



LEARNING MATTERS

ISSUE 14
DECEMBER 2020

IN THIS EDITION

Airway Management

01

Cauda Equina Syndrome

02

Management of referrals from more than one source

03

Never Event: Incorrect prosthesis implanted during total knee replacement

04

Safer bowel care in patients with spinal cord injury or neurologic conditions

05

Get in touch

06

Link below to previous learning:

www.publichealth.hscni.net/publications

<http://insight.hscb.hscni.net/safety/>

Welcome to issue 14 of the Learning Matters Newsletter. Health and Social Care in Northern Ireland endeavours to provide the highest quality service to those in its care. We recognise that we need to use a variety of ways to share learning therefore the purpose of this newsletter is to complement the existing methods by providing staff with short examples of incidents where learning has been identified.



Airway Management

An older patient with dementia attended the emergency department following a fall at home. They had a number of comorbidities including Atrial Fibrillation, for which they were taking Rivaroxaban. They were triaged as category 2 'to be seen within 10 minutes', due to their level of pain. On initial assessment their clinical observations were within normal limits.

A Computerised Tomography (CT) scan identified a mediastinal and retropharyngeal haematoma. The patient deteriorated rapidly in the department and had a respiratory arrest. There was a delay in securing the patients airway which was felt to be below the standard expected. The patient was transferred to a regional unit but sadly passed away. There were multiple factors contributing to suboptimal airway management which included:

- 1) Difficult airway due to Retropharyngeal Haematoma
- 2) Staff being unaware of location of oropharyngeal airways
- 3) Lack of Laryngoscope blades; these had been used earlier in the day, and the trolley had not yet been restocked
- 4) Staff unfamiliar with equipment; Gum-Elastic Bougie (GEB) was handed to the doctor upside down and the Endotracheal (ET) tube was applied to the Bougie upside down

Although airway management was deemed substandard, the reviewing team felt it was unlikely to have contributed to this patient's outcome.

KEY LEARNING

- ✓ Local protocols which address difficult intubations should be adhered to
- ✓ Resus trolleys and difficult airway trolleys should have a documented check on a **daily basis**, and it should have subsequent **restocking** and a further documented check after each use
- ✓ All ED nursing staff should be trained in the use of intubation equipment so they can be of assistance when an anaesthetic assistant is not immediately available
- ✓ A dedicated anaesthetic assistant should be available, as per 2018 Association of Anaesthetists guidelines 'The Anaesthesia Team', available at the link below:

https://anaesthetists.org/Portals/0/PDFs/Guidelines%20PDFs/Guideline_The%20Anaesthesia%20Team_2018.pdf?ver=2019-01-08-163915-087&time stamp=1546967138246&ver=2019-01-08-163915-087×tamp=1546967138246



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Cauda Equina Syndrome

A patient attended the Emergency Department (ED) with acute on chronic back pain. They had a 1 year history of chronic back pain and no other co-morbidities of note. On the day of presentation they experienced a sudden onset atraumatic exacerbation of their back pain, experiencing 10/10 pain, which radiated down the left leg to the knee, with associated paraesthesia over the left leg.

The patient was assessed with the left knee being the focus of the pain, therefore a knee X-ray was undertaken to exclude a bony injury. Documentation from this assessment describes sudden onset left knee pain with paraesthesia. Power and reflexes normal. There was no documentation of bowel or urinary symptoms, and no digital rectal examination was performed.

The patient was handed over to another clinician and following discussion with the Emergency Medicine Consultant, they were informed there was no injury to the knee, and explained it may be a 'bulging disc' in their lower back, so was referred for a Magnetic Resonance Imaging (MRI). The patient was discharged pending an outpatient MRI. No clear safety net or discharge advice was provided.

Four days later and still experiencing severe pain, the patient sought medical advice in the private sector. An MRI was subsequently performed which indicated cauda equine compression at the height of L5/S1. The patient was urgently transferred to the regional spinal unit for surgery, following a diagnosis of Cauda Equina Syndrome. Ten months post discharge the patient continues to experience

ongoing pain, left leg weakness, bladder dysfunction and impaired sexual function.

