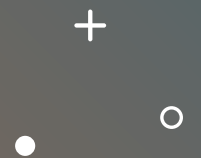




# Vitality & Intimacy: The New Science of Pelvic Aging

Kevin V. Carlson, MD FRCSC

Urologist | Clinical Professor, University of Calgary



RECOVERY

ENDURANCE

FUNCTION CONNECTION

LONGEVITY

VITALITY

MAINTENANCE  
ADAPTATION

ENERGY

INSIGHT  
AGING WELL  
PRESENCE  
CLARITY  
CALM TRUST

SLEEP

ANXIETY INDIVIDUALIZATION

OPTIMIZATION EVIDENCE

EVOLUTION SUSTAINABILITY

PRECISION FOCUS ADAPTATION

ASSESSMENT CONSISTENCY

FATIGUE

CONFIDENCE

INTIMACY

DECLINE

CLOSENESS

HEALTHY

STRENGTH

DESIRE PLEASURE CARE COMFORT  
EASE SECURITY PAIN SATISFACTION  
TRAINING MOVEMENT ACTIVITY

STABILITY

RESILIENCE PERFORMANCE

DISRUPTION

CONTROL BALANCE

PREVENTION AVOIDANCE

CIRCULATION  
UNDERSTANDING

FRAGMENTATION

MOBILITY

**ALLOW MYSELF  
TO INTRODUCE ...  
MYSELF**



+

•

○

# Credentials

- Clinical Professor of Surgery (Urology) and Obstetrics and Gynecology
- Section Head of Urology 2011-2021
- Founded vesia [Alberta Bladder Centre] 2011
- Founded the Functional and Reconstructive Urology Society of Canada (CUA affiliate) 2018
- Lead/Senior/Co-Author of Canadian Guidelines on Female Stress Incontinence, Nocturia, Neurogenic Bladder
- Fellowship Director for Functional and Reconstructive Urology
- Founder,

# Credentials

Surgeon

Endurance Athlete

Ageing Male with Wife  
and 3 Kids and Dog



# Vitality and Intimacy?

What was I thinking?...





# Observations

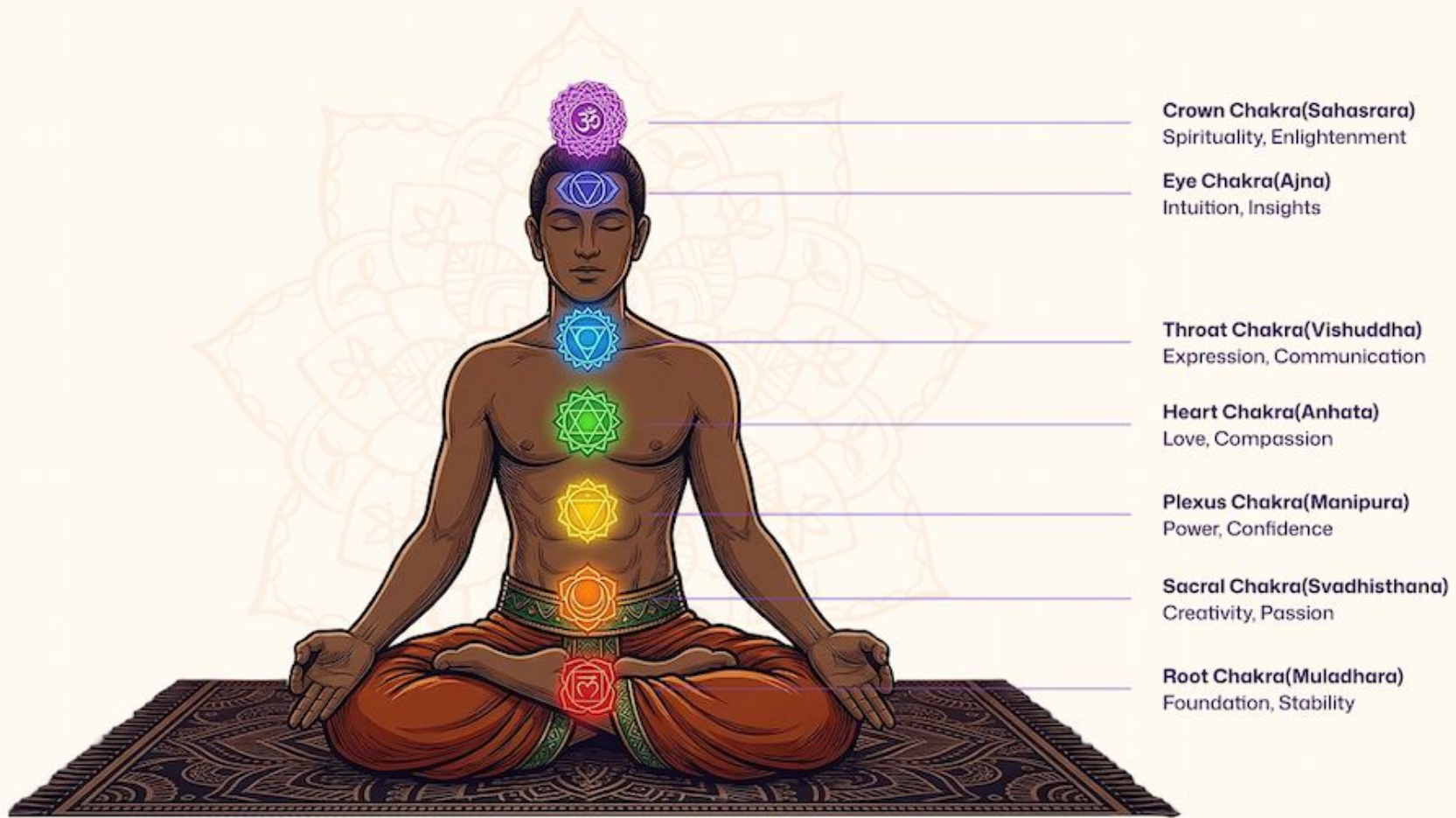
- “Healthcare 2.0” features large silos between
  - Specialist care, primary care, allied care, self-care
  - Publicly funded and private care
- Patients are left to their own devices to “find their way”
- There is a need for qualified leadership in the delivery of “holistic” / “integrative” / “comprehensive” care


