decision for immediate transfer to the emergency department should be made as outlined above.

In all cases, de-escalation should be attempted, but the HCP should continually risk assess the situation, given that de-escalation will not be effective in all cases. The HCP should convey empathy, respect and reassurance. This is more likely if the HCP is more able to actively manage their own emotional response to the disturbance, leading to a non-judgmental attitude and avoidance of provocation.



De-escalation techniques such as distraction, negotiation, re-framing what has happened, and setting boundaries in a non-confrontational manner should be used if appropriate. More psychologically based relaxation and calming techniques may also be employed if the expertise is available.

The HCP may want to consider utilising the environment, however limited the options, by allowing the detainee a period of time-out (to de-escalate). The space and supervision level for the detainee should be considered with safety in mind.

Pain-inducing techniques should be avoided. As well as being inappropriate in a health emergency scenario, such techniques are likely to exacerbate the risks, as pain acts as a stimulus.

If de-escalation has failed to manage the disturbed behavior, the HCP should consider giving medication.

Treatment in custody

Pre-rapid tranquillisation (pre-RT) has the aim of offering oral medication to agitated patients pre-emptively to address acute disturbance and to avoid escalation and the need for parenteral medication and physical restraint.³

Rapid tranquillisation (RT)^{3,4} involves the use of medication by the parenteral route (usually intramuscular, or exceptionally intravenous) if oral medication is not possible or appropriate and urgent sedation with medication is required. **This is not recommended in police custody.** Some people with ABD are so seriously ill as to require sedation but this should only be undertaken in hospital, or by an appropriately trained paramedic and/or pre-hospital physician prior to transfer to hospital.

The aims of any form of pre-RT are threefold:

- a. to reduce further suffering for the patient: psychological and physical (through, for example, self-harm, accidents, hypoxia or metabolic acidosis)
- b. to reduce the risk of harm to others
- c. to do no harm (by prescribing safe regimes and monitoring physical health).

Pre-tranquillisation (pre-RT) may need to be considered when:

- a. the HCP decides that the detainee needs to be transferred to hospital and tranquillisation is required to facilitate that transfer;
- b. it is necessary to reduce suffering for the detainee and prevent a further deterioration in their health prior to further assessment or appropriate disposal.

The decision to employ pre-RT must be a reasonable and proportionate response to the risk it seeks to address but always bearing in mind that the pathophysiology of ever-increasing agitation ultimately leads to worsening outcomes and an increased risk of sudden death.

The use of medication for pre-RT in the police station is a serious step. This is particularly so because detainees may have taken other drugs which interact with those used for pre-RT, leading to serious additive effects in terms of CNS depression. Therefore, caution needs to be employed before tranquillising any such patient and adequate safeguards must be in place to ensure the individual's safety.

Medication for pre-RT should be used with caution owing to the following risks:

- loss of consciousness instead of tranquillisation
- sedation with loss of alertness
- compromised airway and breathing
- cardiovascular and respiratory collapse
- interaction with medicines already prescribed or illicit substances taken (can cause side effects such as akathisia, disinhibition)
- disinhibition
- paradoxical excitation, although uncommon (less than 1% of people given benzodiazepines).
- possible damage to patient-clinician relationship
- underlying coincidental physical disorders.

There is evidence that drugs given orally can be as effective as those administered intra-muscularly and, because of the greater risks associated with parenteral treatment, tranquillisation in police custody should be restricted to oral therapy. In any event it is not considered that what may be only a few minutes shorter onset of action or more rapid time to peak effect justify the risks attendant upon the use of parenteral medication in this setting. The proposed treatment should be explained to the disturbed patient, as most individuals will cooperate with an oral dosing regime with appropriate explanation and support from the HCP. In circumstances where the detainee lacks capacity to consent to the treatment, the HCP may still administer oral medication provided the HCP considers it to be in the person's best interests and the individual complies.

If pre-RT is considered necessary, particularly prior to formal diagnosis and where there is any uncertainty about previous medical history (including history of cardiovascular disease), uncertainty regarding current medication, or possibility of current illicit drug/alcohol intoxication, lorazepam is the drug of choice. The dosage should be the minimum necessary to achieve the desired effect. Failure to reduce agitation suggests tolerance and/or severe ABD and transfer to hospital should be considered.

Transfer to hospital should be by ambulance in preference; that said, if ABD is escalating and the patient is hot to touch/hyperthermic, and the emergency ambulance is not available consideration for police vehicle transfer should be made (blue light) and pre-alert the receiving hospital.



Appropriate adjustments to dosage should be made in the case of detainees who are children, young persons, or elderly. Where the detainee fails to respond to near maximal doses as recommended in the British National Formulary (BNF) it may be more preferable and safer to consider a transfer to hospital than to prescribe in excess of the recommended maximum.

