BEDROOM, BATHROOM, & BEYOND

A Women's Heath Physical Therapist's approach to treating Pelvic dysfunctions in the 4 trimesters of Pregnancy

OBJECTIVES

- Learn the signs and symptoms of pelvic floor dysfunctions
- Learn what type of support/braces our pregnant and post partum clients need
- Learn the signs of symptoms of pregnancy pain and dysfunction issues and when to refer to PT
- Become familiar with why Kegels are not always the best exercise to do
- Become familiar with the scope of practice for women's Health PT and our role with the "team" of patient care
- Learn positions for labor and delivery for those women with pelvic girdle pain

MY HISTORY WITH OB/GYN

MY HISTORY

- Sports medicine since 1975
- Saw Elizabeth Nobel PT at MA state conference in 1976/77 peaked my interest (have attended 2 workshops of hers over the years)
- Taught first Prenatal class 1982 started treating the musculoskeletal issues with pregnancy and Kegel, Kege,l Kegel….
- Discovered Penny Simptims work through ICEA and it was wonderful meeting her here a few years ago
- Took first incontinent and biofeedback training course mid 90's
- Took first Beyond Kegel course in 2009
- Took Pudendal Nerve pain course 2010

MY HISTORY CONT.

- After taking Pelvic Level II training 2014 and finally getting biofeedback equipment I contacted Urology Dept…. All my prep work over the years and here goes!
- Still a Sports Medicine/Ortho specialist till July 2015 when I convinced my boss to allow me to switch to Women's Health 100% as my wait list had grown to 8-12 weeks to get in to see me.
- So now we have 3 Out Pt Women Health PT's treating OB's pts, soon to be 4 and recently one in-pt PT passed certification.
- 4 of us are now trained in Incontinence care
- 2 of us are trained in Pelvic care for pain issues
- And I passed level III pelvic care this year for treating men's pelvic issues. Level III is also deals cancer issues.

MY HISTORY CONT.

- So something that started out as a fear as a little girl has evolved into still finding joy, love and passion in my job. I cannot think of a better way to be winding down my career.
- I feel like a newbie to the pelvic scene so I am very honored to be here speaking today.

- As a Sports Medicine expert now focusing on the pelvis I sometimes have more questions than answers some days.

WHY BED BATH AND BEYOND?

- A majority of people are well aware of this store and what they sell.
- Most people are aware of Physical Therapy and what we do.
- A large majority of people, including medical personal are not aware of the Specialty care that the Women's Health PT's are providing with our pregnant, post partum and with pelvic issues in general.
- The majority of this talk today is dealing with the 4 trimesters of pregnancy
- Chronic pelvic pain can arise in the postpartum gals having delayed referrals to a pelvic PT or had pelvic pain before pregnancy. Some gals are referred but after going thru PT for fractures or ACL repair cannot envision Physical Therapy for their painful pelvic region. Therefore education is an important factor starting in the provider's office of what expect with their visit to a Pelvic Therapist.

WHY BED BATH AND BEYOND

- There are so many dysfunctions related to the bedroom and the bathroom I thought it was a good place to start
- So lets's get started!

A BRIEF BREAKDOWN OF WHAT A PHYSICAL THERAPIST DOES

restore function
improve mobility
relieve pain
prevent permanent disabilities
limit permanent disabilities

IF INJURED
restores..
maintains..
promotes..