+  
◦ •

# The Challenge

+  
• ◦

# The 7 Chakras





We don't  
talk about  
this...

- We talk about heart health
- We talk about brain health
- We talk about joint health
- But we rarely talk about pelvic health

Until something goes wrong.

---

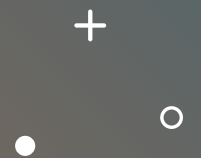
+  
◦ But we  
SHOULD  
talk  
about  
it...

- 1 in 3 adults over 40 experience bothersome bladder symptoms
  - Adult diaper sales double baby diapers - \$6.1B by 2032
- Sexual dysfunction is common — and underreported
  - 40% of men over 40 have ED
  - 48% of premenopausal women
- Nocturia
  - Disrupts sleep architecture → fatigue, falls
- Pelvic symptoms affect intimacy, confidence & productivity

***None are life-threatening.  
All are life-altering.***

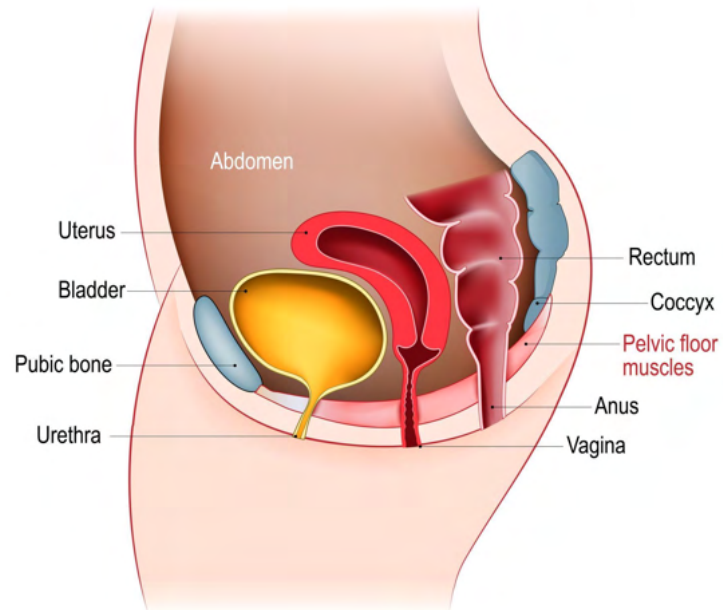
- +
  - Pelvic Anatomy and Physiology

The Basics

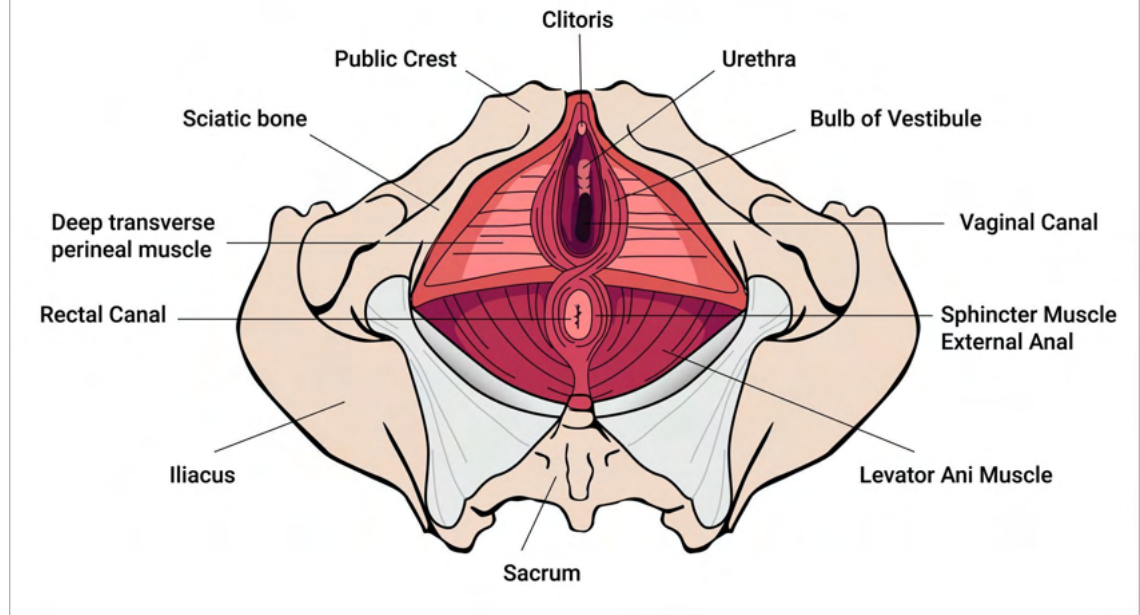


# The Pelvic System: Women

## PELVIC FLOOR MUSCLES

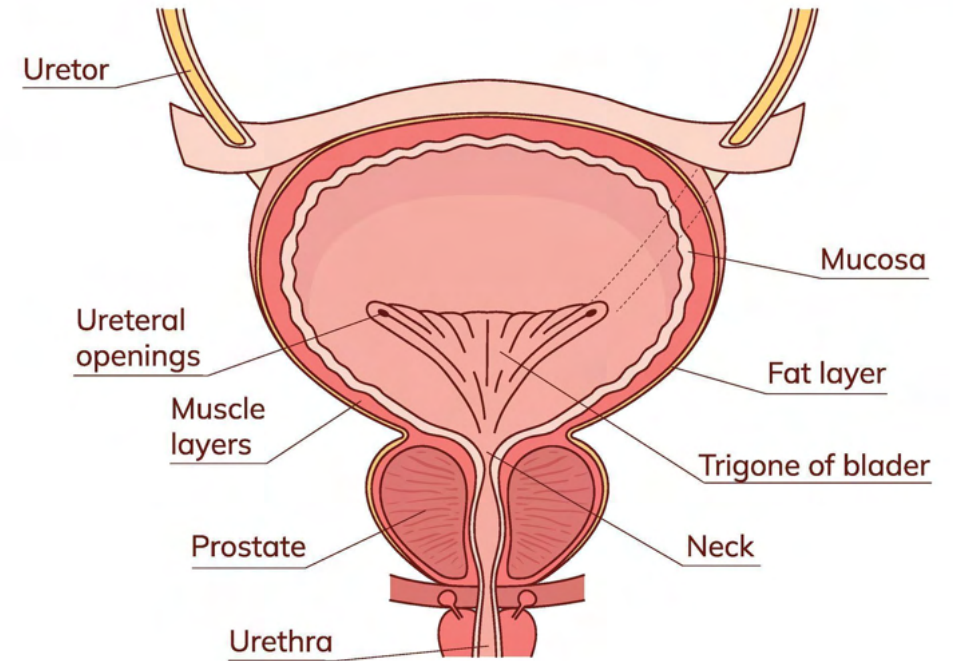
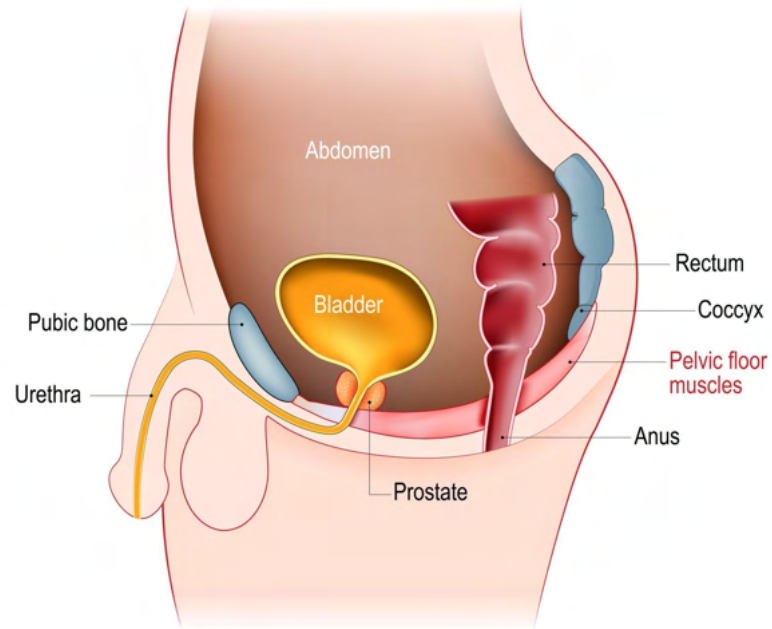


## Female Pelvic Floor Muscles



# The Pelvic System: Men

## PELVIC FLOOR MUSCLES



# The Symptoms That Quietly Change Lives

---

- Urgency & frequency
- Nighttime urination
- Leakage
- Erectile changes
- Vaginal dryness / GSM
- Pain with intimacy
- Core weakness
- Mental/emotional strain



