Neurogenic Bowel and Bladder Management

CNC SPOT
September 2013
Bowel Management
Upper Motor Neuron Lesions
UMN

- Loss of Control
- Loss sensation
- Reflex intact
- Increased spasticity
  - External sphincter dyssynergia

(Zejdelik, 1992)
Lower Motor Neuron Lesions  LMN

- Loss of anal tone
- Loss of sensation
- No reflexes
- Abdominal Straining  Intact
- Cauda equina syndrome
- Pelvic fractures

(Zejdelik, 1992)
Goals of Bowel Management

- Regular, effective and efficient emptying of the lower bowel
- Prevent incontinence
- Prevent constipation
- Prevent long term complications
Factors Effecting Bowel Function

- Timing / Routine (Gastro-colic Reflex)
- Adequate Fluid Intake
- Healthy Diet – high in fibre
- Exercise
- Medications-oral
  - rectal
The 5 Rights in Bowel Management

- Consistency
- Amount
- Place
- Time
- Trigger
The Right Consistency and Amount

- UMN –type 3-4
- LMN –type 2-3 to aid in effective manual removal.
- Coloxyl tablets and senna tablets
- Fibre Intake 15g
- Other medications
- Slow progress with change

(QSCIS, 2005)
Foods That May Stimulate the Bowel

- Peanuts
- Juices (especially orange, pear and apple)
- Hot Spices esp. in Indian and Thai Curries
- Alcohol
- Some fruits eg peaches, apricots
Complications

- Constipation
- Diarrhoea
- Haemorrhoids
Constipation

- Irregular, usually hard bowel motions
- Swollen or hard abdomen
- Lack of appetite, nausea or vomiting

- Increase water intake (3-4 litres/day)
- **Maintain** normal bowel regime
- Include **stool softeners** if necessary
- Seek medical advice if does not resolve
Diarrhoea

- Loose, frequent bowel motions
- feeling unwell, rumbling tummy
- is it overflow from constipation
- Increase fluids to avoid dehydration
- Find cause for diarrhoea
  - Medication related – too much softener, antibiotics
  - Diet related – spicy curry the night before!
  - Illness – eg gastroenteritis
- Seek medical advice if diarrhoea doesn’t settle in 24 hours
Haemorrhoids

- Bulging blood vessels caused by constipation, hard stools or lack of lubricant
- Grape-like lumps in or around the anus, that may or may not bleed, or cause pain.
- Adapt regime to create softer stools, use more lubricant, or haemorrhoid cream (as prescribed)
- May need to seek medical advice if bleeding/pain does not settle, or becomes worse than usual
- Some surgical options available for extreme cases
Making Changes to Bowel Regime

- Change only one factor of bowel regime at a time
- Give any changes time to show it’s true effect
- Find out what works for your client
Medications

- **Oral medications** “push” from above
  - many different types with different actions
  - your bowel can become dependant on these over time
- **Rectal medications** help “empty” from below
  - also many types with different actions
  - some lubricate, some irritate the bowel
  - the stimulation of insertion is often enough to start the bowel’s emptying reflex
Assistive Devices for Bowel Management

- The suppository gun
- The enema inserter
- Mirrors
- Shower Commode Seat design
Bladder Management
The effects of SCI on Bladder Function

- Kidneys and ureters work normally
- The bladder and sphincter muscles may not work (depending on level of injury/complete or incomplete injury)
  - Injuries above T12 (automatic/reflexive bladder) automatically empties, but not completely or on command
  - Injuries below T12 (flaccid bladder) tends not to empty at all, or very little
Methods of Bladder Management

- Indwelling Catheter (IDC)
- Suprapubic Catheter (SPC)
- Tapping and Expressing (T&E)
- Intermittent Clean Self Catheterisation (ICSC)
IDC/SPC

- Insertion of a tube to continually drain the bladder
  - urethrally for IDC
  - through the lower abdominal wall for SPC
- High risk of infection
- Risk of “blocking” of tube
Urine flows down through catheter to empty the bladder of urine.
IDC vs SPC

- More conventional
- Easily removed

- "Clean" tube enters through "dirty" region
- Potential for damage to urethra (long term)

- Cleaner
- Easy to access
- Frees genitals
- Reversible

- Initially surgical procedure
- Will leave small scar if removed
- Potential for abdominal infection
Care of the IDC/SPC

- **Adequate fluid intake** (2-3 litres/day)
  - Flushes the bladder, decreasing risk of UTI

- **Good Hygiene Practises**
  - Vigilant handwashing
  - Perineal washes
  - Clean clothing
  - Clean Leg Bags regularly

- **Regular Catheter Changes** (every 6 weeks)
ICSC

- The periodic passing of a catheter to drain the bladder with removal of the tube after the bladder is empty
- Depends on hand function and other skills such as balance, memory.
Complications

- **Urinary Tract Infection (UTI)**
  - contamination of urine with bacteria

- **Bladder & Kidney Stones**
  - Build up of calcium salts

- **Kidney Failure**
  - Reduction of renal function with build up of nitrogen waste in the bloodstream
UTI – signs and symptoms

- Smelly urine
- Cloudy or sedimented urine
- Fevers
- Increased spasm
- Blood in the urine
- Burning/itching with passing of urine
- Leaking of urine between catheters or around IDC/SPC
- Increased occurrence of Autonomic Dysreflexia (with no other apparent cause)
UTI – What Do I Do?

- Increase fluid intake as tolerated
- Visit GP – particularly if unwell – take a urine specimen along
- Antibiotics as prescribed
- Pay particular attention to hygiene and cleaning of equipment
- May need a catheter change
Assistive Devices for Bladder Management

- Engen splint
- Mirrors
- Torches
- Leg spreaders
- Penis holders
Assistive Devices for Bladder Management

- Electric leg bag emptier
- Penile Clamps
  - LMN injuries who do self catheterisation

www.sayco.com.au
www.ilcaustralia.org
Bladder and Bowel Relationship

- Constipation decreases bladder capacity
- Straining for bladder emptying can trigger bowel movements especially with LMN injuries
- Faecal contamination can cause infection
- Antibiotics for bladder infections can affect bowel routines
Summary

- SCI can affect both sensory and motor aspects of the bowel and bladder routine.
- Think about the ‘big picture’ with continence management in SCI.
- Management for upper motor neurone and lower motor neurone lesion injuries are different.
- Bowel and bladder are inter-related.
References


Craig Hospital (2011) *Bladder cancer* publication #704


Any Questions?