..general fitness and health

WHAT PT'S DO

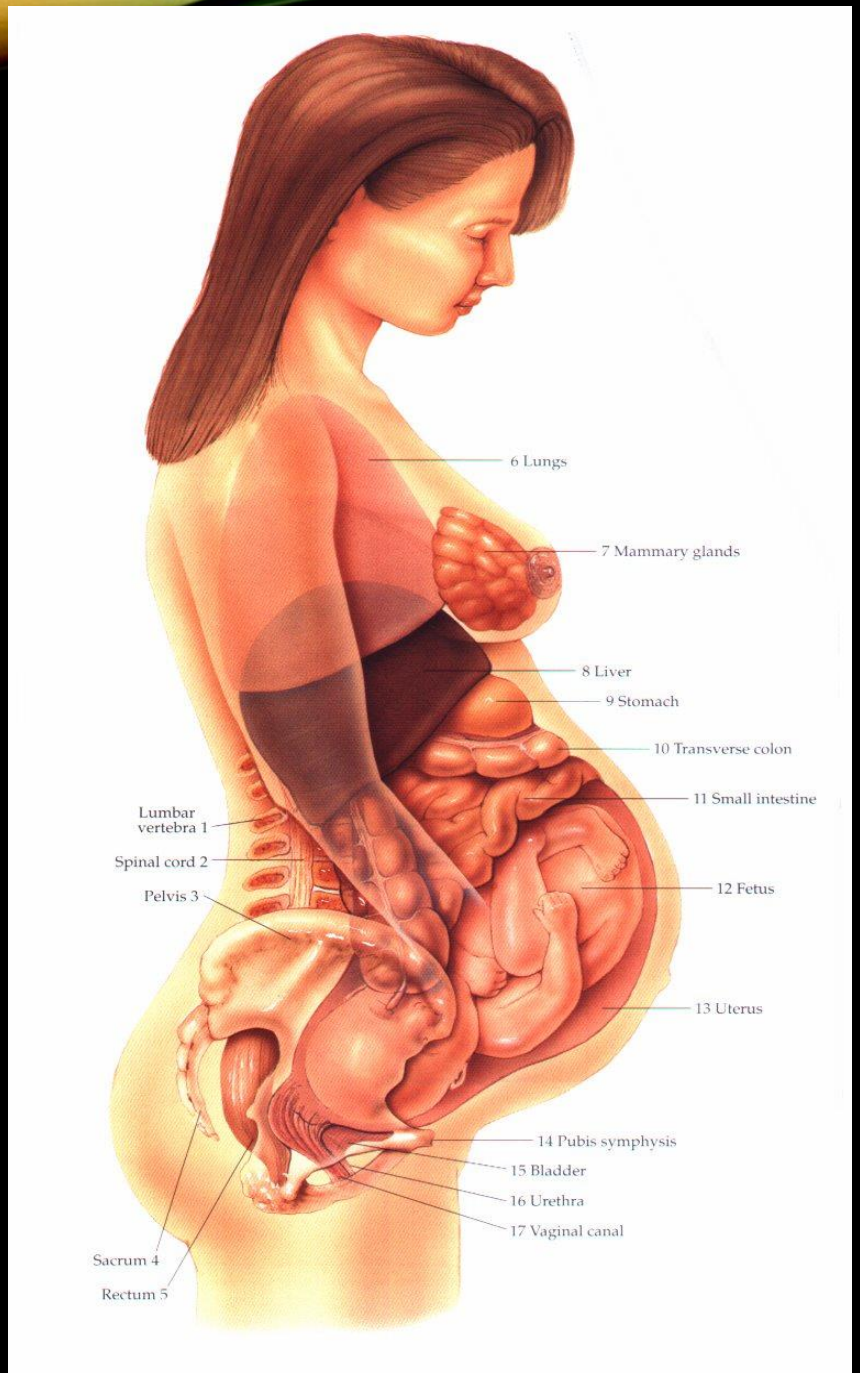
The physical therapist.. examines the
patient's medical history
tests and measures the patient's..

strength
range of motion
balance
coordination
posture
muscle performance
respiration
motor function

..and then develops the patient's
plan describing a treatment strategy
and its targeted outcome.

- Physical Therapists are the Biomechanical experts for evaluating, treatment planning and rehabbing muscles, tendons, ligaments joints, nerve injuries and for body functions.

- The pelvis is comprised of all these structures and then some!
- Let's add a baby in there and see what happens!


6 Lungs
7 Mammary glands
8 Liver
9 Stomach
10 Transverse colon
11 Small intestine
Lumbar vertebra 1
Spinal cord 2
Pelvis 3
12 Fetus
13 Uterus
14 Pubis symphysis
15 Bladder
16 Urethra
17 Vaginal canal
Sacrum 4
Rectum 5

HORMONAL CHANGES

- Maternal hormones kick in right away
- connective tissue softening," laxitizing"
- More easily strained with ADL's, ANL's, and PT mobilizations/manipulations
- Lapse in calciotrophic hormone that prepares the bones for the stress of pg and childbirth