# Sleep, Productivity and Mental Bandwidth

- Nighttime urination, pain, mental stress → fragmented sleep

## ***Sleep disruption affects:***

- Metabolic and health
- Hormone balance
- Mood
- Libido
- Cognitive performance
- Vitality



YOUR GUIDE TO

# The Sacral Chakra

CHAKRA  
Second

SANSKRIT NAME  
Svadhithana

LOCATION  
Lower Abdomen

COLOR  
Orange

PSYCHOLOGY  
Creativity, Feelings, Intimacy, Procreation,  
Sensuality, Confidence, Sociability

EMOTION  
Desires

GLANDS  
Gonad

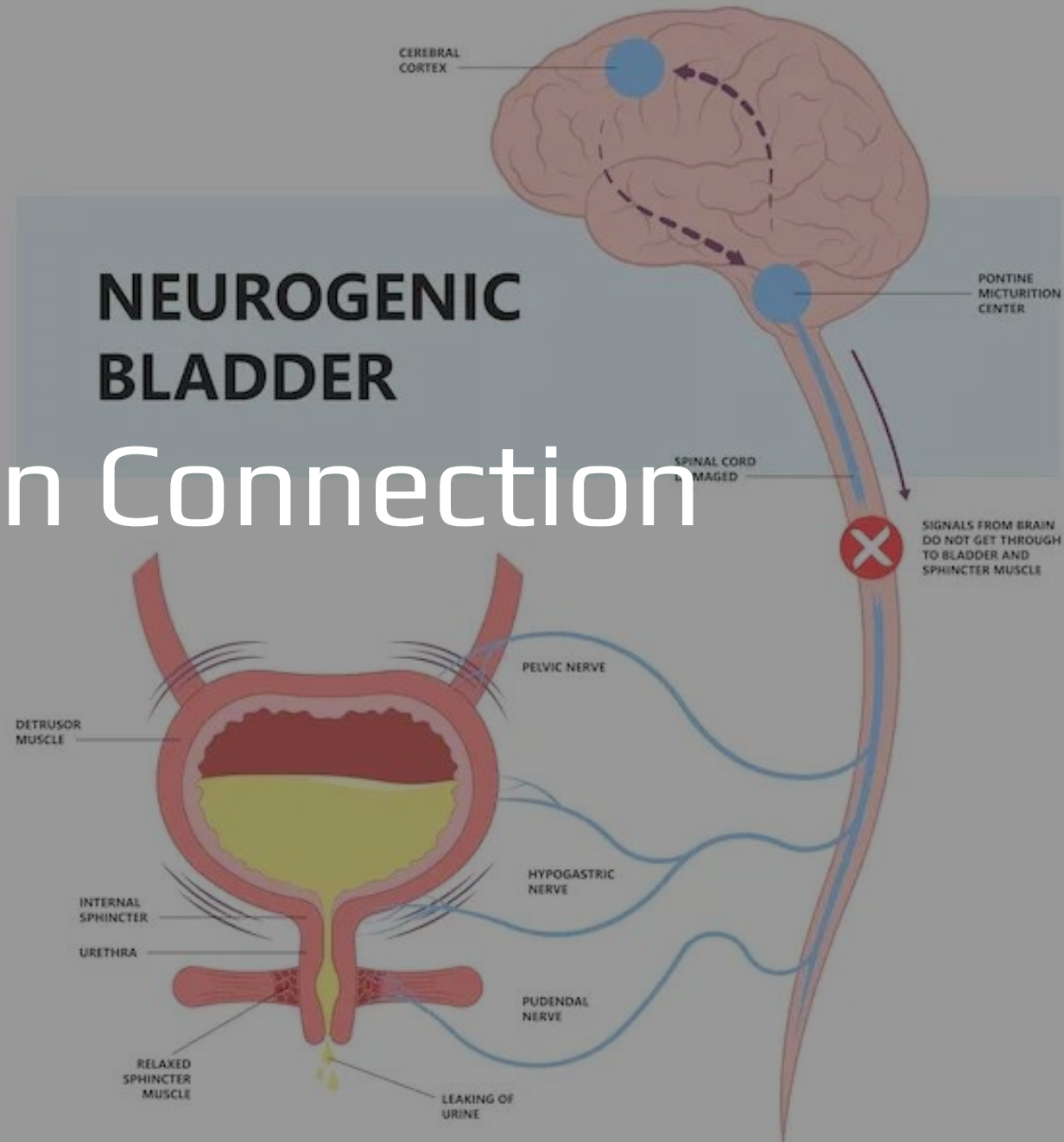
BODILY MANIFESTATION  
Ovaries, Testes, Womb, Kidneys, Urinary  
Tract, Skin, Spleen, Gallbladder, Aura

PHYSICAL AILMENTS  
Impotence, Frigidity, Ovary & Uterine  
Problems, Candida, Eating Disorders, Drug  
Addiction, Depression, Alcoholism,  
Allergies, Asthma

HEALING HERBS  
Fennel, Red Raspberry Leaf, Marshmallow,  
Custard Apple, Motherwort

