Ashford and St. Peter's Hospitals
NHS Foundation Trust

Autonomic Dysreflexia – Safe Management of Bladder and Bowel Care Procedure

CONTENTS

1. AIM

Autonomic Dysreflexia (AD) is characterised by a sudden rise in blood pressure which may lead onto a cerebral haemorrhage (stroke) and even death. It must always be treated as a medical emergency. Those that are at risk of AD are individuals with a spinal cord injury above T6.

Within a normal functioning nervous system, blood pressure rises when the body encounters a harmful stimulus. The nervous system responds via the autonomic nervous system, which results in dilation of the blood vessels, this in turn lowers the blood pressure and the body circulation remains in a safe and static state.

Patients with a spinal cord injury located at Thoracic spinal level 6 (T6) the ability of the autonomic nervous system to respond normally is affected. As a result the autonomic system cannot lower the blood pressure in response to the pain or discomfort below the level of the spinal cord injury. Blood pressure will continue to rise until the stimulus is removed. This can place the patient at risk of cerebral haemorrhage if not managed appropriately.

Patients with spinal cord injuries or neurological conditions may have neurogenic bladder or bowel dysfunction, which often means they need to have routine interventional bladder and bowel care, including procedures such as Digital Removal of Faeces (DRF) and catheterisation. This intervention may stimulate the response so it is vital that all clinical staff have an awareness of AD and the actions required to manage the situation as described in this procedure. Staff must be competent in undertaking bladder and bowel management.

Baseline blood pressure must be obtained and recorded in clinical care records and a reminder (alert) also documented to ensure all staff are aware of the potential risk.

A clear, individualised care plan should be in place for safe management of bladder and bowel care.

Non-adherence to a patient's usual bladder and bowel care regime can cause an onset of AD. Therefore it is vital that bladder and bowel care is a priority for all these patients to ensure that their health and dignity are maintained.

2. SCOPE

This procedure applies to all staff, whether in a direct or indirect patient care role. Adherence to the procedure is the responsibility of all Trust staff, including agency, locum and bank staff.

Autonomic Dysreflexia is not a disorder of bladder and bowel dysfunction and this procedure should be used as part of a comprehensive and wide care plan developed for the individual patient in relation to their own spinal cord injury and consequence of this.

3. LINK TO OVERARCHING POLICY

Continence Policy

4. REFERENCES / FURTHER READING

National Patient Safety Agency 2004 Patient briefing and patient notice 'bowel care for patients with established spinal cord lesions
Archived Patient Safety Alert

National Institute for Health and Care Excellence clinical guideline 2014 [CG49] Faecal incontinence in adults: management https://www.nice.org.uk/guidance/cg49

Royal College of Nursing 2012 Management of lower bowel dysfunction, including digital rectal examination and digital removal of faeces.

The resources to support the implementation of this Alert are available on the NHS Improvement website
https://improvement.nhs.uk/resources/resources-to-support-safer-bowel-care-for-patients-at-risk-of-autonomic-dysreflexia/

5. PROCEDURE

5.1 Symptoms of AD:

- Flushing
- Sweating and goose pimples
- Pounding headache
- Peripheral cyanosis
- Blurred vision and dizziness
- Shortness of breath
- Slow pulse

Staff must consider AD and assess for potential causes listed below, as early recognition of AD is essential in order that treatment can be initiated

immediately.

5.2 Common causes:

Bladder:-

- Distended bladder
- A kink in the catheter
- An over-full leg bag
- Blockage or obstruction that prevents urine flowing from the bladder
- Urinary tract infection or bladder spasms
- Bladder stones

Bowel:-

- Distended bowel which can be due to a full rectum, constipation or impaction
- Any stimulation to the rectum including digital stimulation or digital removal of faeces
- Haemorrhoids
- Anal Fissures
- Stretching of rectum or anus or skin breakdown in the area

Examples of other causes:

- Pressure sores
- Sexual activity
- Gynaecology: menstrual pain, labour and delivery
- Bone fractures below the level of the spinal cord injury
- Pain and trauma
- Acute conditions such as gastric ulcer
- Deep Vein Thrombosis
- Tight clothing

Any noxious stimuli may trigger an autonomic response and therefore an AD event.

5.3 Treatment:

If AD is suspected:

- Assist the patient to sit upright as soon as possible
- Record BP
- If the systolic BP is elevated (>150mmHg) it should be treated until the cause is found and eliminated
- Give GTN spray or nifedipine as prescribed

Once the cause has been addressed continue to monitor blood pressure. This **MUST** be monitored at least 2 hours after it has been stabilised.

Identify and remove the cause:-

Bladder:-Do not attempt to administer a catheter maintenance solution as this could increase the blood pressure

If the patient has an indwelling urethral or suprapubic catheter, check the following:

- Is the drainage bag full?
- Is the tubing kinked?
- Is the drainage bag at a higher level than the bladder?
- Is the catheter blocked?

After correcting the obvious problem, and if the catheter is still not draining after 2-3 minutes, change the catheter immediately.

Bowel:

A rectal examination is required to ascertain if the rectum is full and if so to remove the blockage. This is done by:

- Donning personal protective equipment (PPE)
- Inserting a gloved finger lubricated with an anaesthetic lubricant, such as 2% lignocaine gel (Instillagel) into the rectum.
- If the rectum is full insert additional lubricant.
- It is necessary to wait a minimum of 3 minutes to in order to reduce the sensation in the rectum. Not waiting for this length of time prior to performing digital stimulation (in order to trigger peristalsis) and DRF may worsen the AD. (Please refer to the DRE procedure)

Any bowel care procedure can trigger an AD response. If AD symptoms develop whilst performing a Digital Examination (DRE), Digital Removal of Faeces (DRF) or Digital Stimulation then the procedure must be stopped immediately and only resumed after the symptoms subside.

If Dysreflexia persists or no cause can be found, then an emergency medical assessment is required.

5.4 Prevention:

Prevention is essential as most causes can be avoided by:

Bladder:-

- Change catheter regularly to prevent blockage
- Keep catheters free of kinks, clean and ensure the intermittent catheterisation regime is followed to avoid an overfull

bladder

- Check signs of urinary tract infection (UTI's)
- Have regular bladder and bowel check-ups with either the GP, Community Nurse or Spinal Injuries Unit
- Drink Sufficient fluids

Bowel:-

- Maintain a regular bowel management plan. If you have any concerns / queries about the bowel management plan, liaise with the spinal injuries or neurorehabilitation consultant involved with the patients care.
- Adequate fibre intake to help avoid constipation
- Get treatment for haemorrhoids

5.5 Autonomic Dysreflexia (AD) Emergency Kit

Ensure the patient has an AD kit available with them, this should contain:

- Catheter and supplies for catheterisation
- Medication prescribed for autonomic dysreflexia (Glyceryl tri-nitrate(GNT) Spray or Nifedipine)
- Anaesthetic lubricant like 2% lidocaine gel
- Dressing pack - including sterile gloves and apron
- Wet wipes and disposable bag