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Teaching Independence with Bladder
and Bowel Management

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Objectives

- Learn about different populations who may use self-catheterization and bowel program
- How OTs can work with nursing to teach self-catheterization and bowel program techniques
- How to assess a patient's readiness to learn self-catheterization and/or bowel program independence
- Learn strategies/adaptive equipment used to teach self-catheterization and bowel program independence

Populations

Who?

Regular self-catheterization and bowel program has to take place for patients who cannot empty the bladder or bowels on their own. It allows the person to work and participate in their normal activities of daily living and to prevent kidney infection and other renal disorders, as well as accidents and/or constipation.

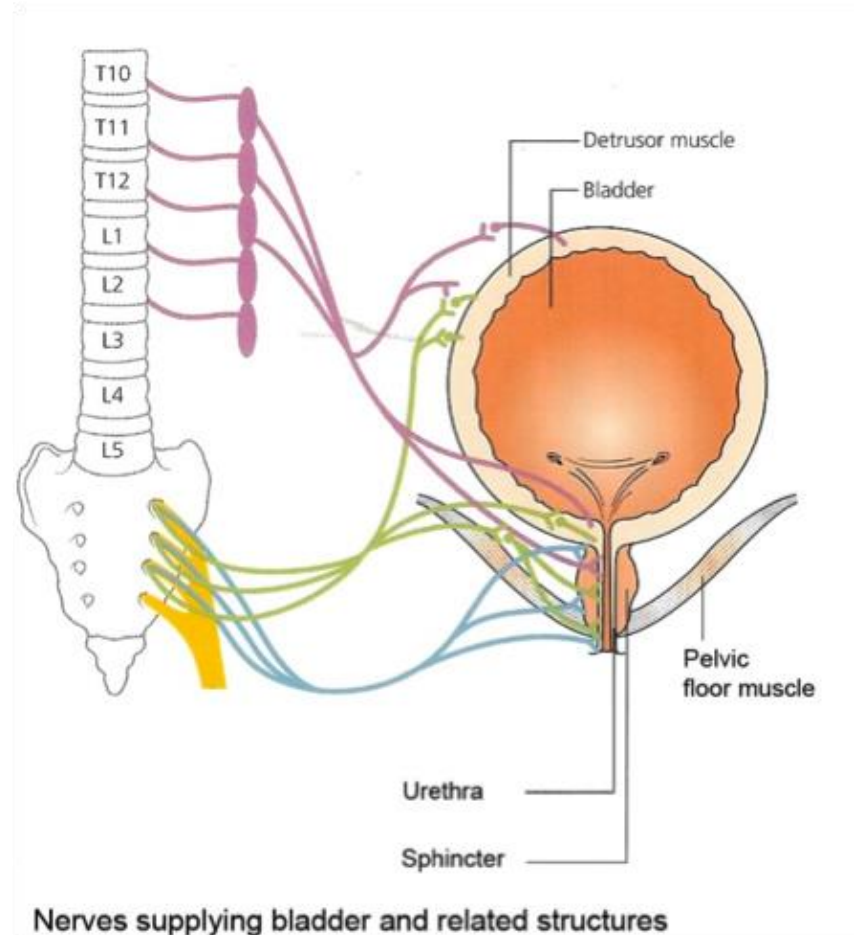
Neurogenic Bladder

- The bladder is a hollow organ located in the pelvis, or lower abdomen. The bladder has two important functions:
 - It helps to store urine until it is full.
 - When the bladder becomes full, there is an urge to urinate, and the bladder empties completely without any leakage.
- When the conditions of the nervous system affect the bladder, it is called “neurogenic bladder.”