# The Pelvic-Brain Connection

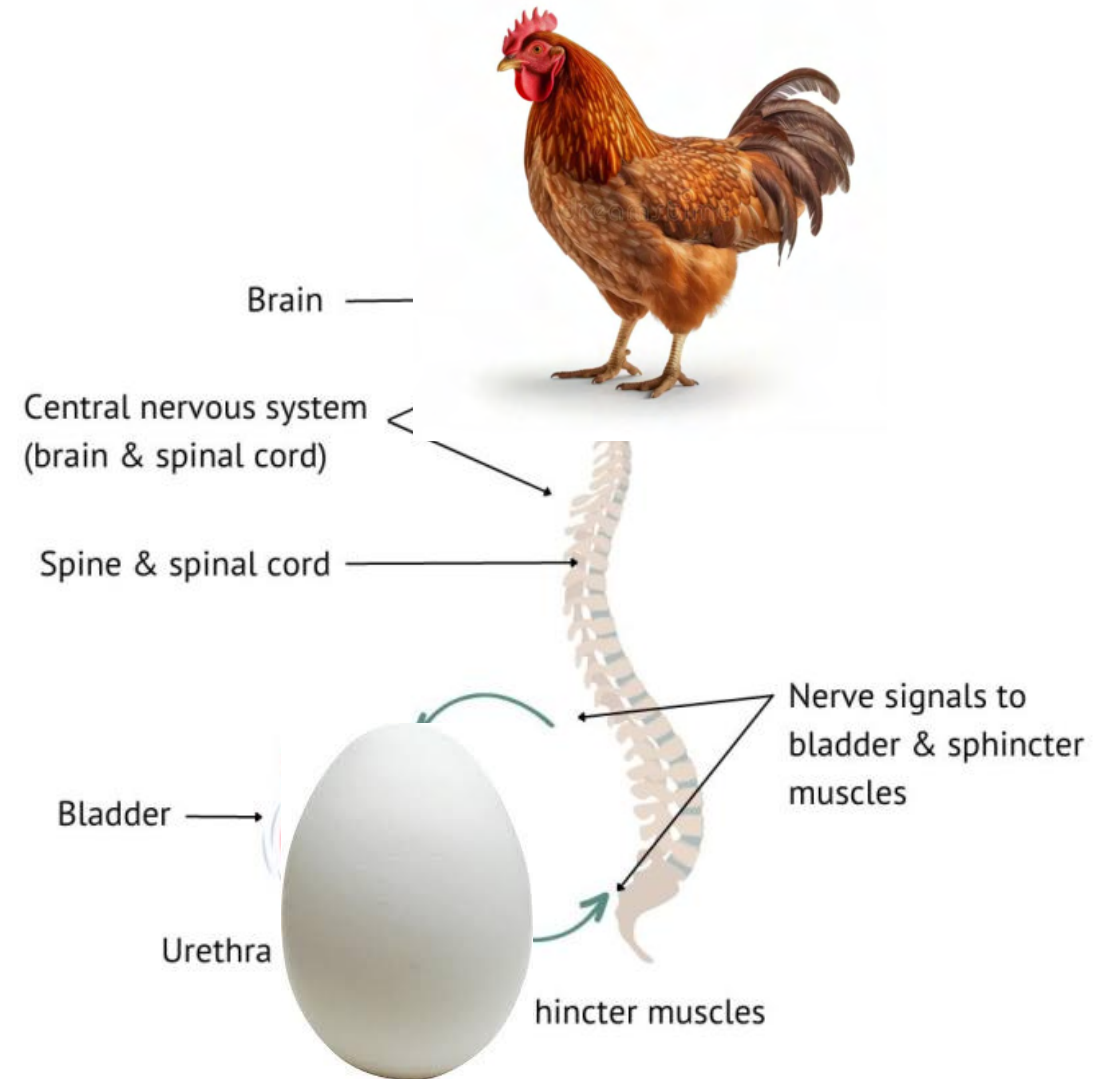
## NEUROGENIC BLADDER



# The Pelvic-Brain Connection

---

1. Pelvic organ and muscle function is neurologically regulated
  - Injury or down-regulation → dysfunction
2. Bladder/pelvic pain or dysfunction cause anxiety
  - Anxiety amplifies the dysfunction and symptom perception (viscious cycle!)
3. Mental health and bladder conditions can share the same cause
4. Hormone function plays a role



# The Impact of Ageing

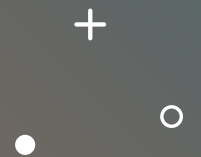
- Brain
- Cardiovascular
- Hormones
- Pelvic organs
- Muscle





# Assessment and Treatment

Let's Go!

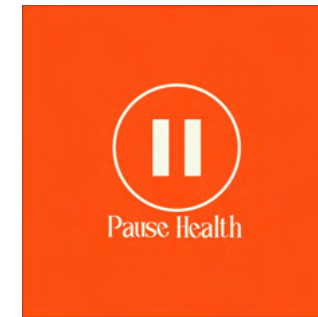


# What a proper assessment looks like

Thorough history

Focused physical exam

Questionnaires, objective testing, lab work



Hormone review when indicated

Screening for other contributors

Different problems feel similar. outcomes.

