

# Sexual Health and Spinal Cord Injury

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Raj Parmar NP  
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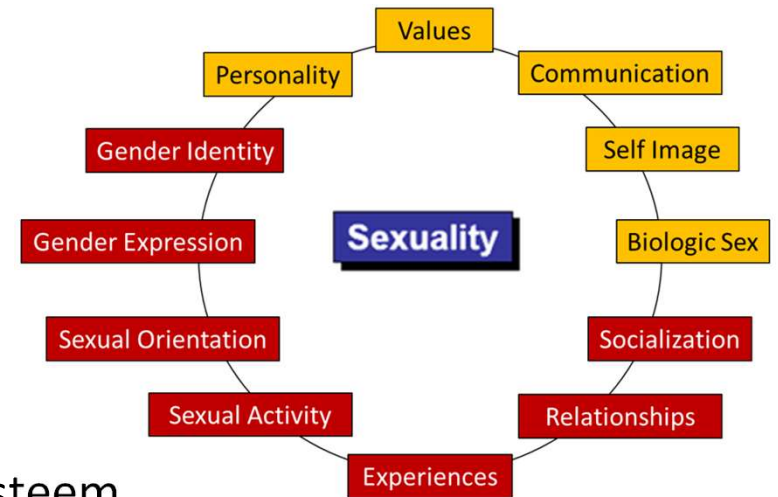
# #1 – Sex vs Sexuality

There's a lot more than intercourse to consider.

# Sexuality & Disability

## People may experience:

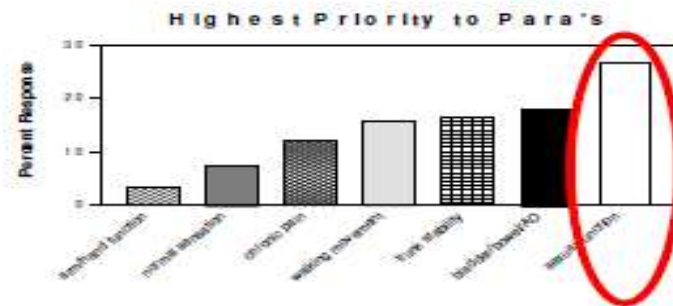
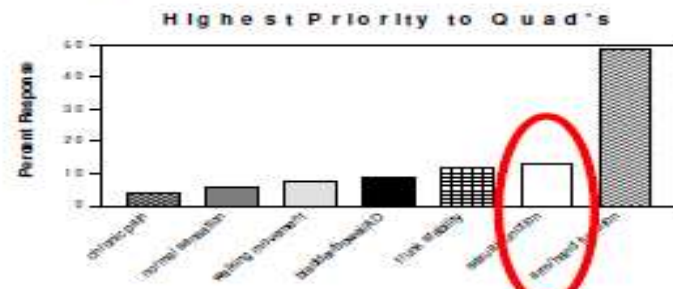
- Changes in physiology, body image, and self esteem
- Role changes
- Misinformation about sexual implications of disease/disability
- Misconceptions of partners expectations
- Unrealistic goals for sexual performance



#1 – Sex vs Sexuality

**#2 – Sex is important**

And often overlooked.



Anderson (2004). *Targeting recovery: priorities of the spinal cord-injured population* J. Neurotrauma 21(10):1371-1383.