KEY LEARNING:

Cauda Equina Syndrome (CES) is a relatively rare, but very disabling condition and can be a source of significant morbidity as well as litigation.

The British Association of Spine Surgeons and the Society of British Neurological Surgeons joint 'Standards of Care for Suspected and Confirmed Compressive Cauda Equina Syndrome (Dec 2018) is available at the link below:

https://www.spinesurgeons.ac.uk/resources/Documents/News/Cauda_Equina_Syndrome_Standards_SBNS_BASS%20-%20Dec%202018.pdf



A patient presenting with acute, or exacerbation of back pain or leg pain, with a suggestion of a disturbance of bowel/bladder function OR saddle sensory disturbance should be suspected as having CES



Suspected cases of CES should be urgently investigated; if imaging is not requested the reason should be clearly documented



MRI scanning should be available on an emergency basis for cases of suspected CES and should not be delayed unless there is a clinical reason



Normal bladder function does NOT rule out CES



Normal anal tone does NOT rule out CES



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Management of referrals from more than one source

A patient with diabetes attended the Eye Casualty complaining of visual disturbance over recent months, blurred vision in the right eye and photophobia. On clinical examination proliferative diabetic retinopathy was noted in the right eye and severe non-proliferative diabetic retinopathy in the left eye. Urgent pan retinal photocoagulation (PRP) laser therapy was carried out to treat the proliferative diabetic retinopathy and the patient's details were added to the waiting list for further PRP laser treatment.

The patient re-presented to Eye Casualty 12 weeks later complaining of further blurred vision and a stinging sensation to the right eye. The patient's eye condition had deteriorated further. A second referral for PRP was completed, at which time it was discovered they were already on the waiting list, following the initial presentation. 4 weeks after the second presentation they underwent a second PRP treatment; this was 16 weeks after the first presentation to Eye Casualty. Theoretically, if PRP laser

therapy had been provided within 4 weeks of the patient first presenting to Eye Casualty, this treatment may have inhibited the disease progression in this patient's right eye.

At the time of presentation there were two separate pathways for referring patients for PRP laser therapy. These were 'day case with procedure' and 'outpatient with treatment'.

These pathways have since been combined and have resulted in decreased waiting times for urgent treatments. A single waiting list has allowed for more effective triaging and waiting time management by the waiting list office and clinical team.

KEY LEARNING



Care should be taken by the receiving speciality when referrals are taken from more than one source to ensure that patients are triaged appropriately.



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Never Event: Incorrect prosthesis implanted during total knee replacement

A patient underwent an elective left sided total knee replacement using the LCS® complete knee system. The procedure was carried by the orthopaedic registrar under the supervision of their consultant. The procedure was carried out without incident, however on closing the surgical site a theatre nurse noted that the implant traceability stickers indicated a right sided prosthesis had been implanted, rather than a left sided prosthesis. On discovery of the error the incorrect right sided prosthesis was removed, and a left sided one was placed.

This incident is classified as a **Never Event** 'wrong implant/prosthesis' as per HSC Revised Never Events List, accessible at the link below:

<https://www.health-ni.gov.uk/sites/default/files/publications/health/HSC-SQSD-36-18.pdf>

In this case the WHO Surgical Safety Checklist was not fully adhered to and the laminate on 'wrong implant/prosthesis' which was implemented to prevent such never events, was not used. A review into the incident did not find any other contributory factors to this incident instead staff reflected that they did not follow the correct procedure.

KEY LEARNING



Use of the wrong implant or prosthesis is a 'Surgical never event'



Human Factors are a key contributor to Adverse Incidents



The risk of these can be reduced by following validated checklists and standard operating procedures



The WHO Surgical Checklist 'Time out' includes 'Anticipated Critical Events' which asks 'Are there any specific equipment requirements?'. While the exact size of prosthesis may not be known prior to surgery, the laterality could be indicated at this stage.