Diagnosis drives

+

•

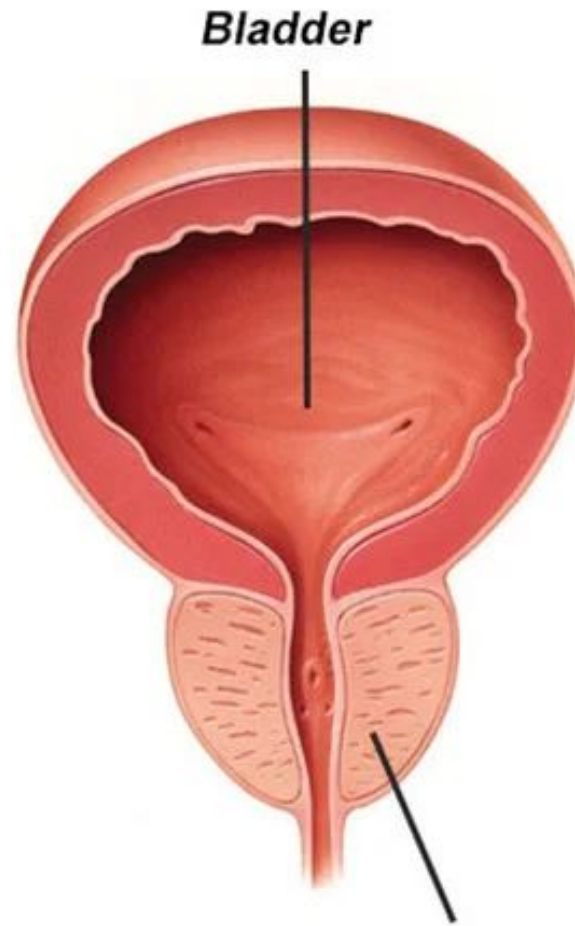
◦

# Pelvic Health Concerns for Men

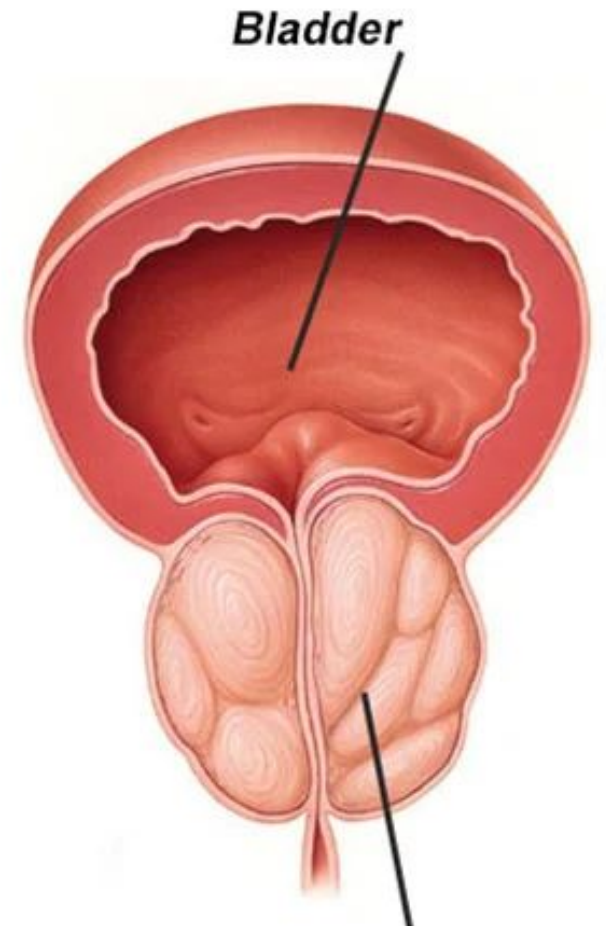
- Enlarging prostate and urinary symptoms
- Prostate cancer risk
- Side effects of prostate treatments
- Sexual function – erections, orgasm, ejaculation
- Declining testosterone levels

