POSITION STATEMENT

ACUTE BEHAVIOURAL DISTURBANCE OCTOBER 2018

Acute Behavioural Disturbance (ABD), also known as 'Excited Delirium' or Acute Behavioural Disorder, is a medical emergency. There is currently no consensus on the definition of ABD, however the College of Paramedics recognises the definition suggested by the Royal College of Emergency Medicine which characterises ABD as the "…*sudden onset of aggressive and violent behaviour and autonomic dysfunction*…" (Gillings *et al.*, 2016).

Patients typically present with tachycardia, tachypnoea, hyperthermia (often with undressing), excessive physical strength with apparent lack of fatigue, insensitivity to pain (including that associated with incapacitant sprays), and acute psychosis often accompanied by paranoia. Common causes include use of stimulant drugs, such as cocaine and exacerbation of underlying mental health disorder (Gillings *et al.*, 2016).

Whilst physical restraint is frequently considered necessary in cases of ABD, it is important to recognise that continued resistance against restraint increases the severity of metabolic acidosis, which combined with high catecholamine release may lead to patients struggling to the point of collapse (Paterson *et al.*, 2003). Cardiac arrest may occur suddenly. It has been suggested that the severe acidosis following a restraint episode is an important factor in fatal cases, alongside the presence of hyperthermia indicating loss of auto-regulation (Vilke *et al.*, 2012). Mortality and morbidity may be further complicated by hyperkalaemia, rhabdomyolysis and disseminated intravascular coagulation (DIC), for which close in-hospital monitoring is advocated (Gillings *et al.*, 2016).

Whilst the pathophysiology of ABD remains to be fully defined, and specific risk factors for death remain poorly understood (Vilke *et al., 2012)*, early recognition of possible cases is thought to be a key factor in improving outcomes. It is important however to recognise that ABD is a diagnosis of exclusion and there are several important differential diagnoses which should also be considered, such as head injury, sepsis and hypoglycaemia.

The priorities of management of a patient with suspected ABD are to minimise physical restraint with interventions such as verbal and non-verbal de-escalation with a view to achieving a state where clinical assessment and management can begin. Where de-escalation is not possible, a pharmacological approach may be required to prevent death and disability, noting that there is a lack of consensus on the best agent for tranquilisation. All patients with suspected ABD require emergency transfer to the Emergency Department as soon as possible, regardless of their treatment modality.

The College recommend that support in terms of investment and resources are made available to ambulance services to ensure that safe and appropriate care is available to all patients presenting with ABD.

The College recommend the following:

1. That pathways and guidance are developed with police services and emergency departments to support early recognition and the appropriate management of suspected ABD;
2. That training and education in recognising and management of potential cases of ABD is provided for all grades of pre-hospital clinicians and ambulance staff, including Emergency Operations Centre personnel;
3. That training takes places in partnership with police services, particularly in relation to restraint and de-escalation techniques;
4. That ambulance services ensure all relevant ambulance clinicians and staff receive adequate training and education on their role where restraint is required, including in relation to the requirements of the Mental Capacity Act (2005) and any subsequent amendments or other relevant legislation and in respect of providing a safe system of restraint in accordance with relevant national guidance;
5. That ambulance services develop a system approach to managing suspected ABD which includes pharmacological management. This should include sedation and potentially the use of anti-psychotics provided by suitably trained and skilled Specialist and Advanced Paramedics as defined by the clinical career education standards contained in the College of Paramedics Post-Registration Career Framework[1];
6. That ambulance services consider the appropriateness of including cooling mechanisms in the management of cases involving suspected hyperthermic drug reactions, and
7. That a national database of cases is developed to facilitate clinical audit, research and quality improvement.

References

Gillings, M., Grundlingh, J. & Aw-Yong, M., 2016. *Guidelines for the Management of Excited Delirium/ Acute Behavioural Disturbance (ABD).* UK: Royal College of Emergency Medicine.

Paterson, B., Bradley, P., Stark, C., Saddler, D., Leadbetter, D. & Allen, D., 2003. Deaths associated with restraint use in health and social care in the UK. The results of a preliminary survey. *J Psychiatr Ment Health Nurs,* 10(1), pp. 3-15.

Vilke, G.M., Payne-James, J. & Karch, S.B., 2012. Excited delirium syndrome (ExDS): Redefining an old diagnosis. *Journal of Forensic and Legal Medicine,* 19(1), pp. 7-11.

[1] https://www.collegeofparamedics.co.uk/publications/post-reg-career-framework