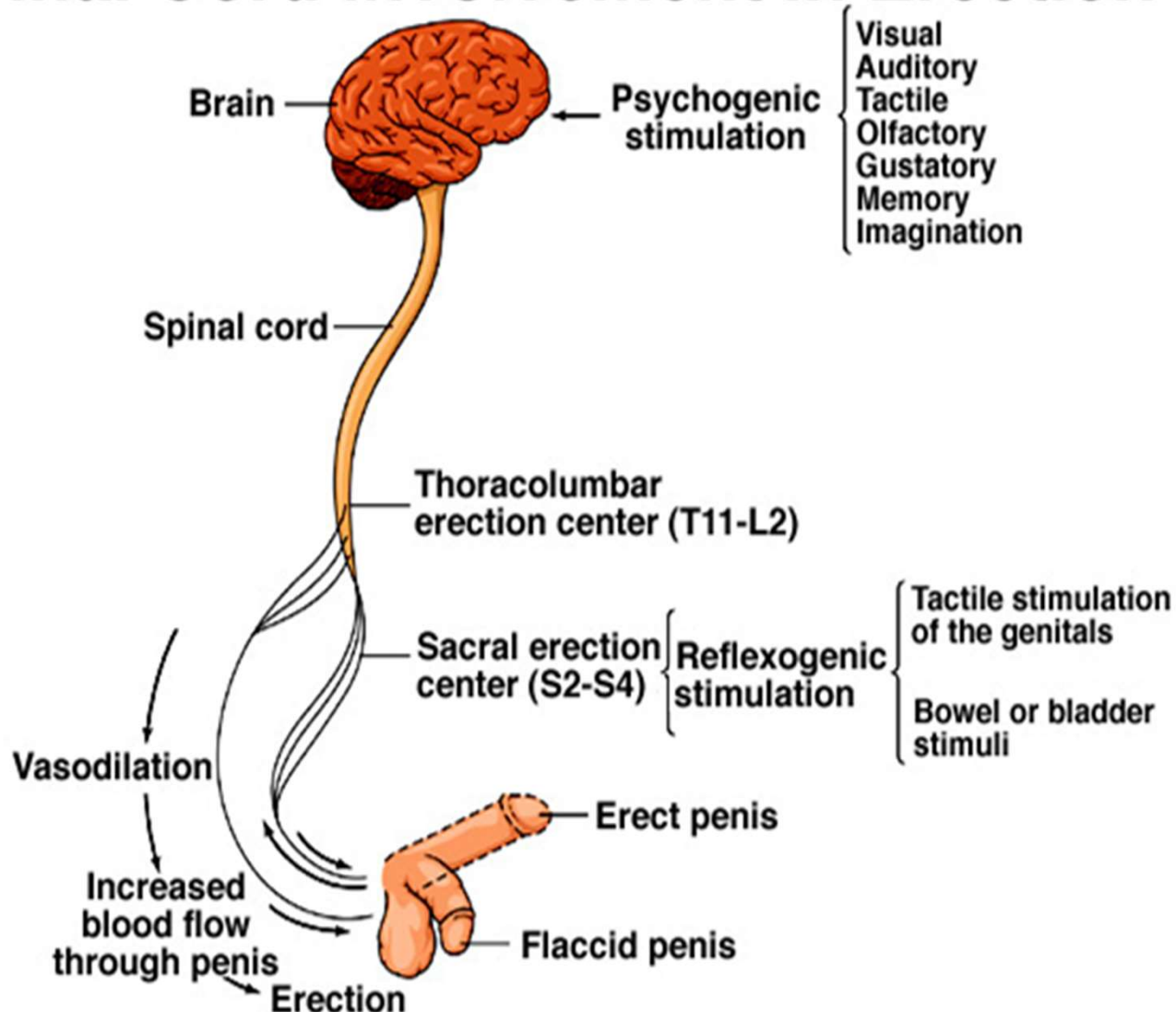
#1 – Sex vs Sexuality

#2 – Sex is Important

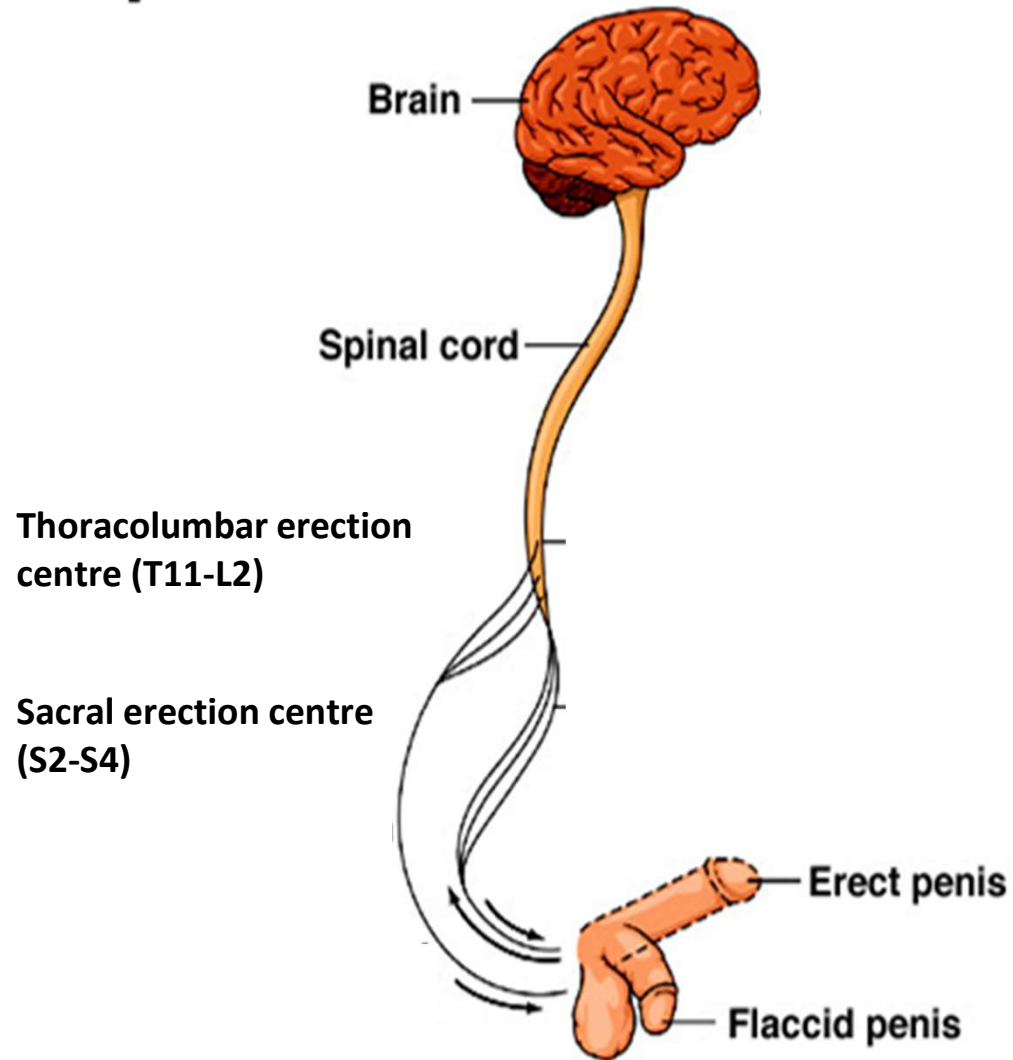
**#3 – Neuroanatomy & Physiology**

The basics of how things work and what to expect with a given condition