# Enlarged Prostate Treatment Spectrum

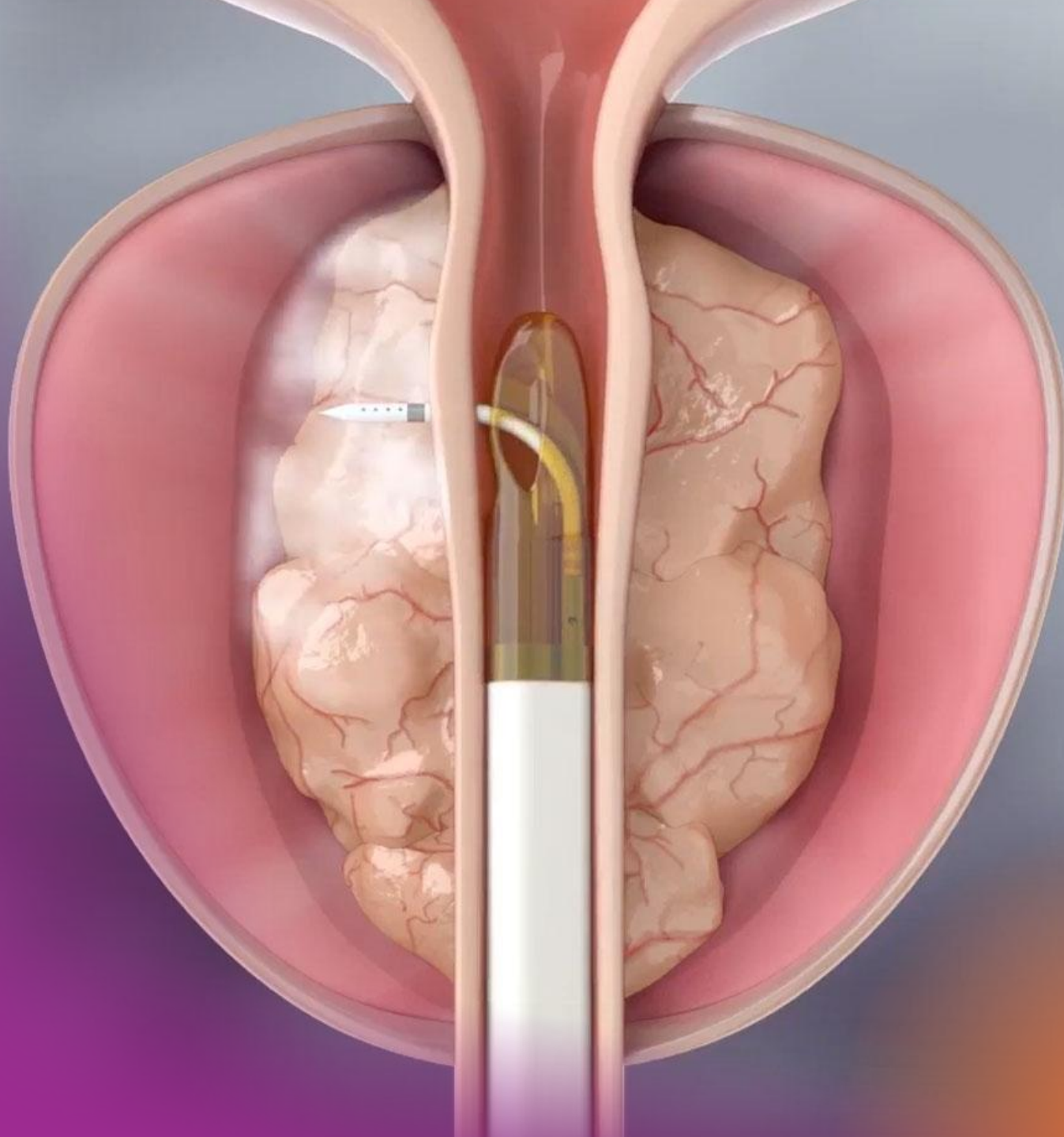
- Lifestyle
- Medication
- Minimally Invasive
- Surgery



**Normal Prostate**



**Enlarged Prostate**



## Rezum Water Vapour Therapy

- Uses convective water vapor thermal energy
- Reduces obstructing prostate tissue without cutting
- Office/outpatient procedure
- ***Preserves sexual function in most patients***
- Supported by long-term clinical trial data

+

- Pelvic Health Concerns for Women

- Overactive bladder
- Urinary incontinence
- Pelvic floor weakness
- Pelvic pain
- Urinary tract infections
- Sexual dysfunction
- Hormonal changes
- Genitourinary syndrome of menopause (GSM)

# Bladder Health Basics

---

- Symptom onset – slow versus sudden
  - Don't ignore them and suffer silently
- Blood in the urine? → ALWAYS see a doctor!
- EVERYONE should drink 1.5 – 3L water per day
- Smoking (and vaping) is bad – very, very bad
- Avoid chronic withholding
- UTI prevention



# Pelvic Floor Health

- Maintain healthy strong muscles
  - Healthy diet, regular exercise, smoking cessation
- Take a load off
  - Constipation (!), chronic cough, weight loss, occupational risk
- Injury prevention – labour and delivery
- Core, Hips, Back
- Targeted strengthening



# Hormones and Women

---

- Estrogen decline → GSM
- Tissue thinning, dryness, irritation
- Increased UTI susceptibility
- Overactive bladder and incontinence
- Pelvic support changes



+  
o Pelvic  
Health  
and  
Vitality  
Concerns  
for All

- Nighttime Urination (Nocturia)
- Muscle Mass and Mobility
- Mental Health

# Muscle Mass and Longevity

---

- Aging → sarcopenia
- Lean mass loss during weight loss (GLP-1 era)
- Resistance training is foundational
- Adjunct technologies may support muscle growth

Function > aesthetics.



