

BLADDER, BOWEL AND SEXUAL DYSFUNCTION

Philippines G. Cabahug MD, FAAPMR

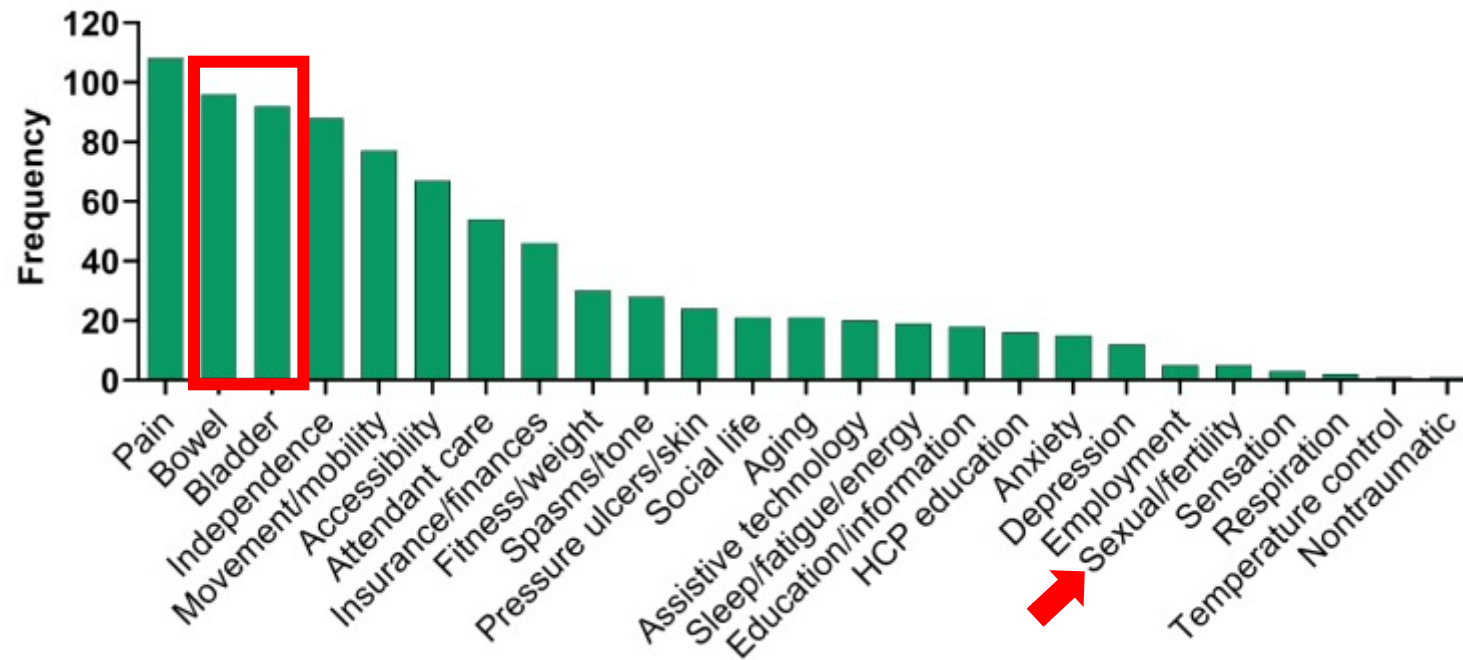


RNDS Symposium
Los Angeles
October 9, 2022



Challenges Faced by the SCI Community

North American SCI Consortium 2019



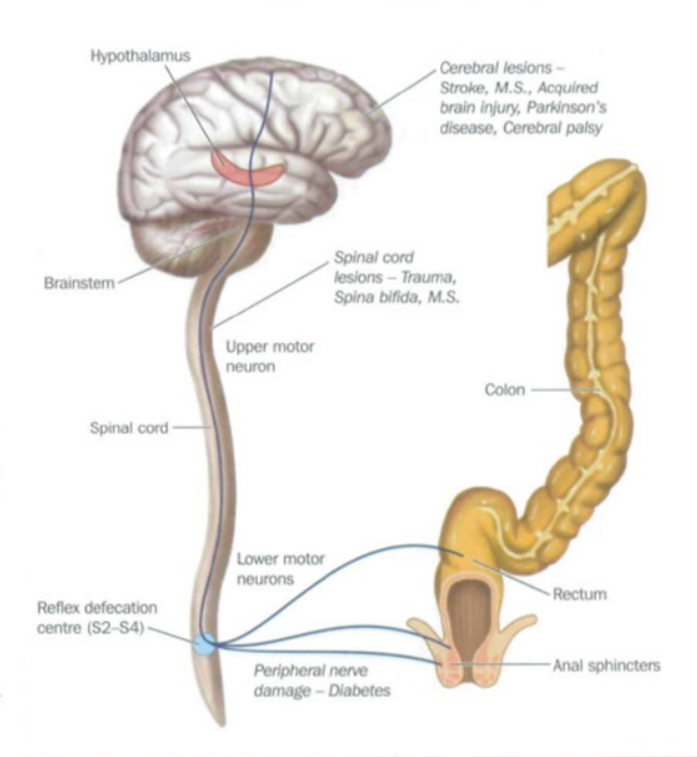
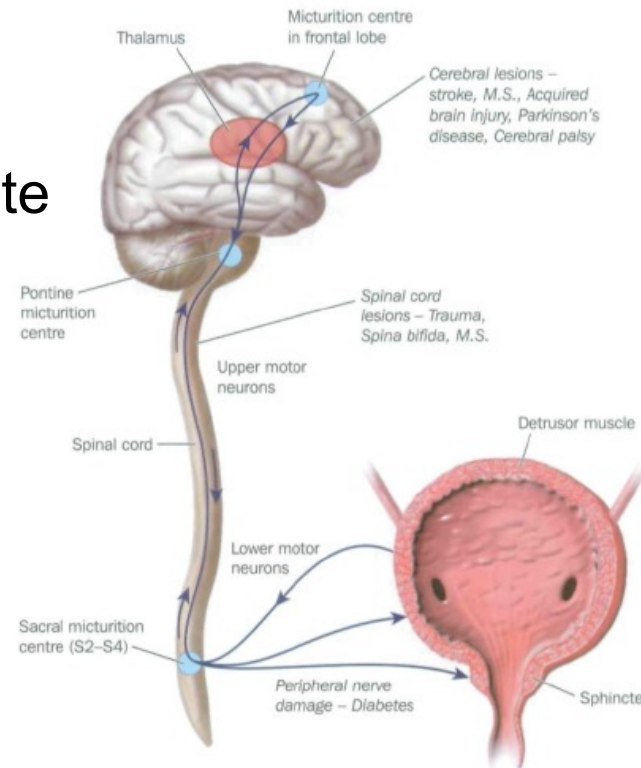
North American Spinal Cord Injury Consortium, Needs of the Community Living with SCI in North America. Niagara Falls, NY. 2019.



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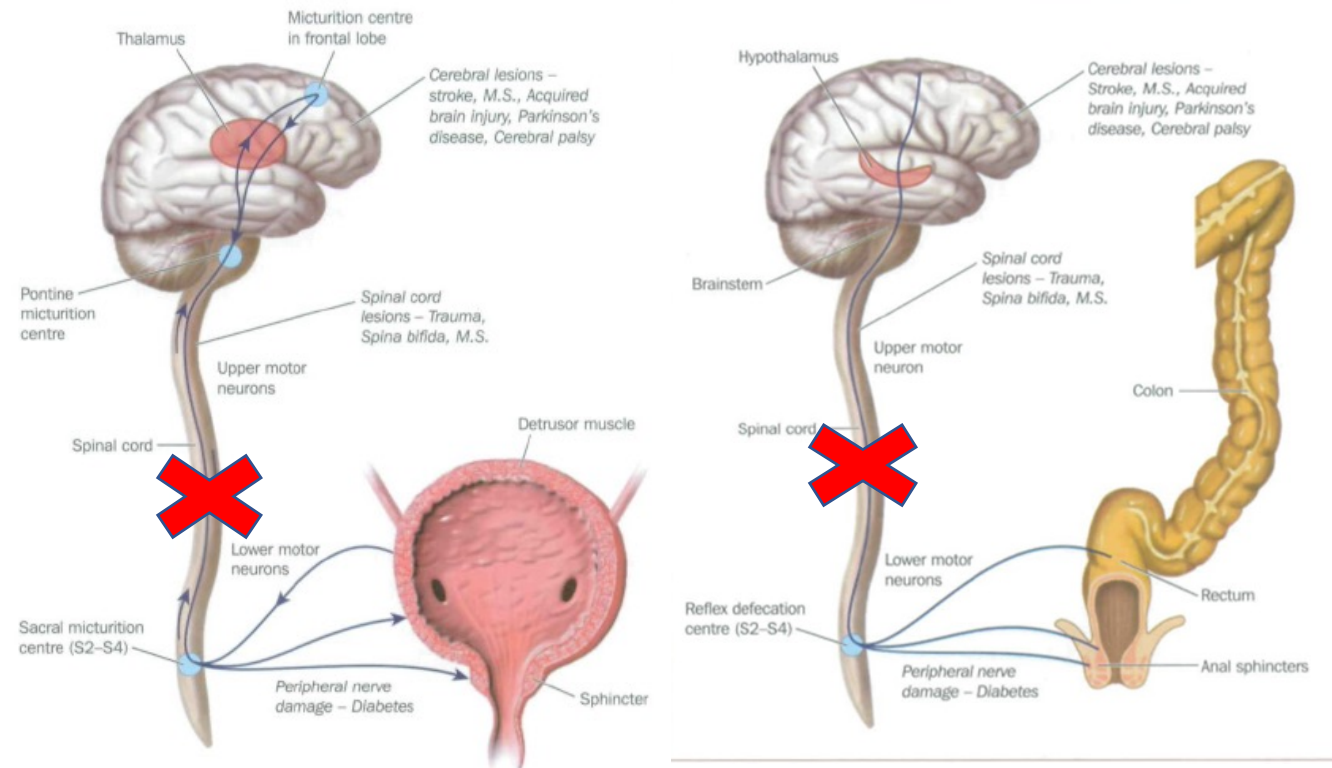
BOWEL AND BLADDER