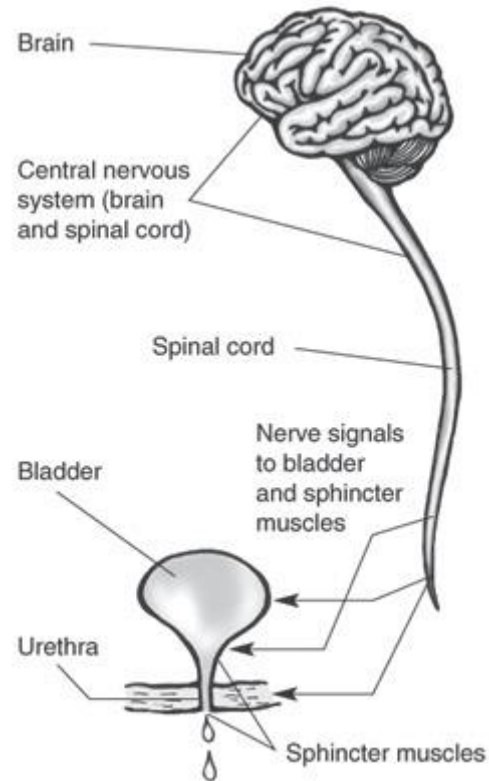
Neurogenic Bladder

- There are two major types of bladder control problems that are associated with a neurogenic bladder. Depending on the nerves involved and nature of the damage, the bladder becomes either **overactive** (spastic or hyper-reflexive) or **underactive** (flaccid or hypotonic).
- **Examples of causes of neurogenic bladder:**
- spinal cord injuries or spinal surgeries
- diseases that affect the nervous system
- central nervous system tumors
- spinal congenital (present at birth) abnormalities ie. Spina bifida

Neurogenic Bladder



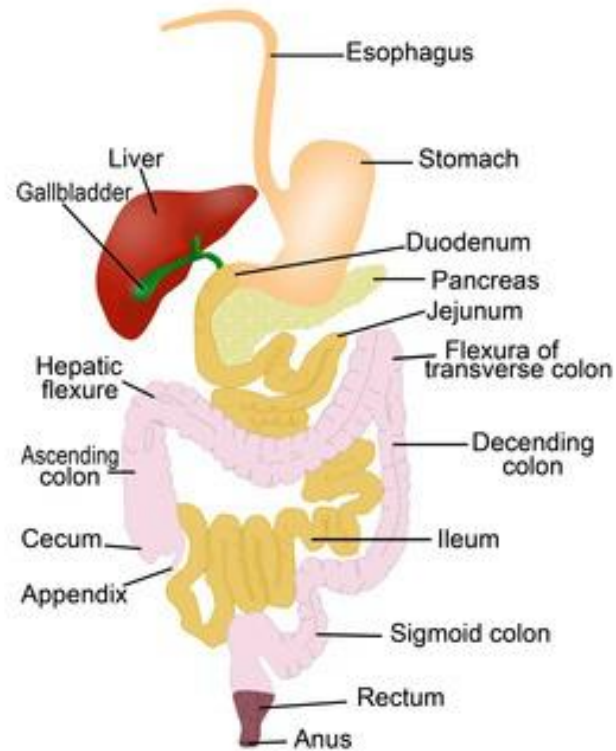
Neurogenic Bladder



<http://www.bing.com/images/search?q=neurogenic+bladder&view=detailv2&id=59C5A058FEDFD1B7E3DB48061DEE025CAE17ABB0&selectedindex=14&ccid=eeKarbuK&simid=607987741561260781&thid=OIP.M79e29aadbb8a55b7d522669687960e75o0&mode=overlay&first=1>

Neurogenic Bowel

DIGESTIVE SYSTEM



Neurogenic Bowel

- Simply means the nerves to the colon are damaged and do not work to full capacity.
- A neurogenic colon does not move waste through as quickly, which gives that colon much more time to do its job of absorbing liquid. This creates large, hard stools, which in turn stretch out the colon. The bowel can't tell the brain that it is full, so the brain can't tell the bowel to empty at the right time.
- Once the bowel is full stool, it usually starts pushing through the anus involuntarily, causing incontinence.
- The goal of any bowel management program is to ensure complete and predictable elimination to reduce the risk of incontinence, constipation, and other GI problems.

How OTs and nurses team teach self- catheterization

Team teaching

- Inpatient vs. Intensive Outpatient vs. Outpatient Teaching
- Coordinate therapy times with catheterization times and coordinate with assigned nurse
- Nurse can work on navigating the catheterization while the OT works with the patient on watching with a mirror and positioning
- Manage potential leaking and what type of barrier protection to use ie. Diaper, pull-up, pad, etc.
- A different perspective, especially when you've tried everything
- Nursing can supervise and advise on sterile vs. clean technique; upgrading once certain skills are developed; anatomical barriers to catheterization when other skills are there

Team teaching

- Sterile technique
 - Most common in hospitals
 - Genital disinfection
 - Use of sterile gloves, catheter insertion kits, and catheters
- Clean technique
 - Hand washing with soap and water
 - Can use cleansed, re-used catheters or single use
 - Cleanse perineum if fecal matter or other waste present
 - Less expensive, more practical, less time-consuming