***Emsculpt  
Neo***

A man is lying on a white treatment table in a clinical setting. He is wearing black shorts and has a black Emsculpt Neo device strapped to his abdomen. The device has a control panel on the side with the text 'PT neo' visible. The background is a plain, light-colored wall.

# Emsculpt Neo®

- Functional indications:
  - Relaxation of muscle spasms.
  - Prevention of atrophy.
  - Muscle re-education.
  - Maintaining or increasing range of motion.
  - Prevention of sarcopenia in cancer patients
- Applications in Urology
  - Combined with Emsella (“core to floor”)
  - Perioperative prehab or postop rehab of abdominal wall
  - Build muscle mass in patients on hormone therapy

# Neuromodulation and Mental Performance



## *rTMS* (*Exomind*<sup>TM</sup>)

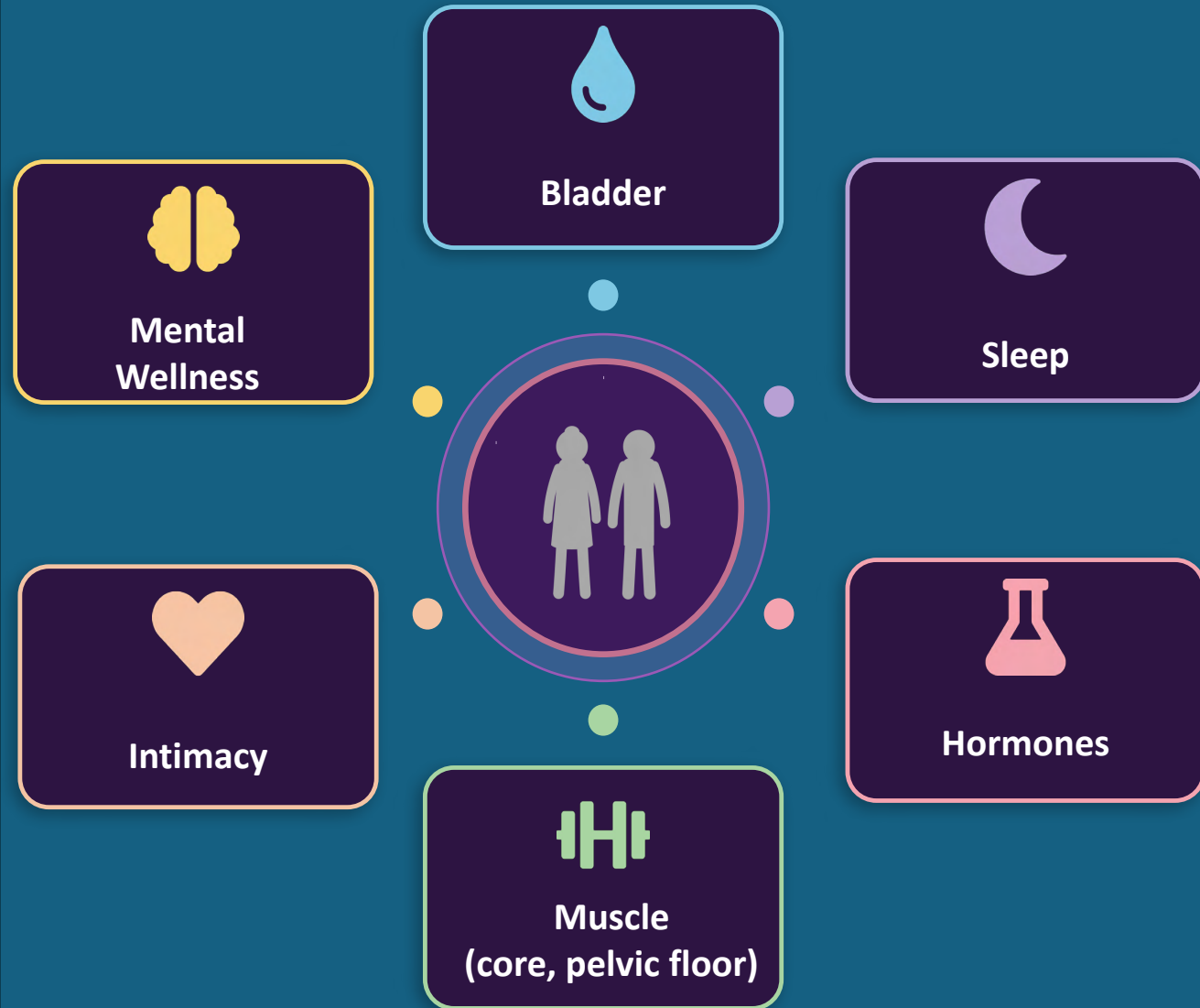
How does it work?

Who is it for?

- Depression, OCD, Binge Eating Disorder
- Mental resilience and performance
- Emerging indications: ADHD, PTSD, post-concussion/trauma, chronic pain, menopause "brain fog", insomnia, tinnitus, movement disorders, cognitive brain dysfunction...
- Urology: Pain, OAB, NGB, DFV, Nocturia



# The Integrated System





# Questions



Link to Today's  
Presentation