- Functions
 - Store waste
 - Release waste at the appropriate times
- Each system has
 - Muscular storage area
 - Outlet valve or sphincter
- Control
 - Voluntary
 - Involuntary



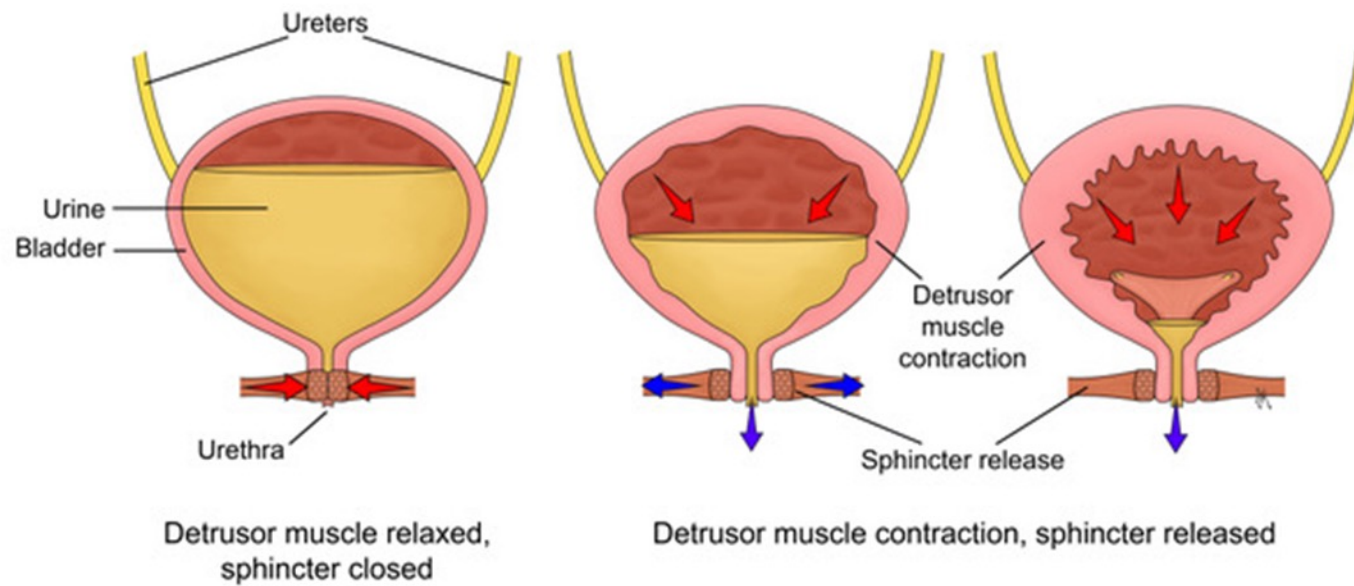
BOWEL AND BLADDER DYSFUNCTION

- Rare Neuroimmune Disorders:
 - Changes your bladder/bowel functioning
 - Disrupts sensation of having to urinate/defecate
 - Disrupt the coordination between the brain and the bladder/bowel
 - Voluntary control of sphincters is lost
 - Changes how you go to the bathroom



BLADDER AND BOWEL DYSFUNCTION





BLADDER AND BOWEL DYSFUNCTION



- UPPER
 - Spastic

- LOWER
 - Flaccid



Neurogenic Bladder

SPASTIC

- Bladder is spastic and irritable
- Urinary sphincter is tight and does not relax voluntarily
- Difficulty storing and releasing urine

FLACCID

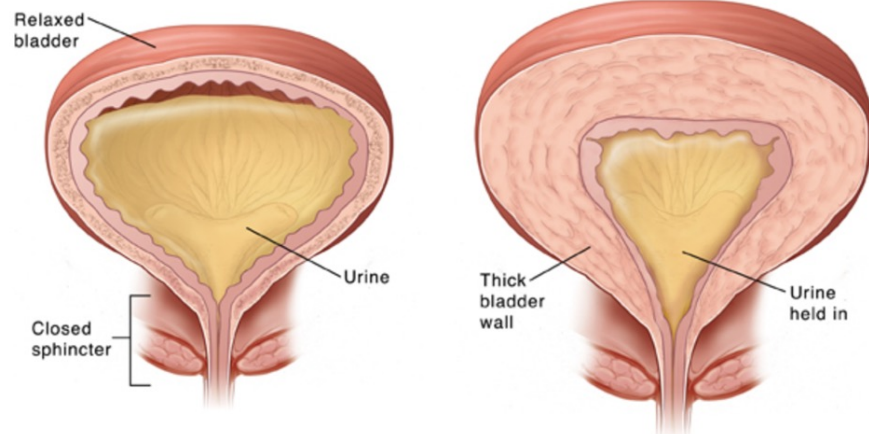
- Bladder will not contract when it becomes full
- Urinary sphincter is loose and fails to contract
- Difficulty storing urine



BLADDER PROGRAM



- Goals
 - Prevent incontinence and accidents
 - Empty bladder at predictable times
 - Maintain health and prevent complications
 - Frequent urinary tract infections
 - Thick inelastic bladder
 - Kidney damage



CYSTOSCOPY

NORMAL BLADDER



<https://dronuma.com.au/cystoscopy/>

TRABECULATIONS



Huang et al. Taiwanese Journal of Obstetrics and Gynecology Volume 59, Issue 4, July 2020, pp 625-626.



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HOW TO MANAGE BLADDER

- Healthy Habits
 - Healthy diet
 - Drink, Drink, Drink spread fluids out over the day
 - Fiber – help with stool consistency
 - Activity
 - Good hygiene
 - Do it yourself
 - Assistive devices
 - Positioning equipment
 - Direct own care
 - Establish a good routine



BLADDER MANAGEMENT

Spastic

- Frequent and urgent urination
- Medications to relax the bladder
 - Oxybutynin
- Intermittent Catheterization
 - approx. every 4 hours (4-6x/day)

Flaccid

- Leaking of urine
- Medications not effective
- Spread fluids out
- Intermittent catheterization
 - Every 3-4 hours
 - Prior to doing activities that cause valsalva

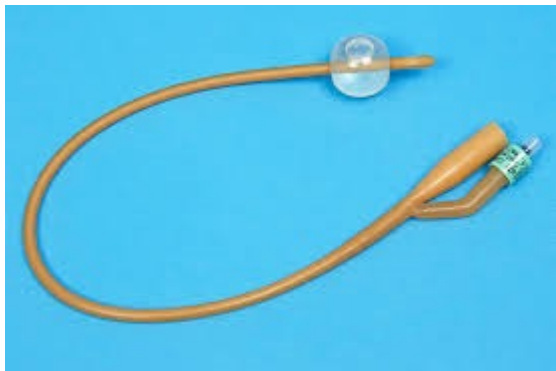
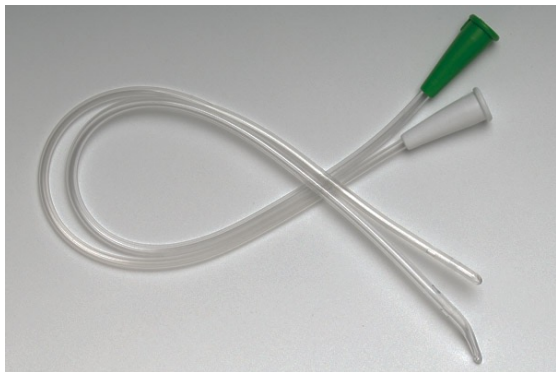


BLADDER EMPTYING METHODS

- External catheter
 - condom
- Indwelling catheter
 - Foley
 - Suprapubic tube
- Catheterizable stoma