Areas of concern

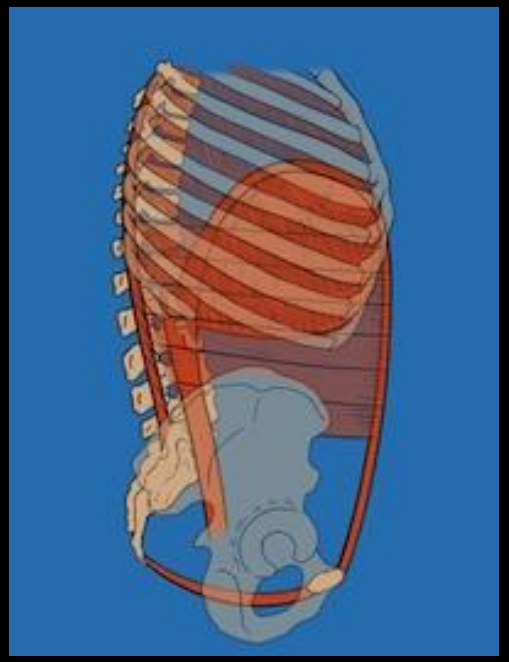
- Pubic symphysis
- Sacral iliac jt
- Pelvis
- linea alba
- annulus of the disc
- Transient osteoporosis
- Rule of 9

ROLE OF THE PELVIS

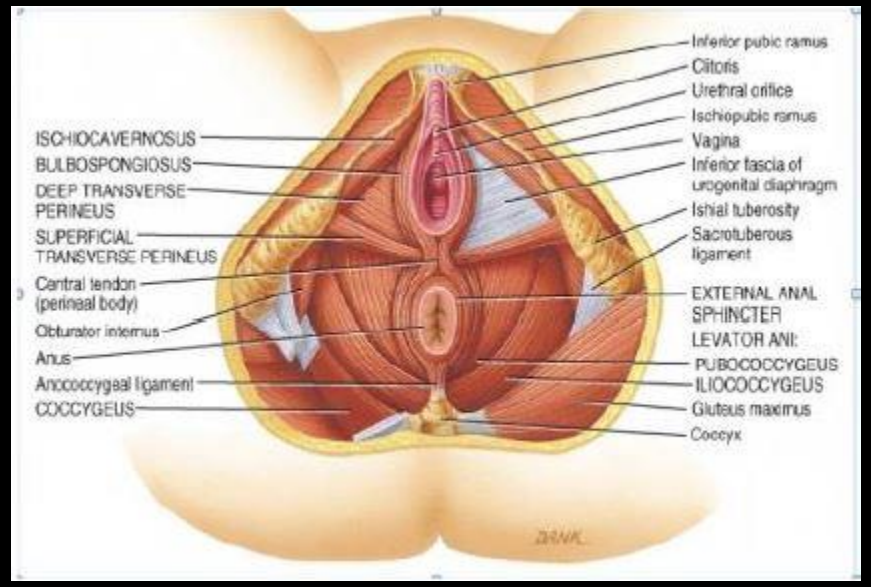
Support the wt of our upper body
Our center of gravity is here
Transfer of wt from upper body to lower body for locomotion
Supports and protects internal organs and growing fetus

WHAT IS THE PELVIC FLOOR

Really not a floor
It is the base of our "core"



Really bowl shaped



PELVIC FLOOR

The floor is comprised of 14 thin muscles intertwined with nerves arteries and veins surrounded by connective tissues that supports the abdominal organs awhile playing a key role in urinary bowel and sexual support.

When you think about how important a job the pelvic floor plays in childbirth, sex, having a bowel movement, urination, continence, sitting, walking moving around, it is difficult to under stand why it's such an under recognized part of human anatomy.