# Spinal Cord Involvement in Erection

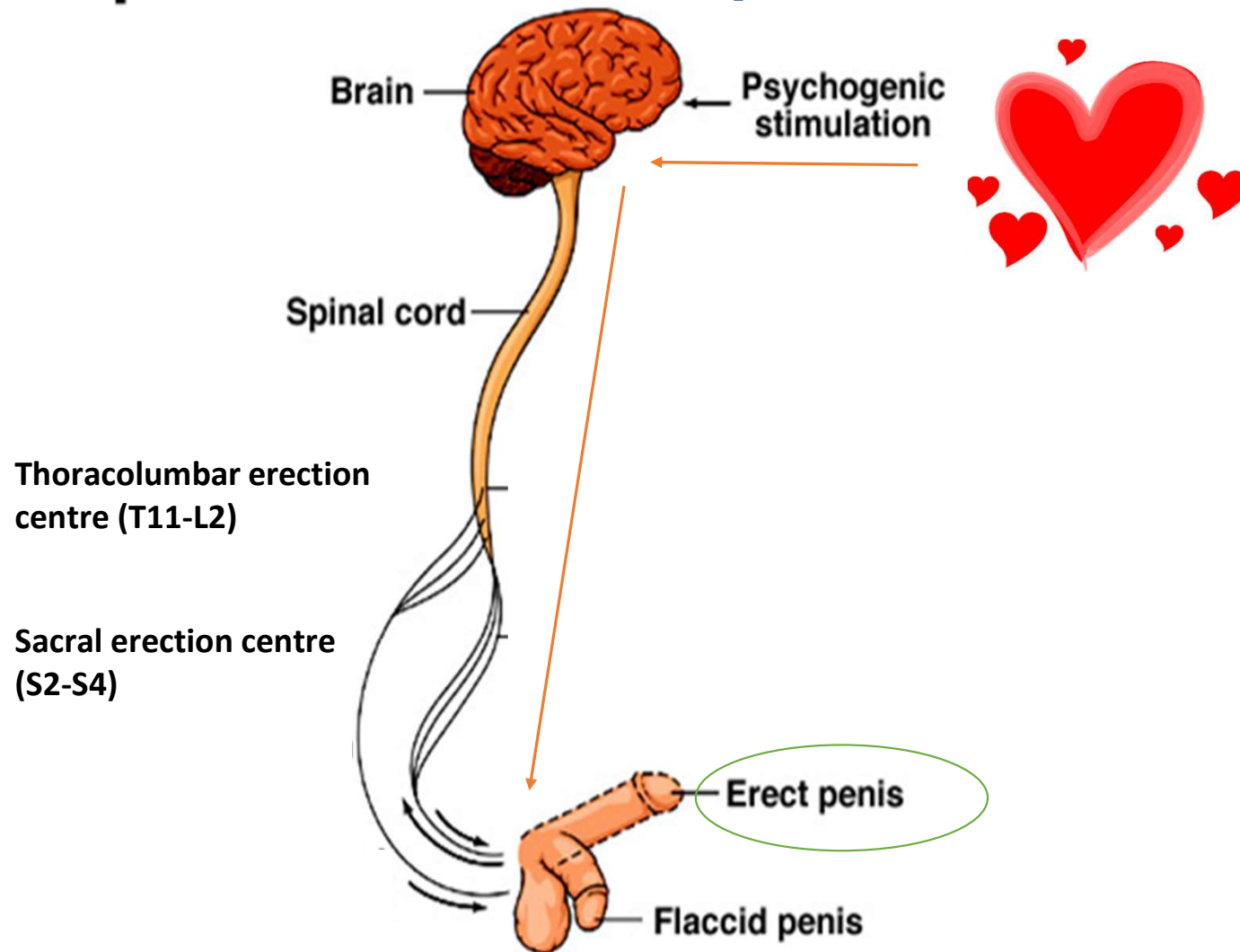


# Spinal Cord Involvement in Erection

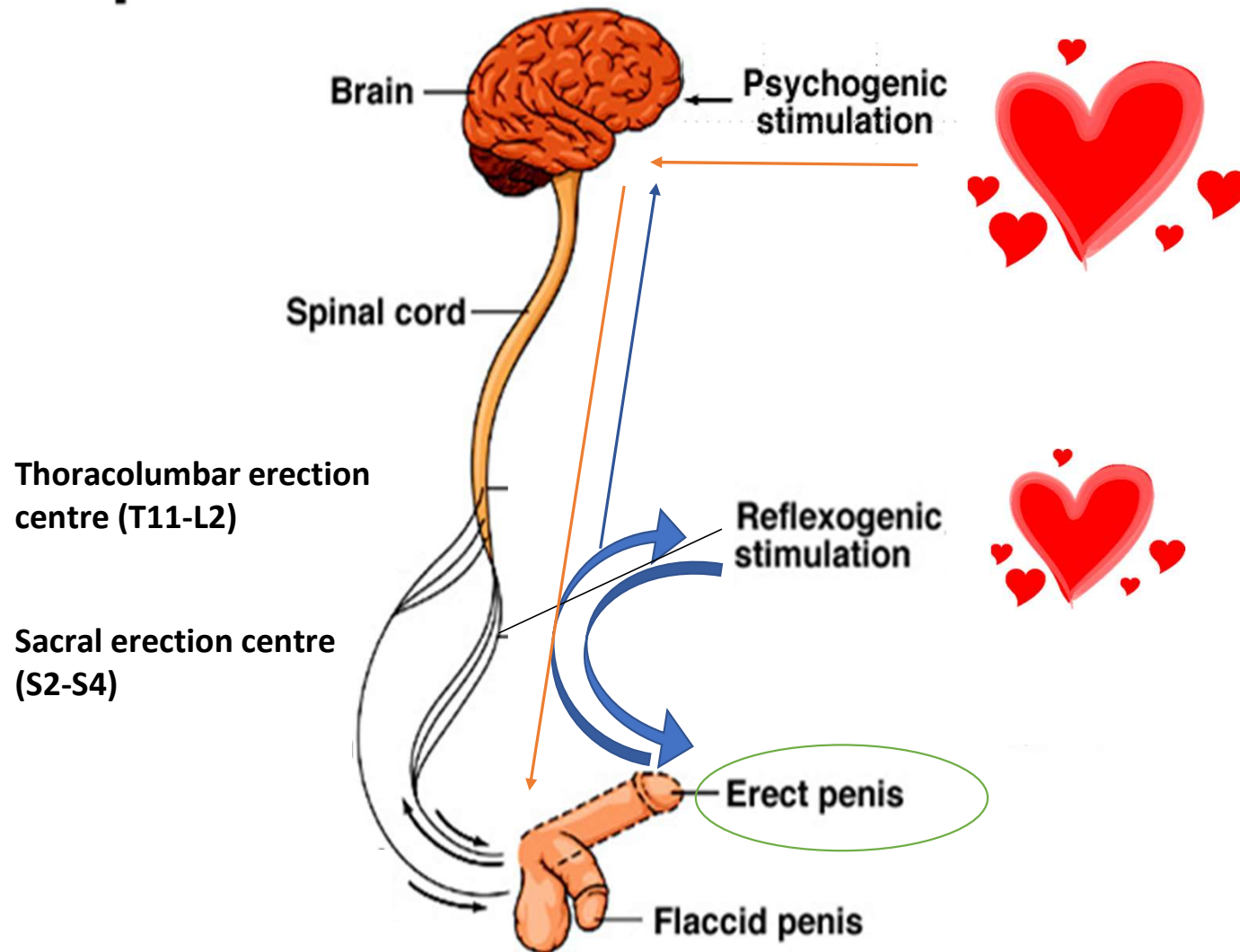




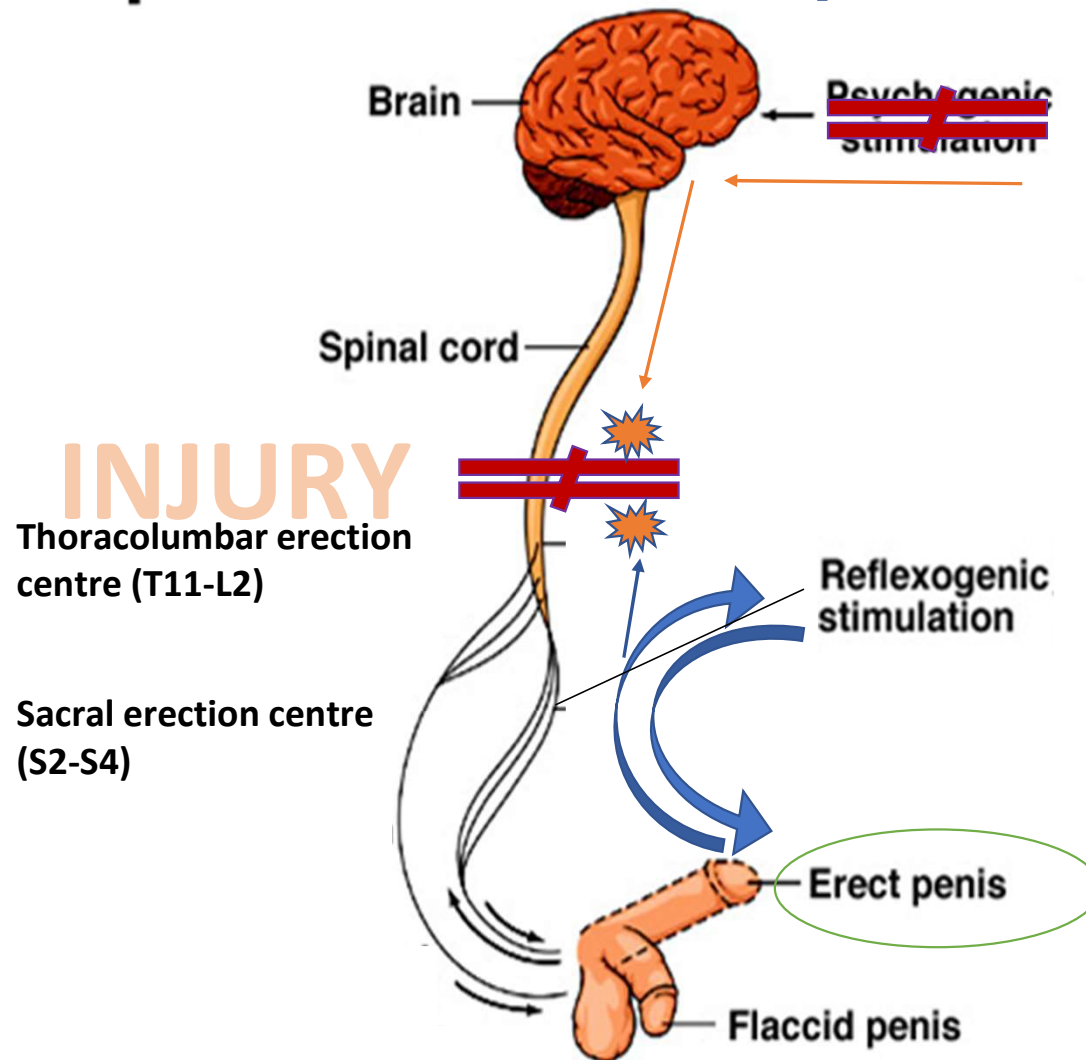
# Spinal Cord Involvement in Erection



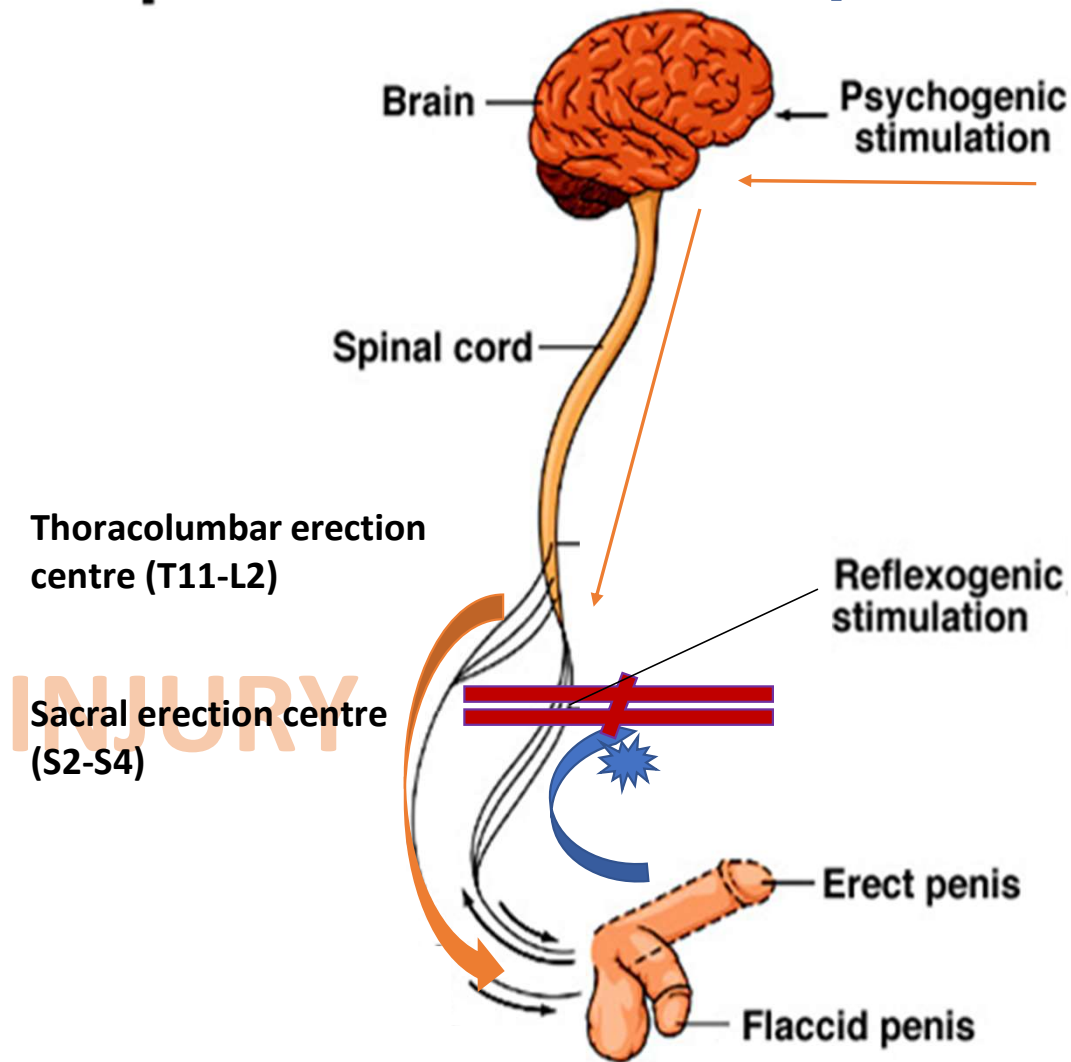
# Spinal Cord Involvement in Erection



# Spinal Cord Involvement in Erection



# Spinal Cord Involvement in Erection



## Ability to achieve erection\*

|     | Complete | Incomplete |
|-----|----------|------------|
| UMN | 95%      | 90%        |
| LMN | 26%      | >90%       |