CATHETERS



External Female Catheter

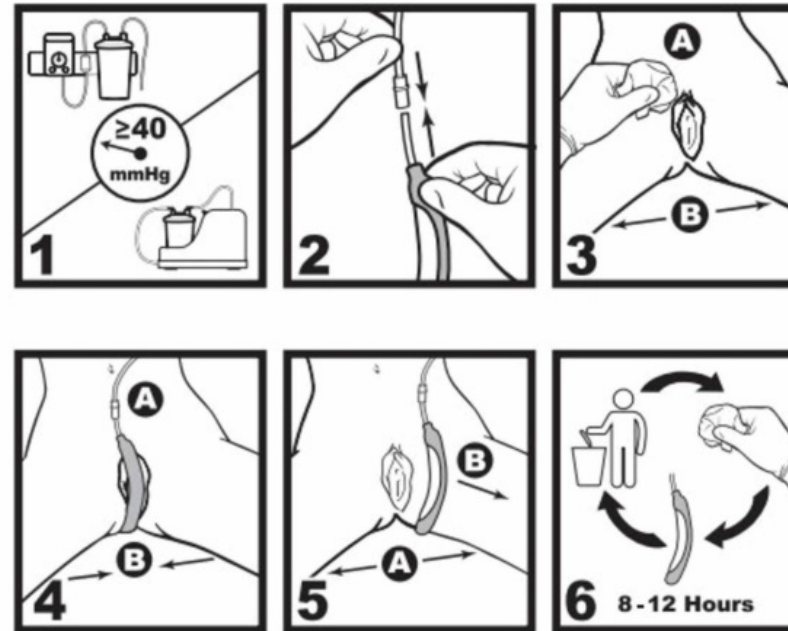


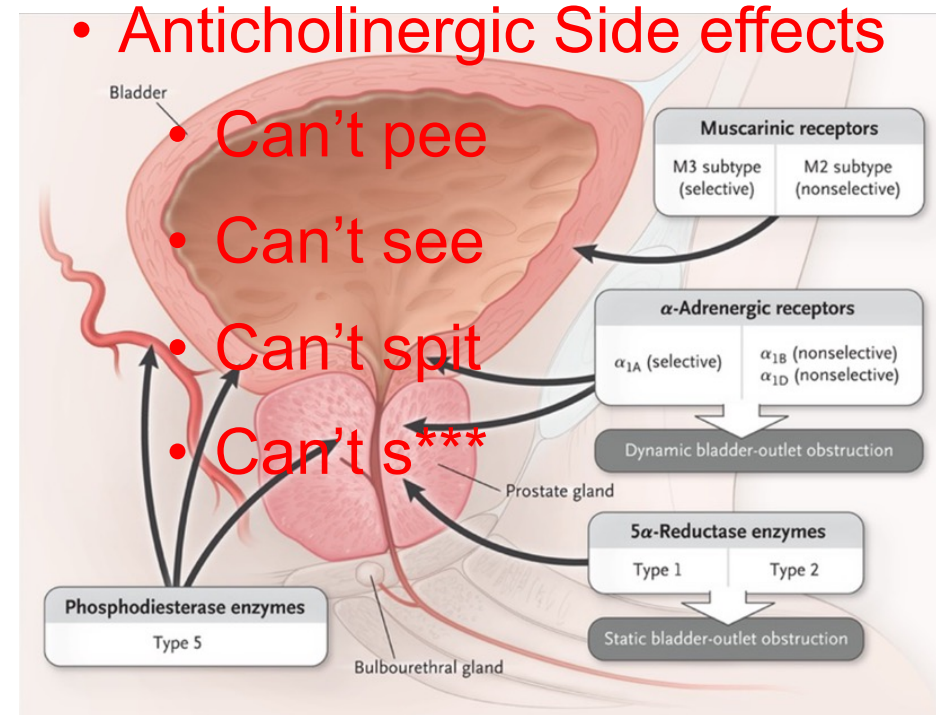
FIGURE 1: Schematic of the PureWick Urinary Collection System

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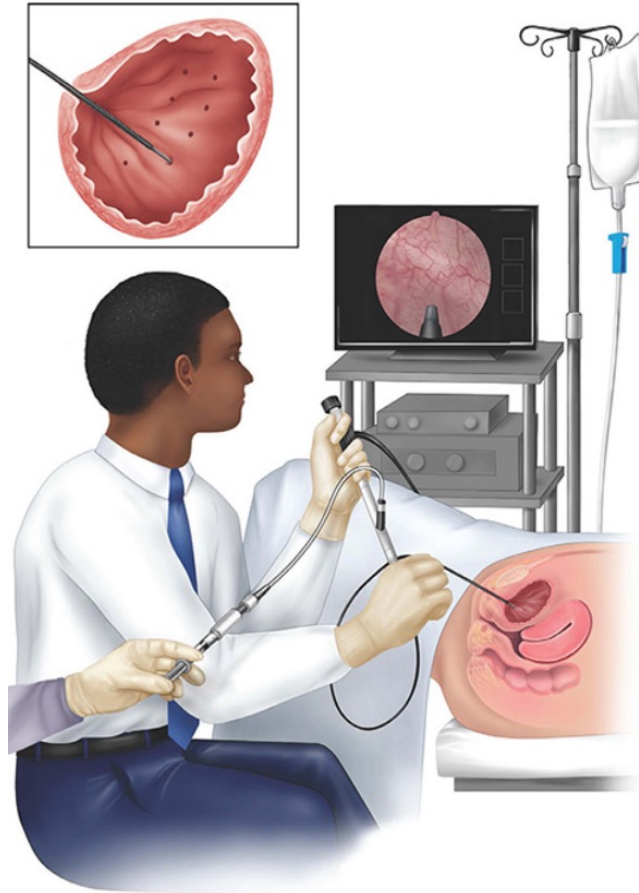


BLADDER MEDICATIONS

- Oxybutynin (Ditropan XL)
- Oxybutynin as a skin patch (Oxytrol)
- Tolterodine (Detrol, Detrol LA)
- Oxybutynin gel (Gelnique)
- Trospium (Sanctura)
- Solifenacin (Vesicare)
- Darifenacin (Enablex)
- Fesoteridine (Toviaz)
- *Mirabegron (Myrbetriq)*
- *Vibegron (Gemtesa)*
- Tamsulosin (Flomax)



Bladder Botox



<https://www.iowaclinic.com/treatments-and-conditions/botox-injections/>

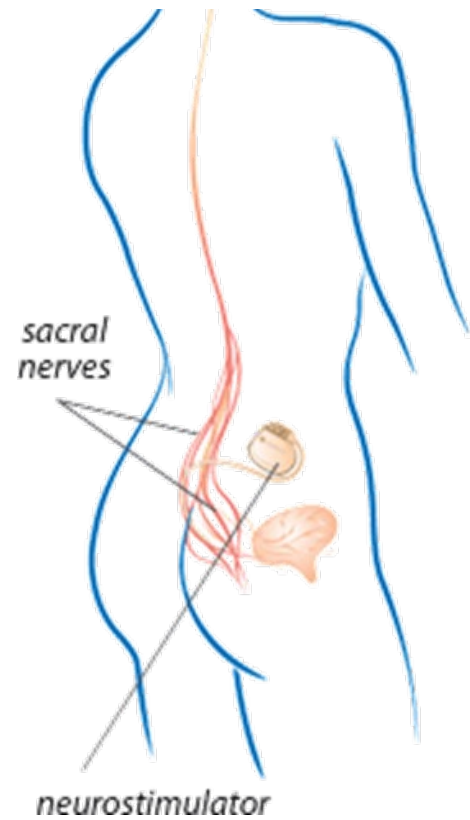
- For overactive bladder or NDO
- Can improve incontinence, decrease UTIs, decrease use of anticholinergics
- Lasts 6 months
- Side effects: bleeding, infections, distal spread