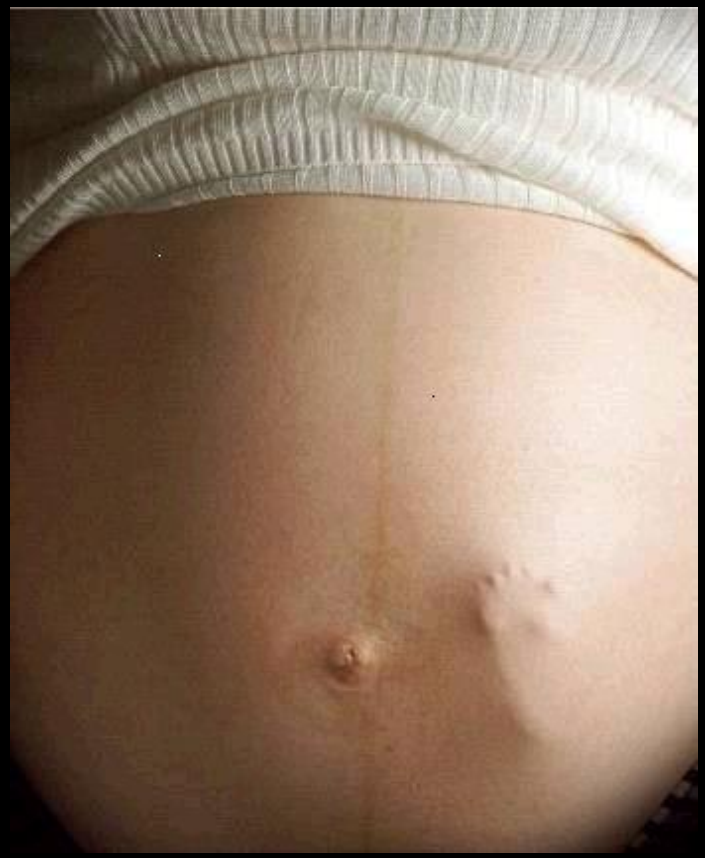
Like I said switching my specialty I often had more questions than answers.

PELVIC PAIN IN PREGNANCY

Pelvis part of a whole complex system and needs to work with the surrounding structures.
We will look at the pelvis today from a Physical Therapy Musculoskeletal point of view
We will be dealing with acute pelvic pain in pregnancy
Pelvis: The area between iliac crest and gluteal folds

PELVIS PART OF A COMPLEX, DYNAMIC SYSTEM

- Lumbar spine needs to be ruled OUT
- HIPS
- Thorax with diaphragm, ribs, Abdominals



PREGNANCY

Back pain in pregnancy in not normal!

Common yes. Normal no.

So many of our pts finally make it in and tell us they have been complaining for months of back pain and they were told it will go away when they deliver.

PAIN

Definition: unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage.

Acute /chronic

PELVIC JOINT PAIN

Pelvic Girdle Syndrome –daily pain all 3 pelvic jts SIJs & PS
Pubic Symphysis Pain – daily pain in PS confirmed by pain provocation tests to PS
One sided Sacroiliac Syndrome- daily pain one SI jt confirmed by pain provocation to this SI jt
Double sided Sacroiliac Pain Syndrome_Modified from Albert