\*With aides to improve/maintain tumescence

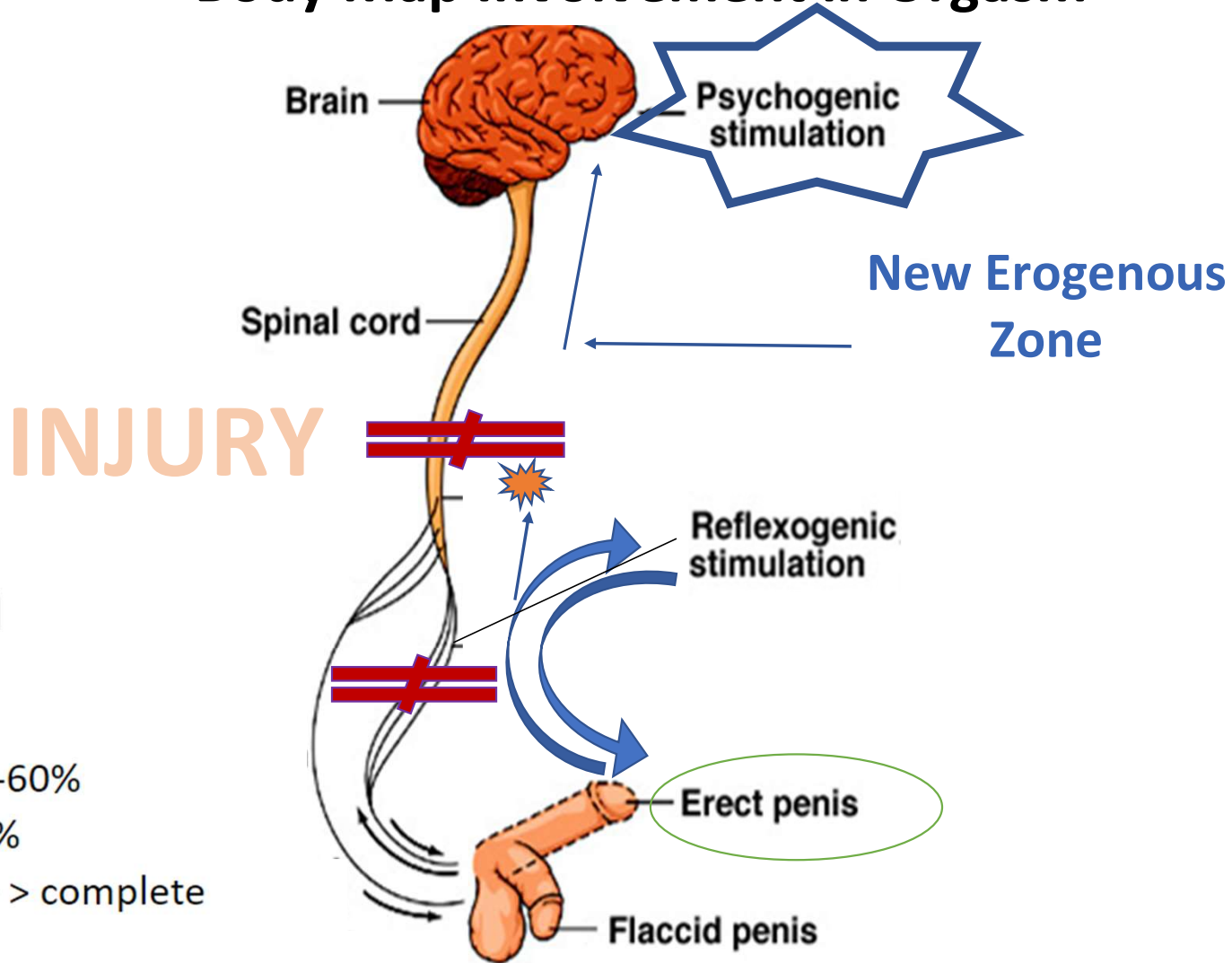
# Ejaculation ≠ Orgasm

- Ejaculation often impaired in SCI
  - 20% all SCI retain some ability to ejaculate
    - Increased with assistive technologies
  - Requires intact sympathetic, parasympathetic and somatic nerve connections
  - Treatment options available for fertility

# Orgasm

- Cortical experience occurring in the limbic system
  - Anterior spinothalamic tracts and pyramidal tracts
    - Cold sensation and VAC indicate intact pathways
- Brain can work independently from injury
  - New Body map
  - Demarcation (ZPP) may become the new erogenous zone
    - Sexual neuroplasticity

# Body Map Involvement in Orgasm



## Orgasm

- Post SCI
  - Female: 22-60%
  - Male: 5-40%
  - Incomplete > complete

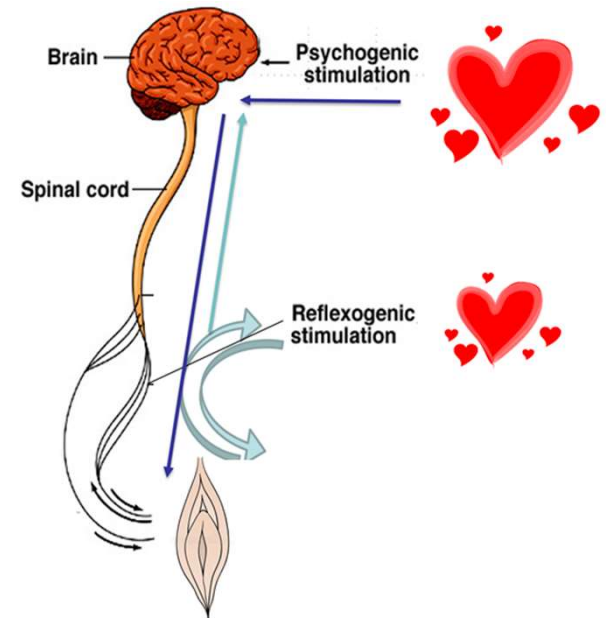


# #3 – Anatomy continued...

Female

# Female physiologic changes after SCI

- Excitement and arousal
  - Reflexogenic and Psychogenic
  - Female lubrication requires intact innervation (and estrogen levels)
    - Complete lesions T10-12 lack lubrication
      - Water soluble > oil
- Accommodation