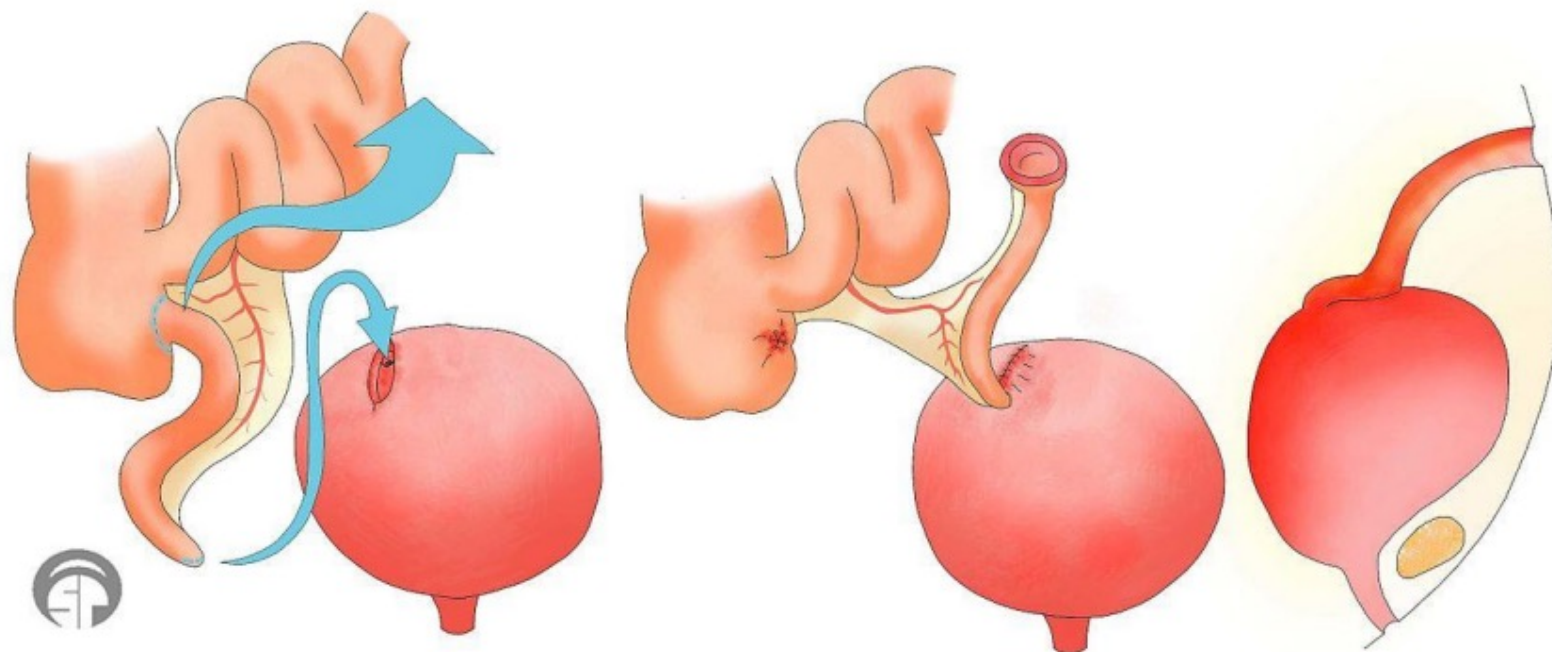
NEUROMODULATION: POSTERIOR TIBIAL NERVE STIMULATION



NEUROMODULATION: Interstim Device



Mitrofanoff Procedure

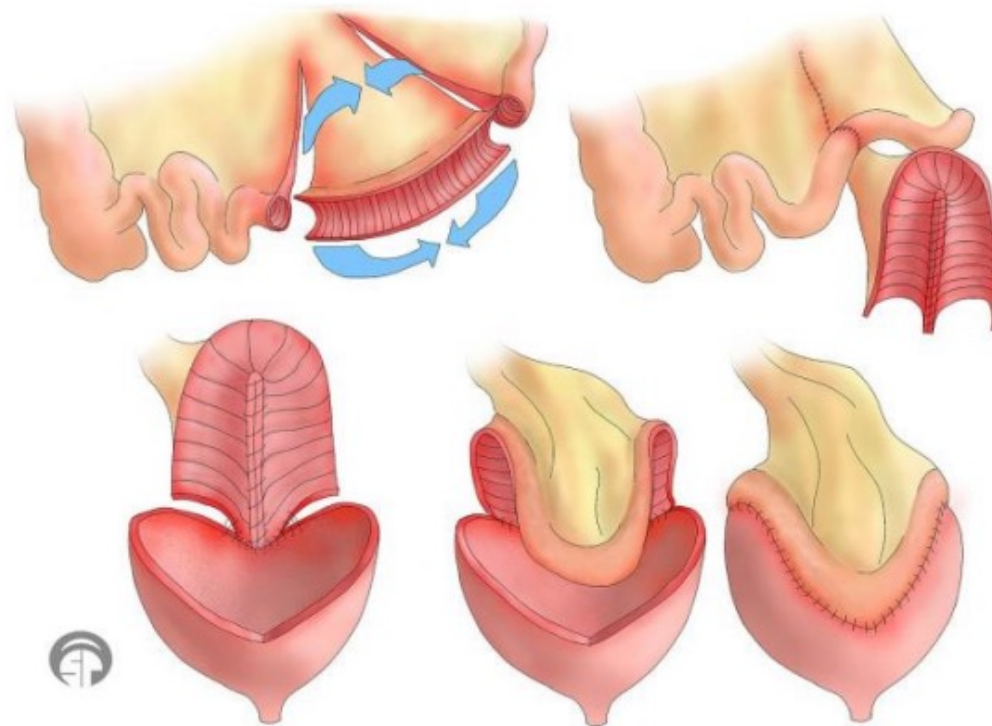


<http://scireproject.com/community/topic/bladder/>



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BLADDER AUGMENTATION

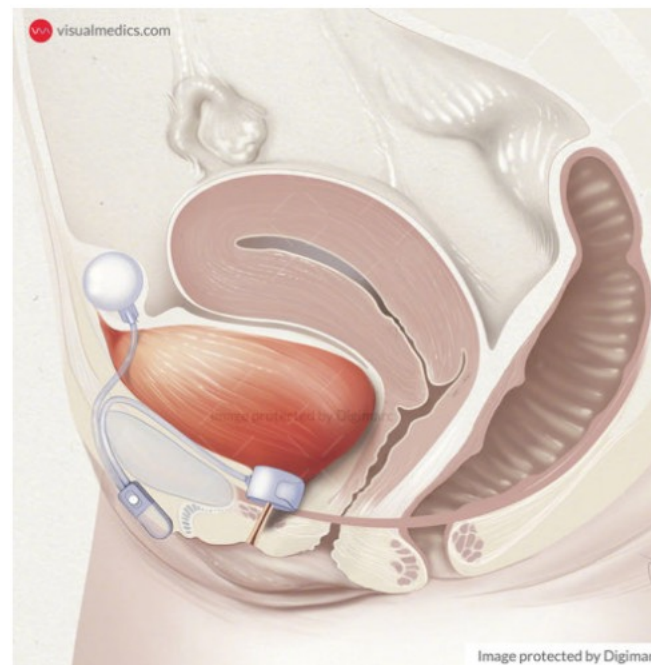
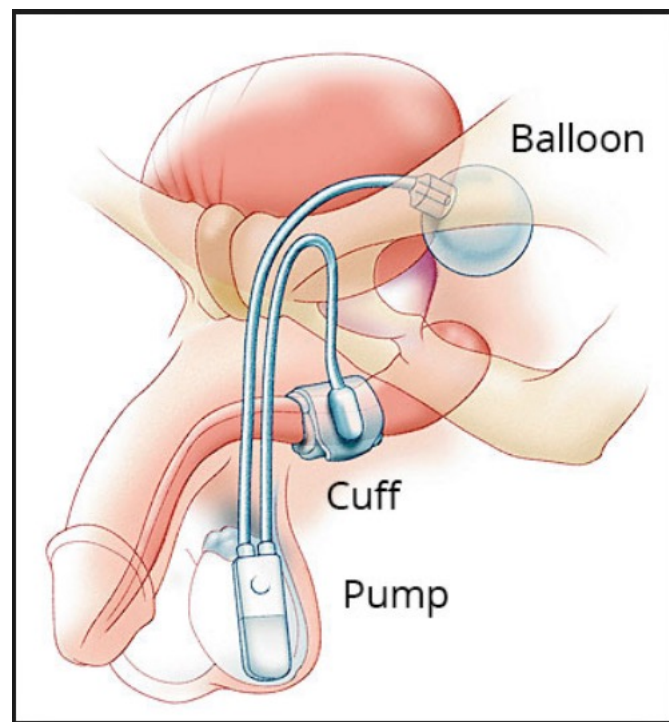


<http://scireproject.com/community/topic/bladder/>



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Artificial Urinary Sphincter










YOUR BLADDER CHECKLIST

- Review bladder management at least yearly
 - Is it adequate?
 - Are your meds working?
- Check creatinine and electrolytes yearly
- Ultrasound every 1-2 years
- Keep track of UTIs (is it a true UTI?)
- Consider establishing care with a urologist
- May need a cystoscopy
- Males: Consider PSA testing after age 50 years



BOWEL MANAGEMENT

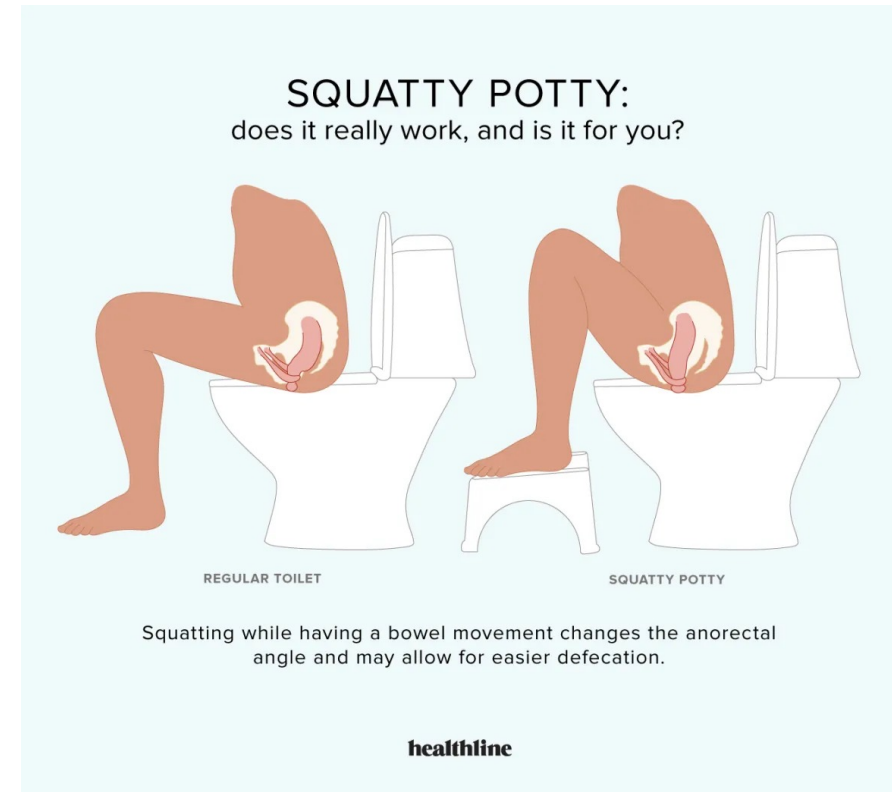
- Manage stool consistency
 - Diet
 - Fiber (or supplement)
 - Fluid
 - Medications to soften stool
 - Docusate Sodium
 - PEG (lower doses)
- Promote GI motility
 - Senna
 - PEG (higher doses)

	Type 1	Separate hard lumps	SEVERE CONSTIPATION
	Type 2	Lumpy and sausage like	MILD CONSTIPATION
	Type 3	A sausage shape with cracks in the surface	NORMAL
	Type 4	Like a smooth, soft sausage or snake	NORMAL
	Type 5	Soft blobs with clear-cut edges	LACKING FIBRE
	Type 6	Mushy consistency with ragged edges	MILD DIARRHEA
	Type 7	Liquid consistency with no solid pieces	SEVERE DIARRHEA