WITH PREGNANCY

Center of gravity moves forward stressing the

- muscles
- ligaments
- joints
- discs
- nerves

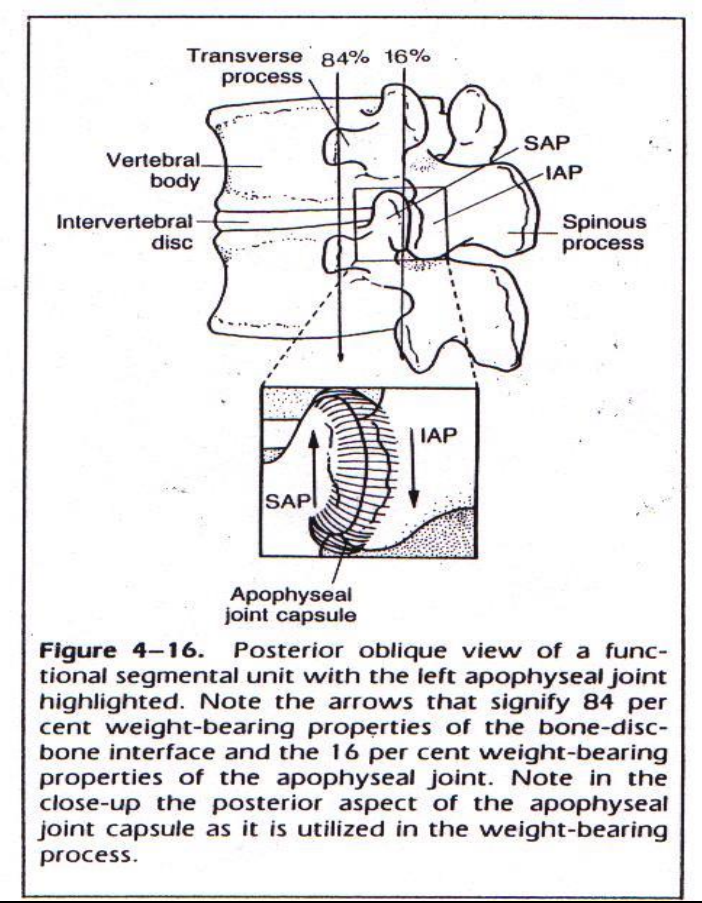
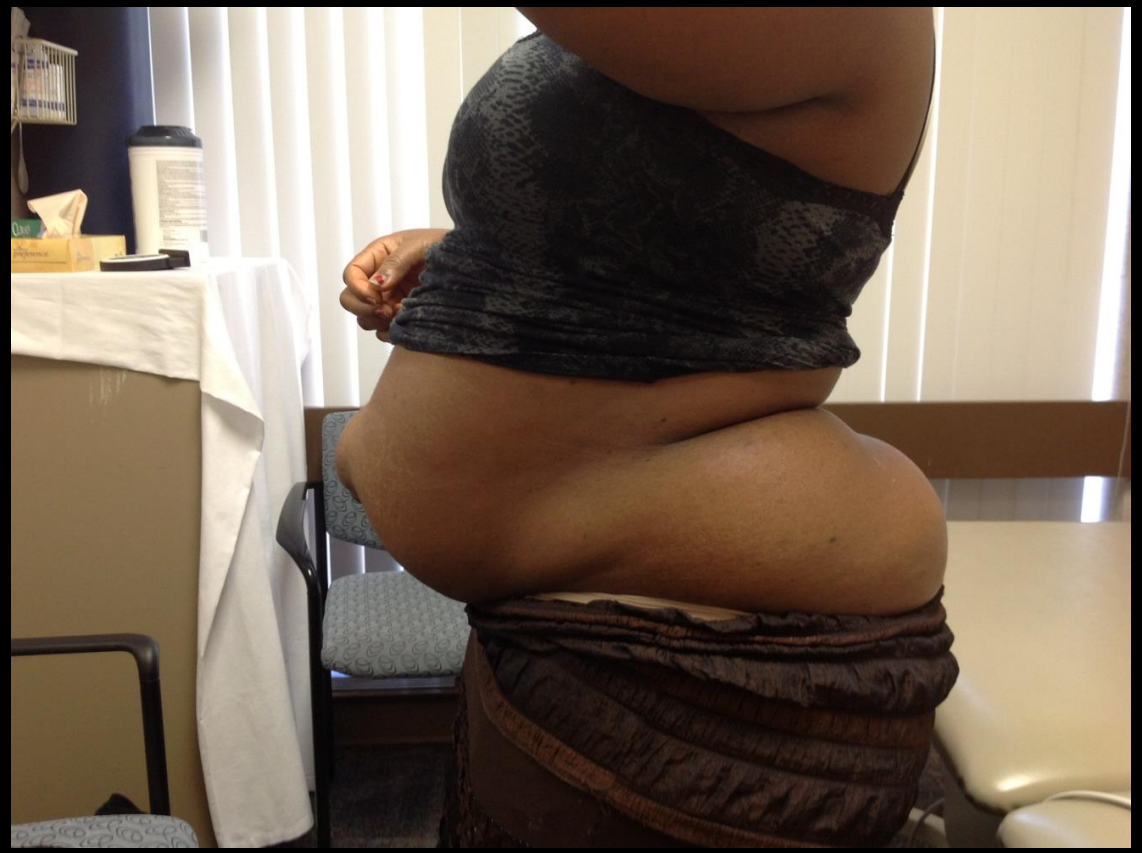


Figure 4–16. Posterior oblique view of a functional segmental unit with the left apophyseal joint highlighted. Note the arrows that signify 84 per cent weight-bearing properties of the bone-disc-bone interface and the 16 per cent weight-bearing properties of the apophyseal joint. Note in the close-up the posterior aspect of the apophyseal joint capsule as it is utilized in the weight-bearing process.

