Back to Basic's

A guide to the basic care of a Spinal Cord Injury Patient

(Outside of specialised SCI Centre's)

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Introduction

Spinal ANP's in the National Rehabilitation have noted an expediential increase in calls from patients, families and healthcare professionals re accessing spinal cord injury/dysfunction (SCI/D) specific care in acute/ longstay hospitals. Areas include autonomic dysreflexia (AD), neurogenic bladder/bowel and skin care.

Because SCI/D is relatively rare in the general population , many healthcare professionals may not have experience managing individuals with these disorders, leading to significant secondary complications. These complications are wide ranging and can be a major cause of morbidity in the SCI/D population.

Complications that frequently occur in an SCI/D patient

Autonomic Dysreflexia (AD) in lesions above T6

Respiratory difficulties; failure / infection /inability to clear secretions

Pressure injuries / sores

Deep vein thrombosis

Neurogenic bowel complications – constipation (causing AD in lesions>T6) & incontinence (causing pressure injuries/sores)

Neurogenic bladder complications – retention (causing AD in lesions > T6) infection, incontinence

Autonomic Dysreflexia

AD is a medical emergency which occurs in individuals with a spinal cord injury or dysfunction at the neurological level of T6 or above. It is characterised by the acute elevation of arterial blood pressure and bradycardia/tachycardia. Other symptoms include pounding frontal headache, sweating, blotchy skin above the SCI/D level, anxiety, nasal congestion, blurred vision and goosebumps below the level of the SCI/D. (Allen & Leslie,2022)

Autonomic Dysreflexia (SCI/D patients above T6)

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Irritation below the level of the SCI/D e.g., overstretched bladder/bowel, sends signals up the spine

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This causes a sympathic response; constricting the blood vessels leading to an increase in BP

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The increases BP is detected by sensors in the heart & baroreceptors in the neck which send signals to the brain

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This slows the heart rate down and dilates blood vessels above the SCI/D injury level

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This attempted compensation message cannot pass through the damaged cord and BP continues to rise

Treatment

Monitor BP until symptoms resolve

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Sit patient upright and loosed tight clothing (abdominal binder/leg straps)

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Exclude cause (Bladder distension is most common cause with bowel being the second most common cause. For faecal mass in rectum: gently insert gloved finger covered in lignocaine gel & remove)

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If symptoms persist and cause is unknown – take prescribed medication Nifedipine 10mgs using a 'bite & swallow' method

AD if left untreated may cause seizures, stroke and cardiac arrest

Neurogenic Bowel Pathway

Areflexic / Flaccid Bowel

Injury or damage to the conus medullaris or cauda equina at or below the first lumbar vertebrae (flaccid Rectal Tone)

Can be performed over the toilet or left lateral position

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Add stimulant laxative Senna/Bisacodyl (nocte) to counteract slow transit

Add osmotic laxative Macrogol/lactulose (mane/BD)

Aim Type 2-3 on Bristol Stool scale

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Review contributing medication

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Gastrocolic Reflex – plan bowel care 20-30 mins after breakfast

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Abdominal Massage

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Digital Removal of faeces (DRF)

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Digital Rectal Examination (DRE) to ensure rectum is empty

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Close attention to diet and fluids (Kurze, et al., 2022)

NB – Always gain patient consent

Link to educational video demonstrating the procedure in management of neurogenic bowel care

https://www.nrh.ie/healthcare-professionals/healthcare-professional-disciplines-nrh/

Reflexic Bowel

Injury or damage to the spinal cord at or above T12 (Rectal tone present)

Left lateral position

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Add stimulant laxative Senna/Bisacodyl (nocte) to counteract slow transit

Add osmotic laxative Macrogol/lactulose (mane/BD).

Aim Type 3-4 on Bristol Stool scale

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Review contributing medication

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Gastrocolic Reflex – plan bowel care 20-30 mins after breakfast

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Abdominal Massage

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Digital Rectal Examination (DRE) to check for the presence of stool / remove if present

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Insert rectal suppository x2 (Glycerol/Bisacodyl)

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Digital Rectal Stimulation (DRS)

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Digital Removal of Faeces (DRF)

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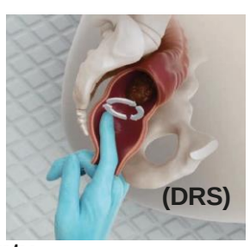
Digital Rectal Examination – To ensure the rectum is empty



NB – Always gain patient consent

Skin

A patient with SCI/D may not feel pain where a pressure injury is forming , which means the injury can escalate within hours before anything is noticed. They may not be able to self examine skin or adjust their position , to pressure relieve independently. Early prevention is crucial. (The Ministry of health Quality & Safety Commission, New Zealand, 2021).

SSKIN Bundle (HSE,2018)

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Skin Inspection 2-4 hourly especially over bony prominences

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Surface- Always use specialist mattress and cushion to reduce pressure

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Keep moving –Change position 2-4 hourly

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Incontinence –Adhere to above bowel/bladder pathway

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Nutrition –attention to diet / fluids

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Avoid shear and unrelieved pressure – skin damage can develop in less than 2 hours

Neurogenic Bladder

Neurogenic bladder – leave catheter insitu unless the patient is competent to self catherise .

Most established SCI/D patients are expert in their own care which means it is important to consult with them on managing their care.

Enquiries

Contact the National Rehabilitation Hospital's Spinal ANP's

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