BOWEL MANAGEMENT

- Positioning
 - Sit up on the toilet or bedside commode
 - Lay on left side if you can not sit up
- Children
 - Be sure feet are supported on a foot stool and they are comfortable



BOWEL PROGRAM

Spastic

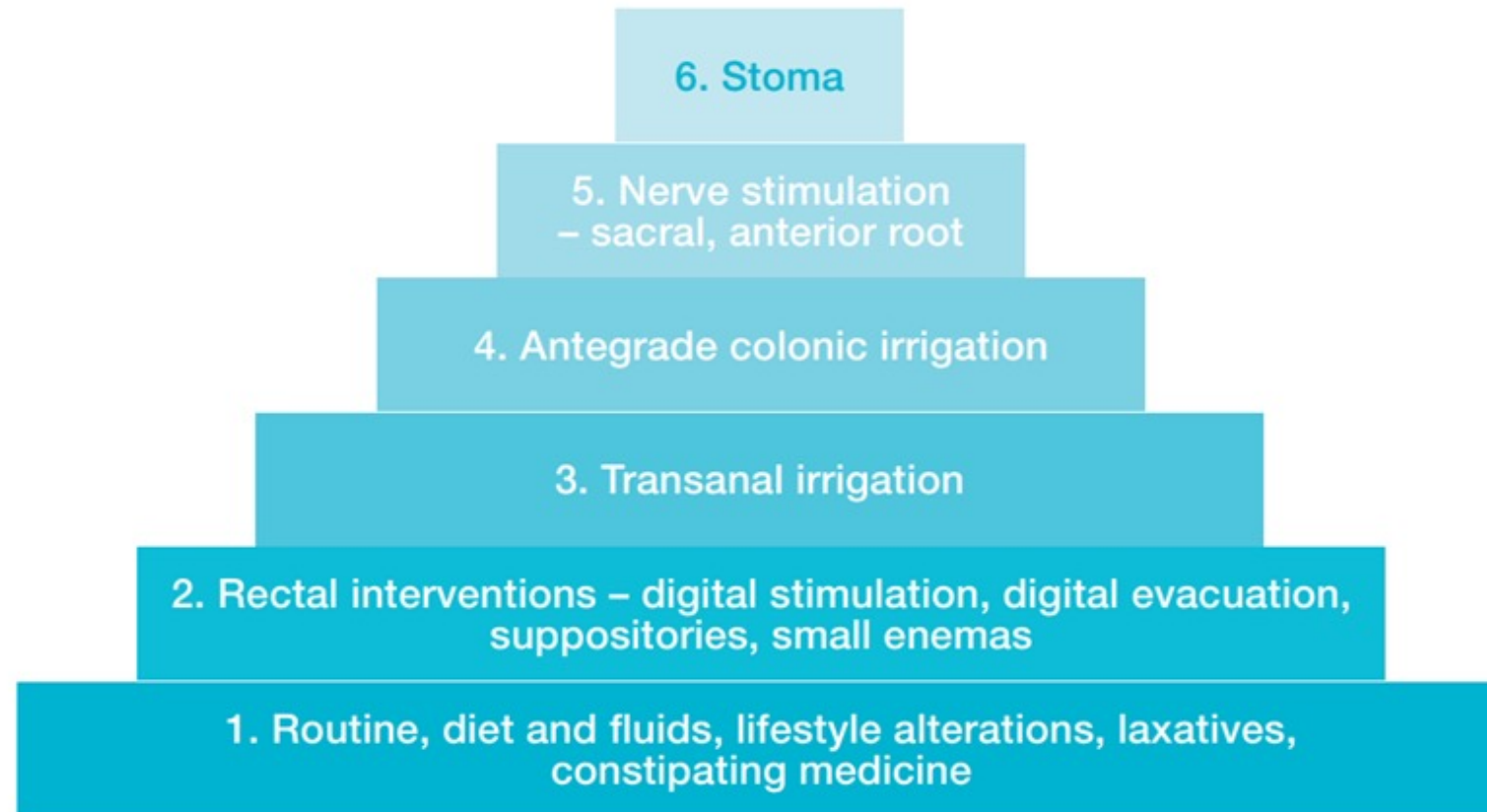
- Routine Bowel Program
 - Every 1-3 days
 - Goal: Soft formed stool
 - Trigger reflex evacuation
 - Suppository
 - Digital stimulation

Flaccid

- Routine Bowel Program
 - 1-2 x/day
 - Goal: Firm formed stool
 - Suppositories generally do not work
 - Manual disimpaction
 - 1-2 times per day
 - prior to activities that cause valsalva



HEIRARACHY OF INTERVENTIONS FOR NEUROGENIC BOWEL MANAGEMENT



<https://www.rnoh.nhs.uk/sites/default/files/sia-mascip-bowelguidenew2012.pdf>



Transanal Irrigation System

- (B)



<http://www.coloplast.us/peristeen-anal-irrigation-system-en-us.aspx>

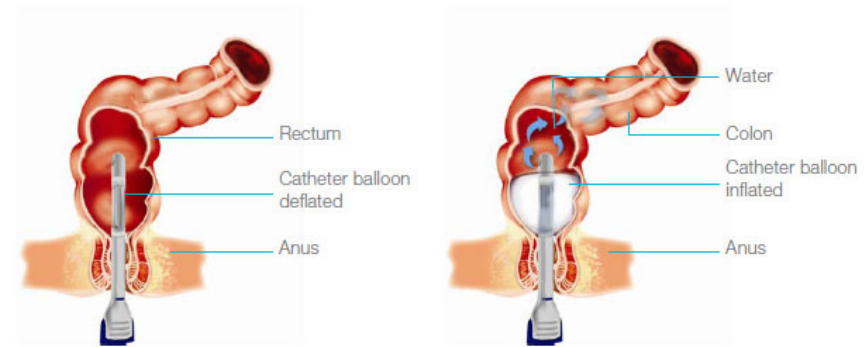


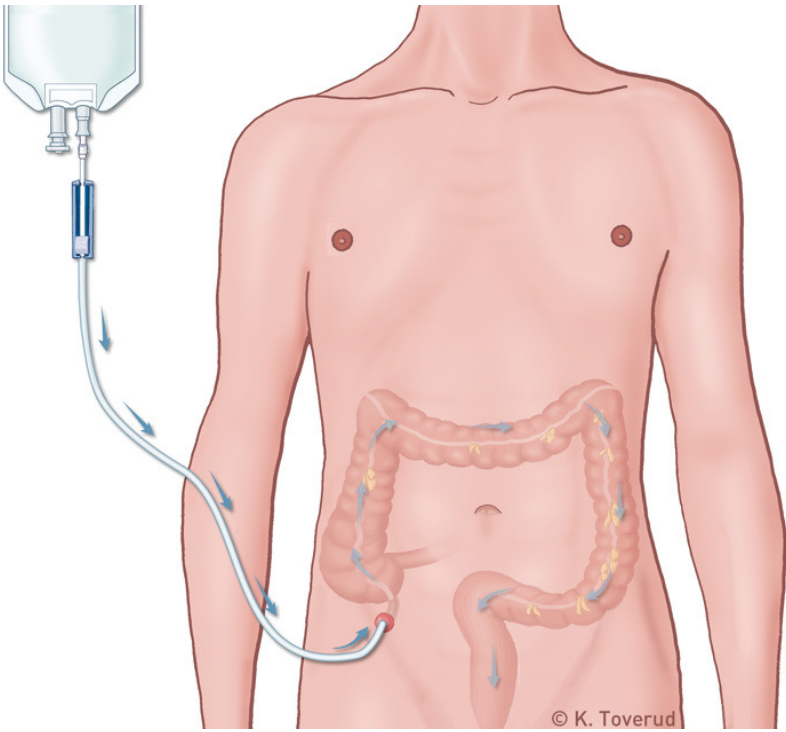
Figure 2. The position of the Peristeen in the rectum. The inflated balloon keeps the catheter in place.

<http://my-bowel.co.uk/for-healthcare-professionals/trans-anal-irrigation-tai-pai/>

