NHS England

Patient Safety Alert

Stage One: Warning

The importance of vital signs during and after restrictive interventions/manual restraint

3 December 2015

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Alert stage:	One - Warning

Whilst a range of guidance exists on positive interventions to reduce the risk of self-harm, violence and aggression in healthcare settings [1-3], restrictive interventions, including seclusion, manual restraint and rapid tranquillisation are used as the last resort to manage a person's behaviour if they are deemed to be at risk to themselves or others. Restrictive interventions can cause psychological and physical harm [1-3] and NICE guidance [3] provides advice on a range of factors that must be considered to minimise the risk of harm to the patient during and following a period of manual restraint.

Whilst the risk of death from positional asphyxia **during** restraint has been increasingly recognised, harm can also occur in the period **following** restraint from the effect of illicit substances, alcohol, prescribed medications (including any rapid tranquilisation) and co-existing medical conditions. People with diagnoses of severe and enduring mental illnesses are at increased risk of coronary heart disease, cerebrovascular disease, diabetes, infections, epilepsy and respiratory disease [4,5], all of which can potentially be exacerbated by the psychological and physical effects of restrictive intervention; between 2008-2012 there were 11 deaths within 24 hours of restraint in mental health settings in England [5].

The risk of death after restrictive interventions may also affect people without a previous history of mental illness. Delirious behaviour that requires manual restraint or rapid tranquilisation may indicate a life-threatening underlying medical cause or head injury [6, 7]. Between 2009 and 2015 there were 19 incidents reported to the National Reporting and Learning System (NRLS) as death or severe harm possibly associated with a period of restraint in acute/general hospital settings; a direct causal link was not always evident from the free text of the report. HM Coroner also issued a Regulation 28 report in March 2015 when a death occurred after restraint in an acute/general hospital setting.

The risk of death following restraint may be increased if the patient is also in seclusion or staff are avoiding close observation for fear of distressing the patient. NICE guidance gives advice on vital signs after manual restraint and very specific advice on the nature, frequency and duration of vital signs that should be taken after rapid tranquilisation [3]. Guidance related to vital signs in suspected delirium and head injury is also relevant [6-10] . However, vital signs are unlikely to be reliably carried out and documented unless the responsibilities for doing so are specified in local procedures, embedded in mandatory training, and routinely audited, including support for staff in managing challenging situations where attempts to record vital signs may lead to further violence or aggression.

Early response to any deterioration in vital signs is equally critical [9,10] and both the NICE guidance [3] and previous National Patient Safety Agency advice [11] emphasise the importance for all settings that undertake restrictive interventions to have access to emergency equipment (including defibrillators) and staff trained to respond to medical emergencies.

Actions

Who:

All organisations providing NHS-funded care where restrictive interventions or manual restraint are (or might be) used, including healthcare provided in prisons

When:

As soon as possible and by no later than 21 January 2016

1. Identify if vital signs during and after restraint are undertaken appropriately in your organisation.
2. Consider if immediate action needs to be taken locally to ensure vital signs are reliably recorded and acted on during and after restraint, and that an action plan is underway if required.
3. Circulate this alert to all relevant staff who may be called to support the restraint of patients or be responsible for their care afterwards.
4. Share any learning from local investigations or locally developed good practice resources by emailing: patient.safetyenquiries@nhs.net.

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Technical notes

NRLS search dates and terms

The NRLS was searched in March 2012 for incidents reported to the NPSA between 1 January 2009 and 21 March 2012 from incident location Lv 1: general/acute hospitals with the free text word 'restrain'. A second search was undertaken via SAS on 10 August 2015 for incidents with an incident start date from 01 May 2012 reported from incident location Lv 1: general/acute hospital, incident location Lv2: inpatient areas, with the following free text words: 'restrain' OR 'security'.

Terminology note

In mental health settings, the term 'observation' is typically used for visual observation, whilst in acute care settings 'observations' would typically mean physiological observations (pulse, temperature, etc.). The term 'vital signs' is used here to denote that more than visual observation is required; the detailed nature of both physiological and visual observations required can be found in the referenced guidance.

We acknowledge any definition of physical intervention/manual restraint is more complex in children, where holding safely [12] can be part of normal parental care, and note that some of the guidance below is only applicable to adults. Services providing NHS-funded care to children should be mindful of this, but the core actions required within the Alert – to review local practice and take action to improve safety if required – can be applied in principle.

References

1. Code of practice: Mental Health Act 1983. (2015) https://www.gov.uk/government/publications/code-of-practice-mental-health-act-1983
2. Department of Health (2014). Positive and Proactive Care: reducing the need for restrictive interventions. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/300293/JRA_DoH_Guidance_on_RP_web_accessible.pdf
3. NICE (2015). Violence and aggression: short-term management in mental health, health and community settings. https://www.nice.org.uk/guidance/ng10
4. The Royal College of Psychiatrists (2010). No health without public mental health. The case for action. http://www.rcpsych.ac.uk/pdf/Position%20Statement%204%20website.pdf
5. The National Confidential Inquiry into Suicide and Homicide by People with Mental Illness. Annual Report, University of Manchester, 2014. http://www.bbmh.manchester.ac.uk/cmhs/centreforsuicideprevention/nci/reports/Annualreport2014.pdf
6. NICE (2010). Delirium: Diagnosis, prevention and management. https://www.nice.org.uk/guidance/cg103
7. NICE (2014). Head injury: Assessment and early management https://www.nice.org.uk/guidance/cg176
8. The Glasgow Structured Approach to Assessment of the Glasgow Coma Scale http://www.glasgowcomascale.org/
9. NICE (2007). Acute illness in adults in hospital: Recognising and responding to deterioration. http://www.nice.org.uk/Guidance/CG50
10. Royal College of Physicians (2012). National Early Warning Score (NEWS): Standardising the assessment of acute illness severity in the NHS. https://www.rcplondon.ac.uk/projects/outputs/national-early-warning-score-news
11. National Patient Safety Agency (2008). Resuscitation in mental health and learning disability settings. NPSA/2008/RRR010. http://www.nrls.npsa.nhs.uk/resources/clinical-specialty/mental-health/?entryid45=59895&p=3
12. RCN (2010). Restrictive physical intervention and therapeutic holding for children and young people https://www.rcn.org.uk/__data/assets/pdf_file/0016/312613/003573.pdf (we understand The Council for Disabled Children have been commissioned by DfE/DH to provide additional guidance)

Stakeholder engagement

- Mental Health Patient Safety Expert Group
- Learning Disability Patient Safety Expert Group
- Medical Specialties Patient Safety Expert Group

For details of the membership of the NHS England Patient Safety Expert Groups see http://www.england.nhs.uk/ourwork/patientsafety/patient-safety-groups/

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