FACET JOINT LOADING

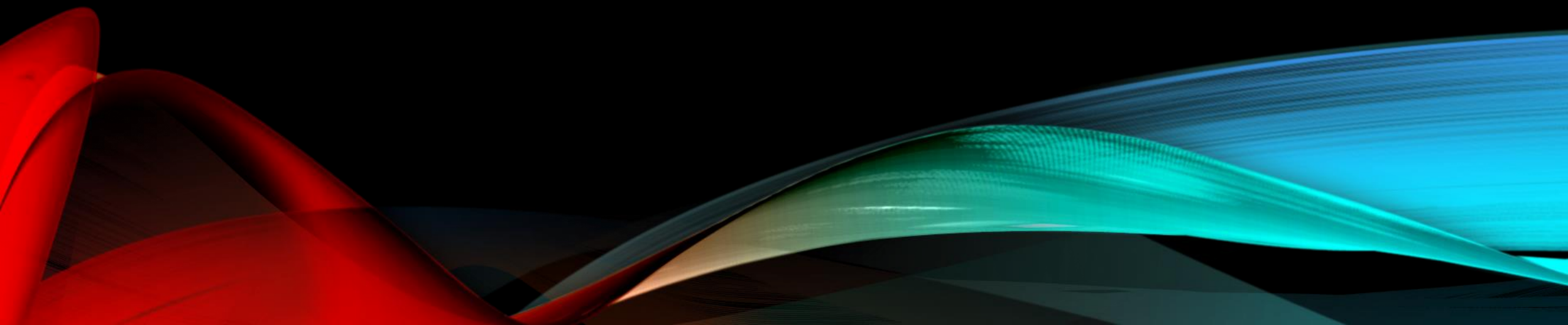


CORRECTION

Posture ex

ROM

Prenatal ex program



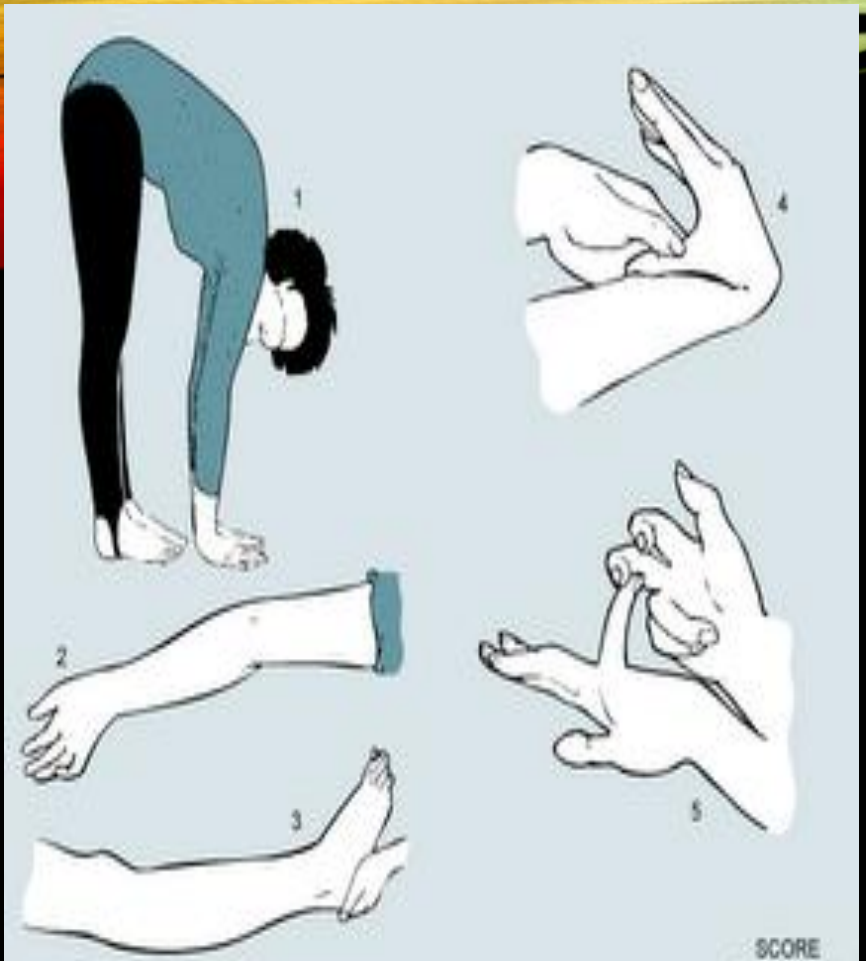
PELVIC GIRDLE PAIN

Low back pain and PGP are frequent and disabling conditions in pregnancy.[10],[11] More than 80% of pregnant women with LBP experience daily discomfort and consequently struggle with housework, childbearing, and job performance.[9] Basic life activities are affected such as dressing, walking, lifting, carrying, climbing stairs, turning in bed, and sitting. These limitations complicate employment, hobbies, sleep, sexual and social life, and personal relationships.[11–13] As a result of pain and reduced function, pregnant women suffer a diminished quality of life (QOL).[9–13]