The HCP should ensure that either he/she or another appropriately trained HCP remains with the detainee to monitor, where possible, the level of consciousness (AVPU/GCS), respiration, pulse, blood pressure and temperature until the situation has resolved (i.e. the detainee has been

safely transferred to hospital or has fully recovered). Where pre-RT is ineffective or where these observations indicate a deteriorating physical condition, consideration should be given to transfer to hospital as an emergency.

It is vital that HCPs should also be trained in immediate life support and be familiar with the use and location of any available resuscitation equipment in the police station. They should be able to put a detainee in the recovery position protecting his or her airway. Any evidence of fast respiratory rate, panting, heralds imminent deterioration.

Rapid tranquillisation of detainees in police custody		
Step	Intervention	Notes
1	Attempt de-escalation with appropriate techniques	Use the cooling off period to try and establish the cause of the disturbed behaviour
2	Offer oral lorazepam Adult: 1 – 2 mg* Ensure that an appropriately trained HCP is present to monitor the effect of the drug	If there is insufficient effect the medication drug can be repeated up to two times at hourly intervals up to a maximum dose of 4mg in 24 hours (for adults).

* Lower oral doses are to be used in children and older adults – please seek medical advice in such circumstances.

The use of medication for Rapid Tranquillisation (RT)

Medical management of ABD where the aim is not just tranquillisation but sedation, should be carried out by appropriately trained healthcare professionals in hospital with direct access to full resuscitation facilities.

Advanced care practitioners (ACP) and paramedics with enhanced skills may attend the police station to assist. These appropriately trained practitioners may have access to benzodiazepines, such as midazolam, and ketamine (use of which requires formal airway skills due to risk of loss of airway reflexes) which may be administered parenterally in order to achieve sedation. The choice of drug and dosage used for RT will then be based on the individual clinician's familiarity with the use of drugs in this setting.

Under no circumstances should a person be transported to hospital by police vehicle if they have received parenteral medication as there will be limited space and no appropriate equipment to deal with a deteriorating patient.

The use of physical restraint⁵

Restraint should be used to achieve a definitive purpose e.g. transfer to hospital/cell/vehicle and not used as a method to 'contain' the individual. The application of restraint may result in sudden cardiac arrest secondary to rise in catecholamines and on a background of acidosis. This cannot be predicted, nor avoided.

A number of physical skills may be used in the management of disturbed or violent detainees. The level of force applied

must be justifiable, appropriate, reasonable and proportionate to the specific situation, should be applied for the minimum possible amount of time and be the least restrictive option to meet the need. However, it must be recognised that restraint per se is dangerous. Whenever a HCP considers that restraint may be required it should be discussed with a senior police officer who should take the lead in any procedures adopted. However, it is the responsibility of the HCP to advise how and to what extent allowances should be made for the detainee's physical health, degree of frailty, or developmental age.

Documentation

The HCP should fully document the management of the patient including a description of the behaviour that resulted in the use of pre-RT. The steps that were taken unsuccessfully to de-escalate the situation should be noted. If the detainee did not consent then the grounds, in terms of best interests, for administering the medication to a detainee who lacked the capacity to consent must be set out in detail. Other information should be documented, as would allow an independent reviewer to find that the administration of medication was justified, appropriate, reasonable, proportionate, and the least restrictive option to meet the need. Where a decision has been made to prescribe in excess of the recommended maximum dose, the reasons should be clearly documented. Documentation of physical observations over time is important to establish when the condition of the detainee deteriorated and/or monitor the effects of medication provided. Where measurement of all the observations is not possible, the HCP should document why they have not been done.



Audit and review

It is essential that the management of cases of ABD are reviewed as part of the clinical governance framework. These cases can be used for the audit of an area of clinical practice which at present does not have a clear evidence base and where clinical experience is more influential than research findings. Cases of pre-RT should be included in the case-based discussions which form part of many HCPs' continuing professional development. In cases where maximum British National Formulary doses have been exceeded, where there has been injury to the detainee or others, or where physical restraint has been required, it is recommended that a 'sudden untoward incident' or similar multi professional review should take place. It is recommended that such a review should include participation of the police if injury has occurred or physical restraint been employed.

Note:

Before transferring to a mental health facility, an acute medical condition should be ruled out, in particular intoxication, CNS disorders, head trauma, epilepsy, stroke, cardiopulmonary disorders, metabolic disorders, systemic illness, delirium, etc.

The Royal College of Emergency Medicine has published 'Guidelines for the Management of Acute Behavioural Disturbance (ABD)' (2016) to provide a guideline for Emergency Departments to safely and effectively manage individuals who attend or are brought in by the police/ ambulance personnel with suspected Acute Behavioural Disturbance.

References

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In developing the guideline, the Guideline Review Panel took account of the views expressed by members of the Faculty of Forensic and Legal Medicine following a formal consultation process.