# Female Fertility after SCI

- Not impacted by spinal cord injury
  - \*Caveat:
    - Spinal shock may temporarily interrupt menstrual cycle
      - Resume 2-8 months after injury
- Contraception
  - Considerations / choices



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# Pregnancy after SCI

- Special considerations:
  - Medications
  - Bladder/bowel
  - Skin / DVT
  - Respiratory, Autonomic dysreflexia
  - Breastfeeding
- Labour & Delivery
  - AD vs pre-eclampsia
- Mobility / Accessibility
- Post-partum depression – more common in SCI populations



New Mobility Magazine  
2016/12/wheelchair-accessible-tips-  
first-time-parent/

# #4 – There are many options

There's almost always something that can be done.

# A Multidisciplinary Approach to Sexual and Fertility Rehabilitation: The Sexual Rehabilitation Framework

*Stacy Elliott, BA, MD,<sup>1-3</sup> Shea Hocaloski RN, BtechN,<sup>3</sup> and Marie Carlson, RN, BSN, CRN(C)<sup>3</sup>*

<sup>1</sup>*Departments of Psychiatry and Urologic Sciences, Faculty of Medicine, University of British Columbia, Vancouver, BC, Canada;*

<sup>2</sup>*International Collaboration On Repair Discoveries (ICORD), Vancouver, BC, Canada; <sup>3</sup>GF Strong Rehabilitation Centre, and the Blusson Spinal Cord Centre, Vancouver Coastal Health, Vancouver, BC, Canada*

# Sexual Rehabilitation Framework

1. Sexual drive/interest
2. Sexual function
3. Fertility/contraception
4. Medical consequences
5. Bowel/bladder issues
6. Motor/sensory influences
7. Sexual self-view
8. Partnership

## A Multidisciplinary Approach to Sexual and Fertility Rehabilitation: The Sexual Rehabilitation Framework

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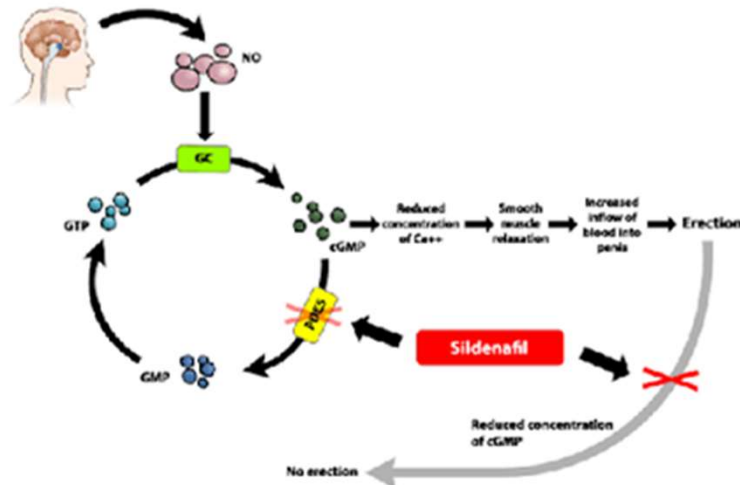
<sup>1</sup>Departments of Psychiatry and Urologic Sciences, Faculty of Medicine, University of British Columbia, Vancouver, BC, Canada;  
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# Sexual Rehabilitation Framework

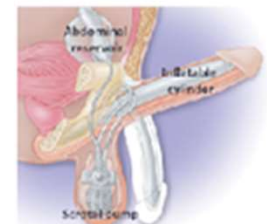
1. Sexual drive/interest
2. Sexual function

## Erectile Dysfunction

- Oral medications
  - Viagra, Cialis, Levitra, etc



The Flator





# Sexual Rehabilitation Framework

1. Sexual drive/interest
2. Sexual function
3. Fertility/contraception
4. Medical consequences
  - Factors associated with the condition
    - Pain, Fatigue, Spasm, Autonomic dysfunction
    - Etc...
  - Comorbid conditions

# Testosterone

- 43% with SCI low serum total T
  - Risk factors:
    - AIS A / B > C / D
    - Narcotic use
    - Obese, diabetes, metabolic syndrome
    - Untreated sleep apnea
    - Brain injury
- Screen testosterone in SCI with ED
  - Remember not to give exogenous T if wanting to procreate

## **Prevalence of Testosterone Deficiency After Spinal Cord Injury**

Anita Durga, DO, Farhad Sepahpanah, MD, Mary Regozzi, RN, James Hastings, PhD, Deborah A. Crane, MD, MPH

ORIGINAL ARTICLE

### **Prevalence of androgen deficiency in chronic spinal cord injury patients suffering from erectile dysfunction**

M Behnaz<sup>1,2</sup>, Z Majd<sup>1</sup>, M Radfar<sup>1</sup>, H Ajami<sup>3</sup>, M Qorbani<sup>4</sup> and A Kokab<sup>2,5</sup>