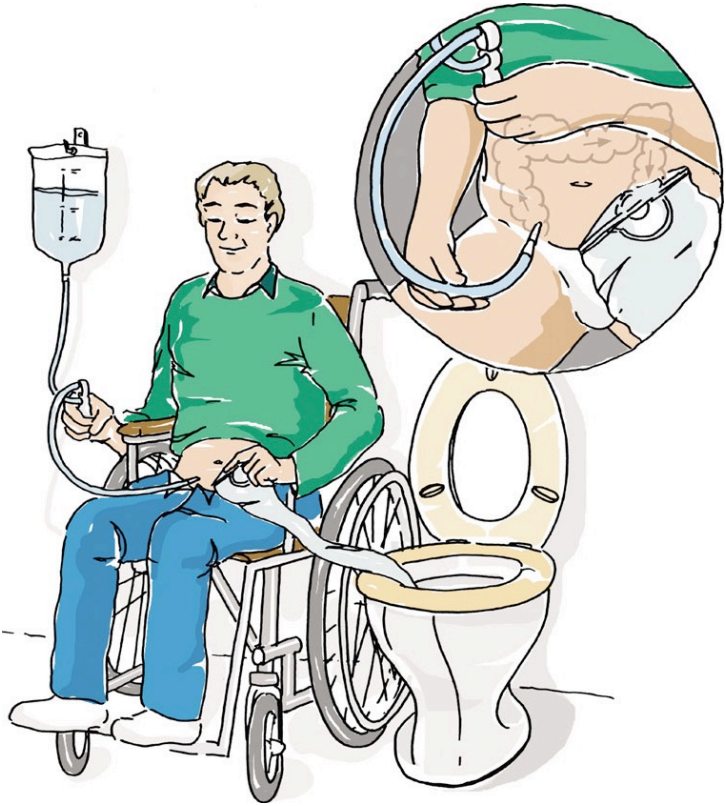


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Antegrade Continence Enema



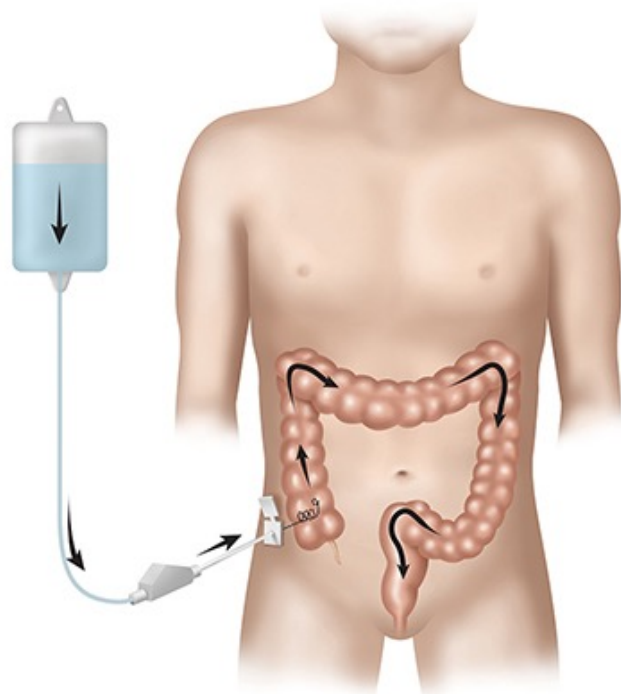
<http://tidsskriftet.no/article/2264473>



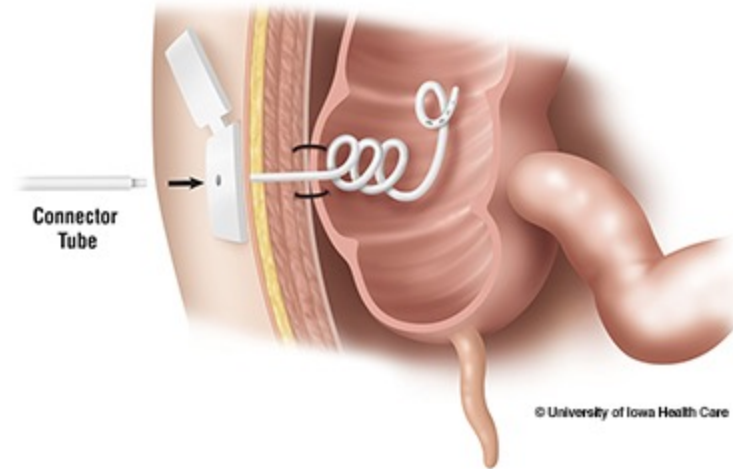
<http://plasticsurgerykey.com/the-malone-procedure-and-its-variants/>



Cecostomy (C-tube)



© University of Iowa Health Care



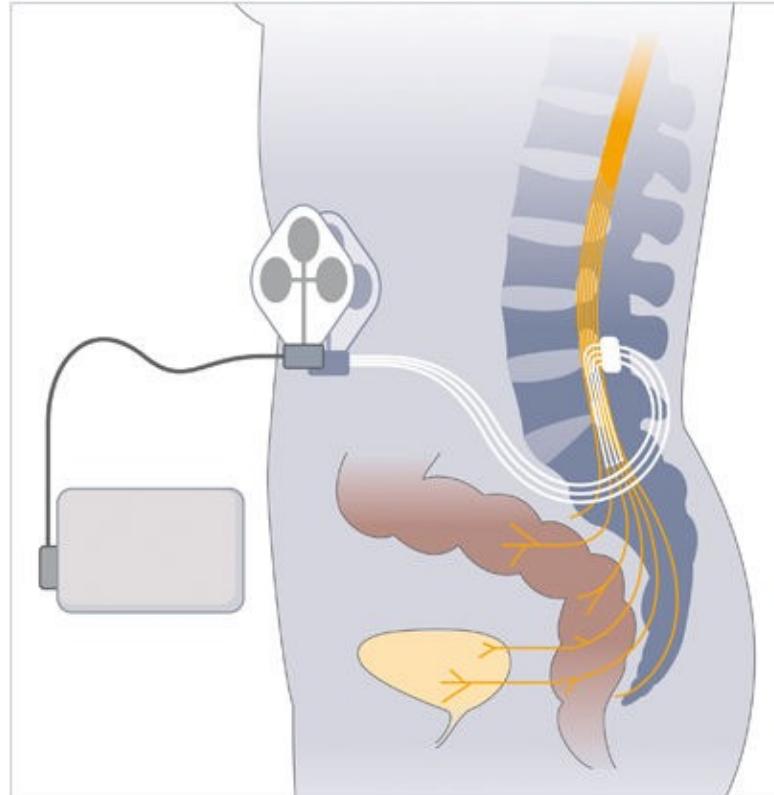
© University of Iowa Health Care

<https://uichildrens.org/health-library/cecostomy-tube-care-pediatrics>



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Neuromodulation: Sacral Root Anterior Stimulator



YOUR BOWEL CHECKLIST

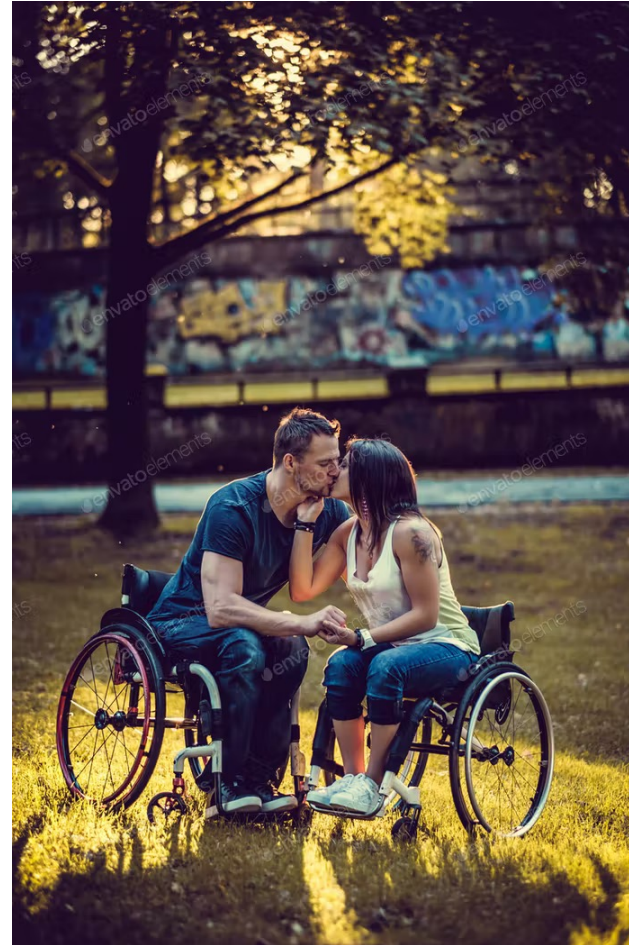
- Review bowel management at least yearly
 - Is it adequate?
 - Are your meds working?
 - Are you taking too long?
- Schedule bowel emptying
- Colon Cancer Screening



Sexual Health

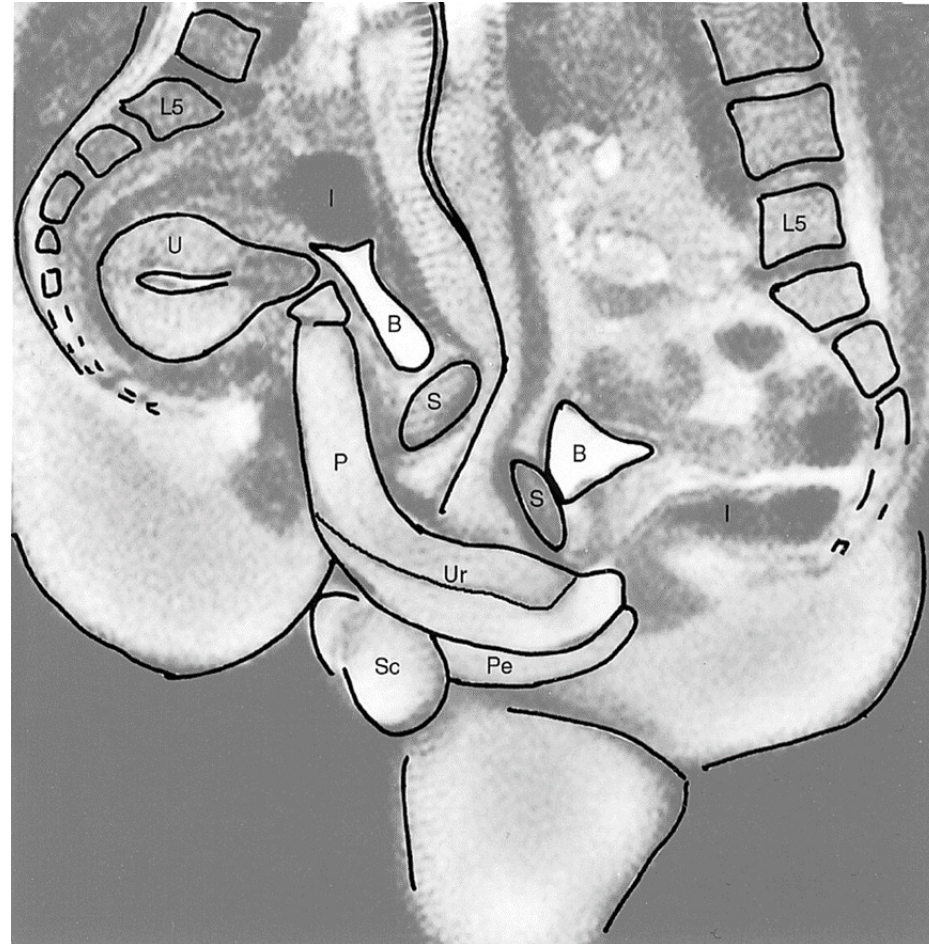
Being healthy and well in all parts of life related to sexuality