Resources

- Vendors come to our hospital and do in-services for the team: including doctors, nurses, social workers, and therapists; all are involved in the child's care
- Coloplast is the company we use primarily. They also have excellent online resources:
 - http://www.coloplast.us/Bladder-and-Bowel/Consumer/Spina-Bifida/#section=Introduction-to-spina-bifida_239236

Assessment of patient's readiness for self-catheterization

Sitting Balance: (circle)

UE Support Additional Support	Good Fair Poor 0 1 2 occasional constant _____
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Transfer/ Mobility Skills:

Primary means of Mobility: _____ **Ambulates Y/N** **Type of w/c:** Manual/ Power/NA

	Ind.	Assist	Comments
Transfers to _____ <i>(primary cathing location)</i>			
Short Sit			
Long Sit			
Ring Sit			
Shift Body Up/Down			
Weight shift with Posterior Reach			

Adequate Hip Abduction (females): Y/N

Hand Skills:

Grip/Pinch Strength

Females

Grip			Lateral			_____			Finger Abduction	
	R	L		R	L		R	L		Adequate
1			1			1			R	Yes/No
2			2			2			L	Yes/No
3			3			3				
ave			ave			ave				

Grasp Pattern: (check or circle)

	Primitive Raking	Ulnar Grasp	Radial Grasp	Pinch	Pincer	Other _____
Pellet		Digital/ Palmar	Digital/ Palmar	Lateral/ 3 point/	Inferior/ Fine	
Block		Digital/ Palmar	Digital/ Palmar	Lateral/ 3 point/	Inferior/ Fine	
String/ Catheter		Digital/ Palmar	Digital/ Palmar	Lateral/ 3 point/	Inferior/ Fine	



In Hand Manipulation: Right hand ___/5 marbles [finger→palm; palm→finger] Shifts: Y/N
Left hand ___/5 marbles [finger→palm; palm→finger] Shifts: Y/N

Stereognosis: Right hand ointact oimpaired ___/5 (____, _____, _____, _____, _____) oabsent
Left hand ointact oimpaired ___/5 (____, _____, _____, _____, _____) oabsent

String Beads: ___/ 5 independently ___1/2" ___1" ~and/or~ **Strings Cath thru Straw:** Y/N

Open/ Close: Flip top: Y/N Screw top: Y/N Tear packet: Y/N

Visual Perception Skills (circle): oAdequate oNeeds Further Assessment

Comments: _____

Cognitive Skills:

Attention: oAdequate oFair oPoor

Behavioral Observations: _____

Problem Solving: oAdequate oFair oPoor

General Observations: _____

Sequences: ___/8 self-cath flash cards ~**OR**~ ___/8 alternative flash cards

Goals: _____

Therapist: _____



Considerations

- Is the whole family on board?
- Motivation? For the child? For the caregiver(s)?
- Cognition and safety factors
- Positioning and mobility challenges
- Anatomy and body composition
- Prone to UTIs

Equipment & Adaptive techniques

Teaching kids to be **INDEPENDENT**



****The presenter does not have any affiliation with any of the discussed products or resources and does not intend to endorse any. They are items that have been successful for myself or others that could be recommended.****

Treatment Ideas to Promote Early Involvement & Independence with Catheterization

- Use adaptive equipment, methods or clothing as needed.
- Fine motor activities to improve hand function for self-catheterization and involve child in steps.
- Increase functional mobility for increased independence with tub/toilet transfers.
- Use of visual cues such as sticker charts, reminder signs of steps or cell phone reminders, backward/forward chaining.
- Encourage families to have children use bedtime and weekends to practice, since it can be hard to contend with time constraints before school when kids may need more help.