# Bowel, Bladder, and Sex

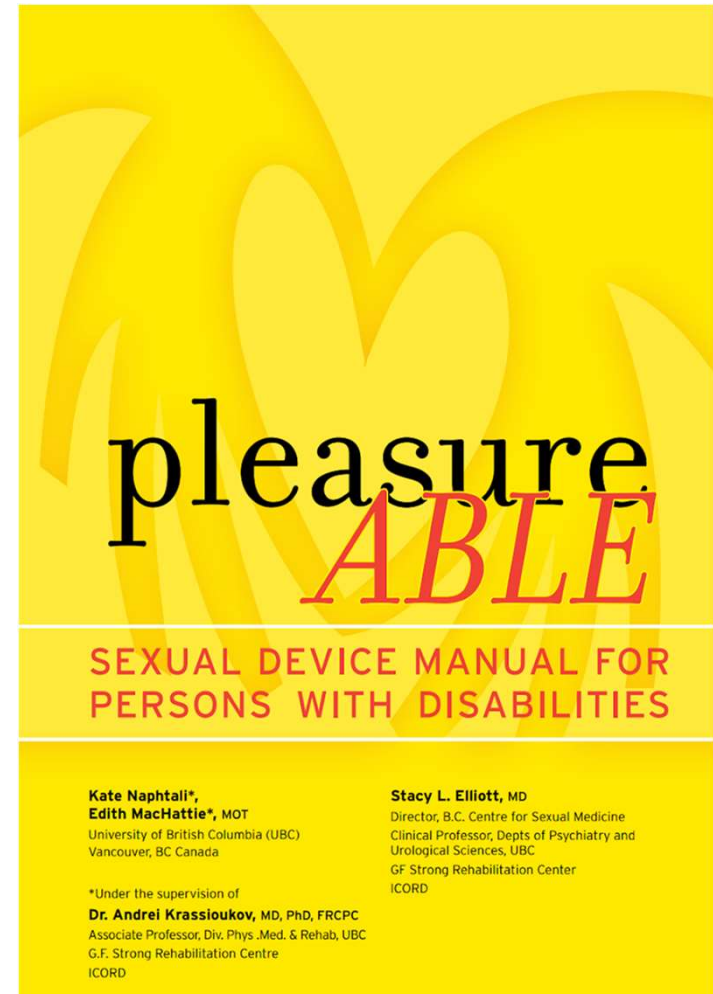
- Goals:
  - Maintain continence
  - Avoid UTI / autonomic dysreflexia
- Considerations:
  - Bowel routine/timing
  - Catheter use:
    - Remove
    - Clamp
    - Tape
    - Cover
- Planning



<https://scisexualhealth.ca>

# Impaired Mobility

- Special consideration
  - Equipment
  - OT assessment
  - Creativity
- Disabilities Health Research Network (BC)

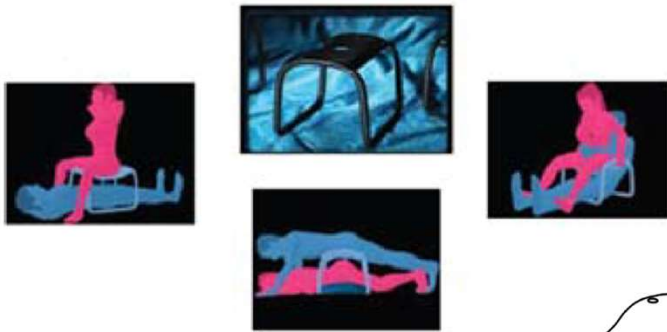


<https://facingdisability.com/resource/pleasure-able-sexual-device-manual-for-persons-with-disabilities>

# pleasure *ABLE*

SEXUAL DEVICE MANUAL FOR  
PERSONS WITH DISABILITIES

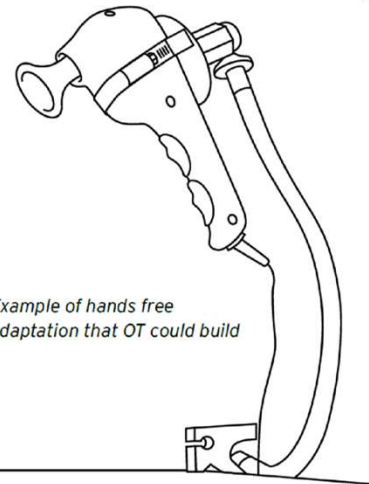
## Body Bouncer



## Liberator Shapes



## Thigh sling



*Example of hands free  
adaptation that OT could build*

**Sexual mobility enhancing products**  
designed to improve intimacy for  
the physically challenged.



Shown with optional cushion.

**IntimateRider™**

# Sexual Rehabilitation Framework

1. Sexual drive/interest
2. Sexual function
3. Fertility/contraception
4. Medical consequences
5. Bowel/bladder issues
6. Motor/sensory influences
7. Sexual self-view
8. Partnership

# #5 – Start the Conversation

# What can healthcare providers do?



- Provide information
- Be aware and respectful of patients/clients' sexual choices and orientation
- Participate in continuing education



# Glenrose Sexual Health Service

- Education and counseling to address sexuality concerns related to injury, illness or disability.
- Services available to people of any age, sexual orientation or relationship status as well as family members/caregivers as required.
- Professional education/consultation provided upon request.
- Multidisciplinary Team (Nursing, OT, Psychology and Social work).
- Bimonthly wheelchair accessible gynecology clinic.
- Urology consultation available to address complex ED and fertility.

# Glenrose Sexual Health Service - Referrals

- Current or former GRH patients can self-refer or be referred by any member of their healthcare team.
- Non-GRH patients require a referral from a healthcare professional.
- Referrals can be submitted via fax to 780-735-7923 or via connect care using the Ambulatory Referral to Rehab option.
- Additional information and referral forms can be found on the Alberta Referrals Directory.
- For more information phone the Sexual Health Service intake line at 780-735-6290

Foothills Medical Centre

# Spinal Cord Injury Sexual Health Clinic



*Everyone has the right to sexual health education and information as part of overall health.*

*~ World Health Organization*

## How to make a referral to the Foothills Medical Centre Spinal Cord Injury Sexual Health Clinic:

- Patients can self-refer or be referred by a member of their treatment team.
- External referrals can be made by any physician or nurse practitioner.