Emotional, mental and social well-being can be linked to your sexual health



Physiology of Sex

Magnetic resonance imaging of male and female genitals during coitus and female sexual arousal

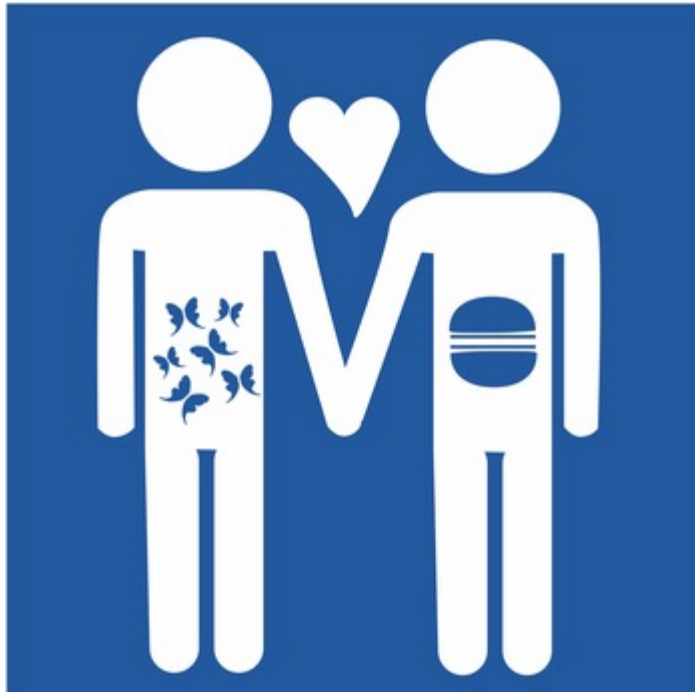


Willibrord Weijmar Schultz et al. BMJ 1999;319:1596-1600



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Sexual Arousal



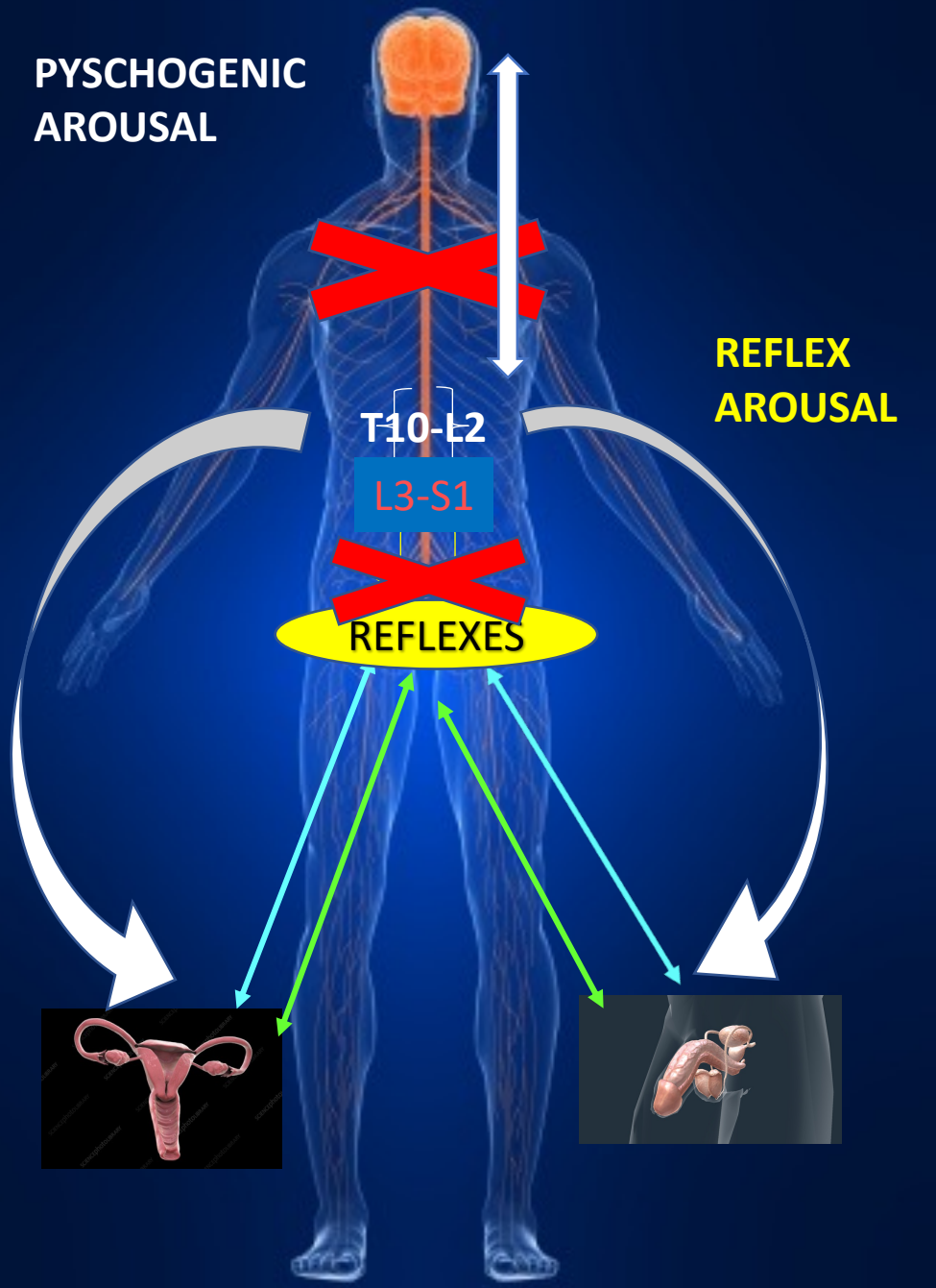
Mind + Body
→ sexually
excited →
prepare
body for SEX

- Males: Erection
- Females:
Lubrication

Two
pathways:

- Psychogenic
Arousal
- Reflex Arousal





Injury Level	Male	Female
T10 and above	No psychogenic erection (+) reflex erection	No psychogenic arousal (+) reflex arousal
L3-S1	(+) psychogenic and reflex erection (poorly coordinated during sex)	May have both psychogenic and reflex arousal
S2-S4	No reflex erections May have psychogenic erections	No reflex arousal May have psychogenic arousal

Orgasm

Peak of sexual excitement

Release of sexual tension accompanied by rhythmic movement of pelvic muscles and pleasure

Males: normal: Ejaculation

Women: + rhythmic muscle tensing in vagina and uterus



Orgasm: Changes



Trudy wasn't very good at disguising her fake orgasms.

- Males
 - No ejaculation, unpredictable ejaculation or retrograde ejaculation
- Females
 - More difficult, feels different or none at all



FERTILITY

MALE

- Impaired sperm motility (slowed)
- Ejaculatory difficulties

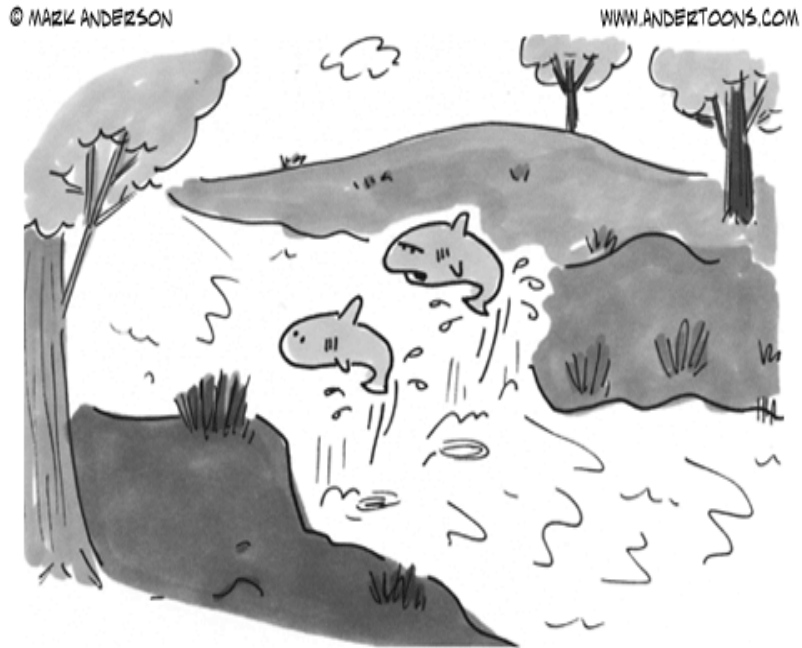
FEMALE

- Normal menstruation restored 6-12 months after
- Fertility normal

PREGNANCY IS STILL POSSIBLE!



