BLADDER MANAGEMENT AFTER A SPINAL CORD INJURY

Know your bladder type: is it SPASTIC or FLACCID?

ANATOMY

- **Kidneys:** Filter waste and make urine
- **Ureters:** Connect kidneys to the bladder
- **Bladder:** Stores urine
- **Sphincters:** Narrow, circular muscles surrounding the urethra
- **Urethra:** Passage for urine to leave the body

SPASTIC BLADDER
Upper Motor Neuron Injury

- Injuries above T12
- Voiding reflex is intact between bladder and spinal cord
- Increased bladder muscle and sphincter tone
- Messages are blocked to the brain resulting in frequent involuntary bladder emptying
- Sphincter muscle may not open when bladder squeezes to empty
- May have incomplete bladder emptying

FLACCID BLADDER
Lower Motor Neuron Injury

- Injuries below T12
- Voiding reflex is not intact between the bladder and spinal cord
- Decreased/loss of bladder muscle and sphincter tone
- Bladder will continue to fill (may leak urine when it gets too full)
- Unable to empty bladder voluntarily

FLUID INTAKE GUIDELINES

- **WATER**
- Limit caffeine and alcohol
- Intermittent catheterization:
  - drink 2L throughout the day
  - Indwelling catheter:
  - drink 3L throughout the day

AUTONOMIC DYSREFLEXIA (AD)

- May develop in injuries at T6 and above
- **MEDICAL EMERGENCY** - Sudden rise in blood pressure in response to a problem below the level of injury i.e. full bladder

What to do:
- Raise head of bed or sit upright
- Look for and remove cause
- Monitor blood pressure
- Loosen tight clothing
- Seek medical help if unable to find the cause
- Carry an AD wallet card
- Educate family, friends and care givers

TIPS

- Keep your skin dry
- Empty your leg bag when it’s 3/4 full
- Keep your bladder volume less than 500 mL
- Follow-up with your urologist yearly
- Limit your use of antibiotics
- Ensure all urine cultures are taken directly from the bladder
- Know your supply resources
- Talk to your peers
- Learn to problem solve!

*Injuries at T12 may be spastic or flaccid*

BLADDER EMPTYING METHODS

- **Intermittent Catheterization**
  - Catheter inserted into the bladder every 4-6 hours
- **Indwelling Catheter**
  - Stays in place with an inflated balloon
  - Continuous drainage into a collection device
- **External Condom Catheter**
  - Worn over the penis
  - Attached to a collection bag

AVOIDING INFECTIONS

- Maintain adequate fluid intake
- Empty your bladder regularly
- Learn correct catheter technique
- **Possible** signs and symptoms:
  - Fever, chills, fatigue
  - Sediment or mucus
  - Cloudy urine
  - Strong smelling urine
  - Bloody urine
  - Increased spasms
  - Leaking of urine

Developed by Joshua Silao and Brandon Wong, Langara Nursing Students, in collaboration with GF Strong SCI Educators, November 2015