Teaching Tools

- Flashcards
(http://www.coloplast.us/Global/3_Bladder%20and%20Bowel/Pdf/Wee%20Game_Playing%20cards_Girl_A4.pdf)
- Cathing doll
- Online teaching tools
- Videos
- Anatomy review
- Hand sanitizer wash activity
- Reading books and coloring books on the topic
- Talking with others to see what has worked for them
- From bed, floor, wheelchair, and toilet levels
- HEP for variety of related skills

Promote Early Involvement & Independence with Bowel Management

- Recognizing and reporting bowel accidents or soiled clothing
- Removing or replacing clothing
- Inserting suppositories
- Assembling supplies
- Cleaning up supplies and restroom
- Participating in bowel washouts or increasing personal responsibility for bowel program
- Communicating with school nurse or trusted employee or friend

Adaptive equipment for self-catheterization and skin inspection



Types of Catheters and Adaptations

- Catheter in bag/
Closed system
- SpeediCath®
- Mitrofanoff
Appendicovesicostomy



Durable medical equipment (DME) for the shower/bathtub and/or toileting



DME for toileting



*Cushie Tushie



*Padded toilet ring reducer



ROHO® products

A very popular potty seat for small children is the **Prince Lionheart Weepod**. (Some use the **Weepod** and others use the **Weepod Basix**.) They can be purchased online and in store at many retailers, including Amazon, Kohls, Target, and Walmart.



For larger children who outgrow toddler potty seats, a popular option is the **Special Tomato Reducer ring**. It can be purchased in elongated or round shapes depending on the shape of your toilet. Adaptivemall.com usually has this “on sale” for about \$70.



Another piece of equipment that is popular for children who need trunk support or help with balancing on the toilet is the **Rifton Toileting System**. Parents also like it for the cone enema because you can get your hand underneath the child a little easier. Often, insurance will cover this equipment.



Besides a proper seat, you may also want to provide the child with a **stool on which to rest his feet**. Feet that are allowed to dangle for prolonged periods often lose circulation (especially true with Spina Bifida) and turn blue and cold. Many people also bring a TV tray into the bathroom. It can be used for leaning over during the administration of the enema as well as for homework, coloring, and watching movies.

If you need help, visit the Bowel Management for Spina Bifida Facebook group.



*Squatty Potty



*Table Mate II

Adaptive equipment for bowel program



Self-catheterization training and challenges

Challenges and Successes

- Females: anatomy is much more difficult to navigate than males
- Sequencing of steps and remembering them all
- Very hard when child has NO involvement prior ie. Washing hands, clothing management, etc.
- Family members jumping in too much, not following through on having child do more, taking lead
- Success: when family follows through with the practice, seeing what works and what doesn't
- Best case when family coaches but does not participate
- Encourage more independent problem solving instead of too many directives

Effectiveness of Inpatient Hospital Stays for Self-Catheterization and Independence for Children with Spina Bifida

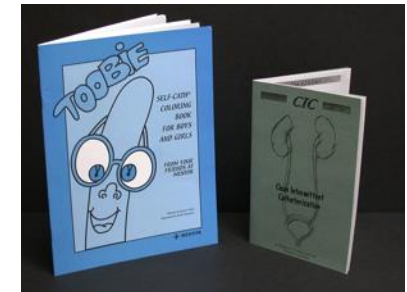
- Retrospective Chart Review from 2007-2011
- Purpose: Analyze a group of pediatric patients with spina bifida (SB) who have undergone inpatient hospital stays to learn self-catheterization training with occupational therapists and nurses.
- Background: Individuals with Spina Bifida (SB) often have delays with activities of daily living (ADL) and executive functioning which makes independence training at home challenging. We sought to determine if a short, intensive hospital stay would provide the tools for children/adolescents with SB to be successful with self-catheterization.
- N=13 patients with SB, average age 11.2+2.4; 3M, 10F
- Children identified in clinic as a good candidate for catheterization training and participated in a 3-5 day hospital stay with bid OT and nursing team teaching.

Retrospective chart review (continued)

- OT interventions
 - Flash cards
 - Teaching doll
 - Anatomy review
 - Achievement charts
 - Aids used as needed



- Readiness activity skills
 - Fine motor strengthening
 - Dexterity
 - Perceptual motor
 - Visual perceptual
 - ADL
 - Bathroom transfers training



- Data was collected prior to training, at discharge and at clinic follow up

RESULTS

- Prior to training
 - 54% of participants were completely dependent for catheterization
 - 36% were dependent with catheter insertion but helped with pre-catheterization tasks
- At discharge
 - 31% required assistance with catheter insertion and cues for pre-catheterization tasks
 - 62% were independent except for verbal cues
- Clinic follow up (6.5 months)
 - One participant required assist with catheter insertion and cues for pre-catheterization tasks
 - 23% were independent with catheter insertion with occasional cueing
 - 62% were completely independent with all aspects
- Aids to catheterization
 - 50% of participants used a mirror in bed to complete the task.
 - 17% performed it in bed without aids
 - 17% used a toilet and mirror
 - 17% used a toilet with no aids