Secondary Challenges



"All I'm saying is I'm not swimming all this way upstream for you to have a 'headache!'"

- Depression
- Fatigue
- Decreased self esteem
- Muscle spasms
- Loss of mobility
- Hypersensitivity or diminished sensitivity
- Bowel and bladder issues



PRACTICAL CONSIDERATIONS

- Autonomic Dysreflexia risk in T6 and above
- Complete bowel and bladder care prior
- Inspect insensate skin after
- Risk of STDs
- Risk of pregnancy



Sexual Health Assessment

- General health and sexual health history
 - Functional history
 - Other health conditions (spasticity, bowel, bladder, meds, mental health)
 - Current medication
 - Sexual history and current sexual abilities and concerns
- Physical Examination
 - Rectal tone
 - Sensation
 - Genital Reflexes



Treatment Options: Male

Phosphodiesterase inhibitors

Penile injection

Vacuum pump

Transurethral therapy: MUSE

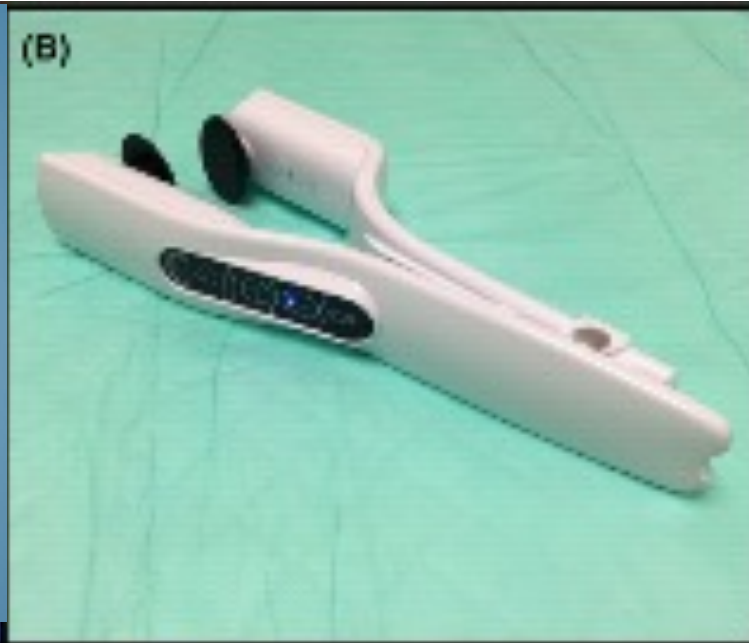
Penile prosthesis

Pelvic Floor Therapy

Vibration

Electroejaculation

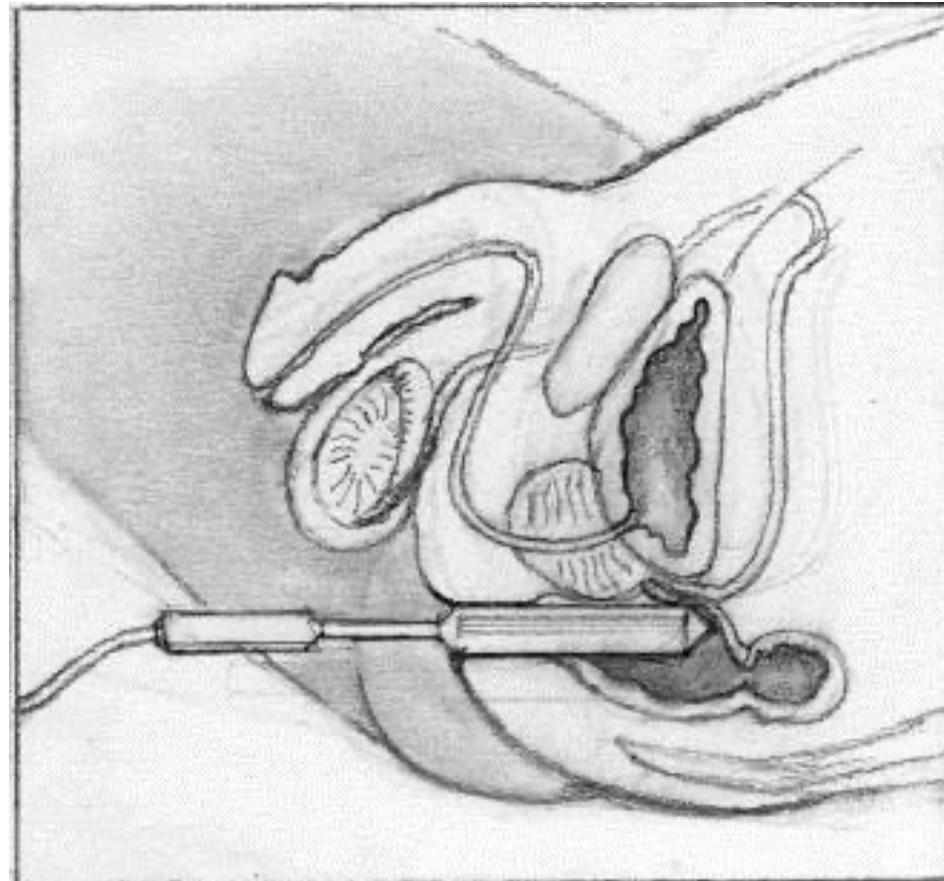




SEMEN RETRIEVAL PENILE VIBRATORY STIMULATION



SEMEN RETRIEVAL RECTAL PROBE EJACULATION



Treatment Options: Female

- Clitoris stimulation
- Vacuum device
- Vibration
- Medications
- Pelvic floor exercises (perineal muscle training)



Vibrators to wear
MHP Tongue Joy



Lush 3

The most powerful Bluetooth remote control vibrator!



Overcoming Challenges: Enabling Romance

- Know your needs
 - Explore
 - Share what you've learned
 - Reset your relationship
- Prepare and Plan ahead
 - Meds timing
 - Bowel, bladder
- Redefine Sex
 - Try new or different positions
 - Use extra pillows if needed to support parts
 - Add lubricant
 - Toys and devices



SEX TIP #113:
SPICE THINGS UP IN THE
BEDROOM WITH SOME ROLE-PLAY

11 TUESDAY sex	12 WEDNESDAY dinner sex	13 THURSDAY sex	14 FRIDAY
18 TUESDAY	19 WEDNESDAY	20	21

ONE PARTNER ON TOP:



RESOURCES: Sexual Health

- <https://community.scireproject.com/topic/sexual-health/>
- <https://scisexualhealth.ca/sexuality-201-sci/>
- pleasureABLE: Sexual Device Manual for Persons with Disabilities
 - http://www.dhrn.ca/files/sexualhealthmanual_lowres_2010_0208.pdf
- Videos
 - https://www.youtube.com/playlist?list=PLbl_Crr_ahpYkOjGsdWr5dQlOlE-3aaCs
- Catalogue Services (discrete, anonymous)
 - Eve's Garden International, Ltd. 119 W. 57th Street, Suite 420, New York, N.Y. 10019-2383., Phone: 800-848-3837.
 - Good Vibrations, Inc. 938 Howard Street, San Francisco, CA 94103, Phone: 415-974-8990; Phone: 800-289-8423.
- Books
 - Enabling Romance: A Guide to Love, Sex, and Relationships for the Disabled. By Ken Kroll and Erica Levy Klein, 1992, No Limits Communications.
 - Disability and the Art of Kissing-Questions and Answers on the True Nature of Intimacy. Gary Karp 2006



RESOURCES: Primary Care

12. PROBLEMATIC SPASTICITY: The first step in solving a problem is recognizing there is one.

Muscle spasticity is a common sequela of SCI, with an estimated prevalence of 65% to 93% at 1-year post injury. For the general practitioner, the challenge lies in identifying problematic spasticity, knowing when to treat and when not to treat, and formulating a treatment plan that will meet patient goals.

Identify with the patient the potential triggers of spasticity: Common culprits: Bladder, bowel, and skin problems such as UTIs, constipation, and wounds. Sunburn, menstrual cramps/ovulation, ingrown toenails, gallstones and other culprits are a few more.



TSCIR
Article



Article
Takeaways



Spanish
Translation



Additional
Resources

13. Clinical Needs of Women with Spinal Cord Injury

High, Narrow & Short: Exam Tables Remain A Structural Barrier to Gynecological Care

Ninety percent of people with SCI consider their primary care doctor to be their regular doctor; however, there are significant gaps in access to equitable primary care due to lack of provider comfort and expertise in disability-specific issues; physical exam equity barriers; and health care costs. Primary care for women with SCI encompasses the same women's health maintenance preventive measures as those for the general population, but there are specific needs that should be addressed.



TSCIR
Article



Article
Takeaways



Spanish
Translation



Additional
Resources

14. Neurogenic Bowel Dysfunction Management in Spinal Cord Injury

Due to sensory deficits and impairment of anal sphincter control, people with SCI need scheduled bowel emptying for social continence. Oral medications are used to modulate stool consistency. To avoid incontinence and diarrhea, avoid overuse of oral agents.

Assess all aspects of the client's bowel program including oral medication, diet, rectal interventions, and frequency of bowel movements. Ask about the amount of time required for bowel emptying. Assess the impact of potential incontinence, autonomic dysreflexia due to constipation or rectal irritation, and other bowel complications on quality of life.



TSCIR
Article



Article
Takeaways



Spanish
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Additional
Resources



<https://asia-spinalinjury.org/primary-care/>



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QUESTIONS?

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