## How to contact us

Phone: 403-944-4226

Fax: 403 283-2526

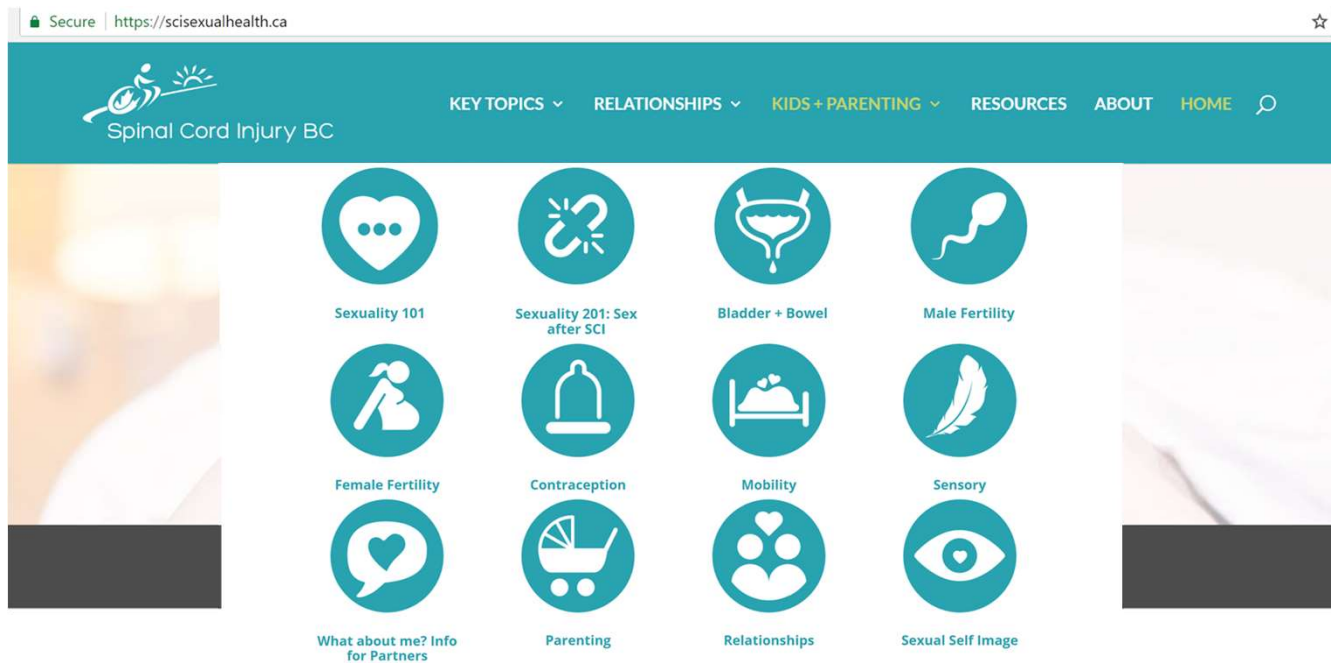
Please leave a message and a clinician with the Sexual Health Clinic will return your call.

# Sexual Health Allied Health Roles\*

- Social Worker – relationships, safety, community resources, funding
- Psychologist – relationships, mental health/wellbeing
- Occupational Therapist – equipment needs assessment, upper extremity splints/braces, custom modifications
- Physiotherapist – lower extremity bracing/splints, exercises / strengthening program
  - Pelvic floor physiotherapist (special training, more \$\$)
- Nursing – bowel and bladder, wound care, education re: anatomy/physiology

\*Only a glimpse of their involvement, each allied health member does so much more!

# Online Resources: Spinal Cord Injury BC



<https://scisexualhealth.ca>

# Online Resources: SCIRE PROJECT

The screenshot shows the SCIRE Professional website interface. The browser address bar displays 'https://scireproject.com'. The website header includes the SCIRE logo (SPINAL CORD INJURY RESEARCH EVIDENCE) and navigation links: Home, Contact Us, Publications, and Legal. A secondary navigation bar contains: About SCIRE, Evidence (selected), Outcome Measures, Videos, Clinical Resources, SCIRE Community, and Search.

The main content area is titled 'Sexual and Reproductive Health'. On the left, a 'Rehabilitation Evidence' sidebar lists various topics with expandable icons (+). The central content features a 'Download as a PDF' button, a citation for Elliott S, McBride K (2014), and a list of related links including Abbreviations, Introduction, Systematic Review, Sexual Activity in Spinal Cord Injured Men and Women, Sexual and Reproductive Health in Men with SCI, Sexual and Reproductive Health in Women with SCI, Sexual Education and Counselling, Summary, Key Points, and References. On the right, there are two sidebars: 'Related Clinical Resources' listing Fertility in Men with SCI, Labour and Delivery following SCI, and Sex and Autonomic Dysreflexia; and 'Related Outcome Measures' listing scales like Emotional Quality of the Relationship Scale (EQR), Knowledge, Comfort, Approach and Attitude towards Sexuality Scale (KCAASS), Sexual Attitude and Information Questionnaire (SAIQ), Sexual Interest and Satisfaction Scale (SIS), and Sexual Interest, Activity and Satisfaction (SIAS) / Sexual Activity and Satisfaction (SAS) Scales. At the bottom, navigation buttons for 'Previous Page', 'Back to Top of Page', and 'Next Page' are visible.

# Online Resources: SCIRE PROJECT

→ ↻ Secure | <https://scireproject.com/community/topics/browse-by-area/sexual-health/> ☆ 🔍

**SCIRE** Community  
SPINAL CORD INJURY RESEARCH EVIDENCE


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### Browse by Area

- Spinal Cord Injury
- Understanding Health Care
- Research
- Community Living
- Repair and Recovery
- Autonomic and Cardiovascular Health
- Bladder Health
- Bone Health
- Bowel Health
- Breathing
- General Health
- Mental Health



[Home](#) » [Topics](#) » [Browse by Area](#) » Sexual Health

## Sexual Health

Sexual health treatments being added in January 2018. Please check back for updates!

[← Previous Page](#)   [↑ Back to Top of Page](#)   [Next Page →](#)

# Abuse – What to do

1. Ensure safety
2. Provide resources

## Acutely (within 96hrs of assault)

- Calgary Sexual Assault Response Team (CSART)
  - Sheldon Chumir
  - 403-955-6030

## >4 days after:

- Sexual Abuse Network
  - 403-237-5888
  - 1-877-237-5888 – toll free in Alberta
- Domestic or relationship abuse
  - 403-234-7233 (SAFE)
  - 1-866-606-7233 - toll free in Alberta



[Connectnetwork.ca](http://Connectnetwork.ca)  
Family & Sexual Abuse Network



## Counselling

- Individual
  - Up to 18 sessions – free
- Group counselling



# 5 Keys of SCI Sexual Health

1. Sex vs Sexuality
2. Sex is Important
  - i. QoL
3. Neuroanatomy & Physiology
  - i. Psychogenic (T11-L2) & Reflexogenic (S2-S4) erections
  - ii. Women
4. There are many options
  - i. Sexual Rehabilitation Framework (8 key components)
5. Start the conversation