An 'implant pause' should be observed in all relevant cases in which scrub nurse and operating surgeon step away from the operating field to verify correct implants have been acquired, and in cases of more than one implant, that they are compatible. The implant type, size and expiry date should be read aloud

The HSCB/PHA has previously issued learning in relation to 'Mismatched/Incompatible components in elective orthopaedic joint replacement surgery' which is accessible at the link below:

[SQR-SAI-2019-046 \(AS\) Mismatched Incompatible components in elective orthopaedic joint replacement surgery \(hscni.net\)](https://www.hscni.net/SQR-SAI-2019-046-AS-Mismatched-Incompatible-components-in-elective-orthopaedic-joint-replacement-surgery)

The Healthcare Safety Investigation Branch (HSIB) also published a report on wrong site surgery titled: 'Investigation into the implantation of wrong prostheses during joint replacement surgery' (June, 2018) which provides details of their findings of a national investigation carried out on similar incidents. Both the final report and summary are accessible at the link below:

<https://www.hsib.org.uk/investigations-cases/implantation-wrong-prostheses-during-joint-replacement-surgery/final-report/>



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Safer bowel care in patients with spinal cord injury or neurologic conditions

Patients with spinal cord injury, especially those with spinal cord injury above T6, are particularly susceptible to the potentially life-threatening condition autonomic dysreflexia, which is characterised by a rapid rise in blood pressure, risking cerebral haemorrhage and death.

Patients with spinal cord injury or neurological conditions may have neurogenic bowel dysfunction, which often means they depend on routine interventional bowel care, including the digital (manual) removal of faeces (DRF). Lack of adherence to DRF can increase the risk of autonomic dysreflexia.

A search of the National Reporting and Learning System (NRLS) over a four-and-a-half-year period identified 61 reports of significant delays in providing DRF or an appropriate alternative, including three cases of autonomic dysreflexia.

Key issues identified were:

- ▶ Lack of staff with the training and experience to perform DRF or an inability to identify staff with the appropriate training

- ▶ Unclear local policies stating who could perform DRF
- ▶ Lack of knowledge of relevant clinical guidance
- ▶ Uncertainty over requirement for and provision of training
- ▶ Uncertainty over using alternative methods of bowel management
- ▶ A mistaken belief that this type of care constitutes assault

KEY LEARNING:

Autonomic dysreflexia is a medical emergency seen most commonly in patients with spinal cord injury. It is the result of an uninhibited sympathetic nervous system response (commonly known as fight or flight response). The cause of this response is due to a noxious stimuli below the level of spinal cord injury, most commonly bladder or bowel distension.

Signs and symptoms include: hypertension, tachycardia, and headache. Note that on examination, signs may vary above and below the height of injury. Signs seen in areas above the level of injury include flushing and sweating; signs seen below the level of spinal cord injury include pallor and skin cool to the touch.



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Safer bowel care in patients with spinal cord injury or neurologic conditions (*continued*)

Management:

- ▶ Sit the patient up
- ▶ Loosen or remove tight clothing (tight clothing is a potential cause)
- ▶ Regular, frequent blood pressure monitoring
- ▶ Check for signs of constipation or haemorrhoids
- ▶ Check urinary catheter for blockage or full catheter bag, or consider inserting catheter if patient is not catheterised
- ▶ If systolic blood pressure >150mmHg start pharmacological management

Other patient groups susceptible to autonomic dysreflexia include severe stroke, severe Parkinson's disease, multiple sclerosis, cerebral palsy or spina bifida.

References/resources:

1. NHS Improvement Patient Safety Alert (July, 2018): Resources to support safer bowel care for patients at risk of autonomic dysreflexia
[Patient Safety Alert - safer care for patients at risk of AD.pdf \(england.nhs.uk\)](https://www.nhs.uk/consult/patient-safety/alerts/patient-safety-alert-safer-care-for-patients-at-risk-of-ad.pdf)
 2. NHS Improvement: [Resources to support safer bowel care for patients at risk of autonomic dysreflexia | NHS Improvement](#)
 3. [Tracy's story - YouTube](#) Tracy shares her personal story of the fear she experienced when hospital staff didn't listen to her advice regarding her symptoms of autonomic dysreflexia
- ▶ Autonomic dysreflexia: Royal National Orthopaedic Hospital
- <https://www.rnvh.nhs.uk/services/spinal-cord-injury-centre/medical-management-advice/autonomic-dysreflexia>

If you have any comments or questions on the articles in the newsletter please get in contact by email at learningmatters@hscni.net

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