CONCLUSIONS

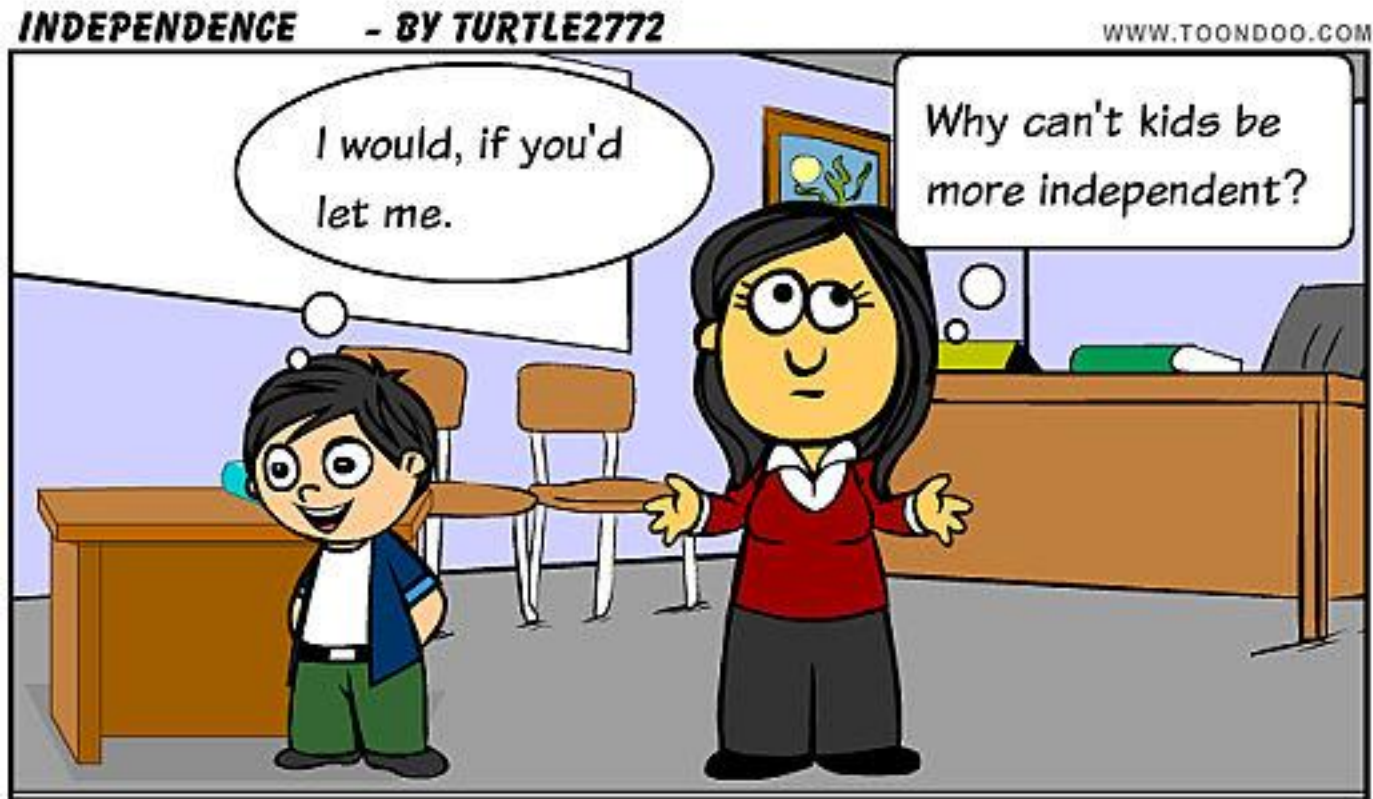
Utilizing this unique model of intensive inpatient hospital stay and OT intervention, most participants with SB made excellent progress in self-catheterization independence and maintained or surpassed that level at follow-up.

Take Home Messages

- Catheterization and bowel program are necessary for good health for those with neurogenic bladder and bowel
- OTs and nurses can work together for optimal teaching of self-catheterization and bowel program
- Support families with encouragement, adaptive techniques, equipment, and strategies
- Self-catheterization independence and involvement in bowel program are challenging and are only realistic if child has mastered other basic self-care skills



Thank You!!



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