Long term outcomes less favorable for PGP because these gals are less mobile, experience more comorbidities

and depressive Sxs

LAXITY WITH PREGNANCY



	SCORE Left	Right
1. Can you put your hands flat on the floor with your knees straight?	1	
2. Can you bend your elbow backwards?	1	1
3. Can you bend your knee backwards?	1	1
4. Can you bend your thumb back on to the front of your forearm?	1	1
5. Can you bend your little finger up at 90° (right angles) to the back of your hand?	1	1
		9

Figure 1. Beighton's modification of the Carter and Wilkinson scoring system. Give yourself 1 point for each of the manoeuvres you can do, up to a maximum of 9 points.

LAXITY

Laxity of SI jt is predictive of pelvic pain in pg

Now hormones are floating around too

SI JT PAIN:

Can start in first trimester

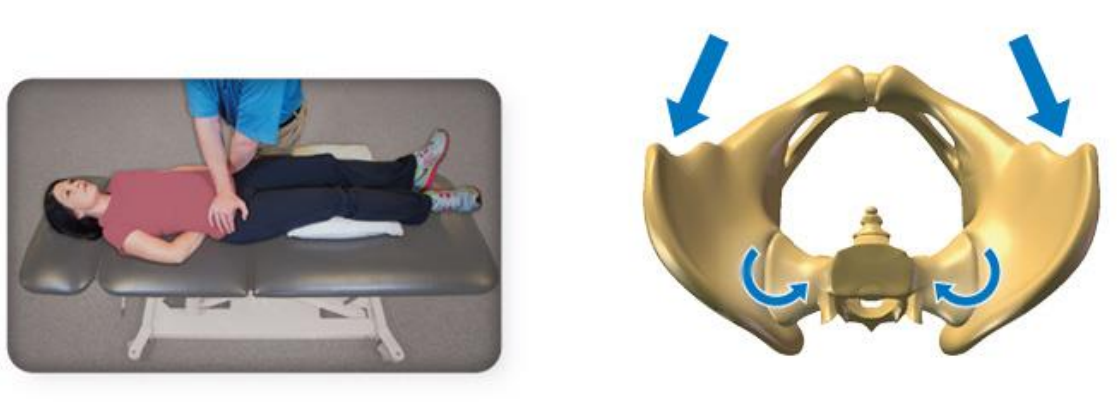
Related to circulation of relaxin hormone which causes major physiological and musculoskeletal changes in the PG’s women's body

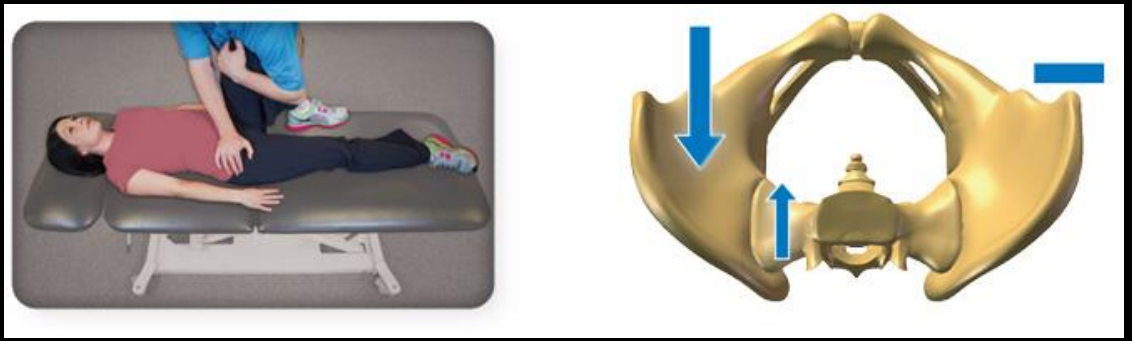
Can be made worse by preexisting SI jt conditions

Loss of ligament stability

QUICK TESTS FOR SI JT

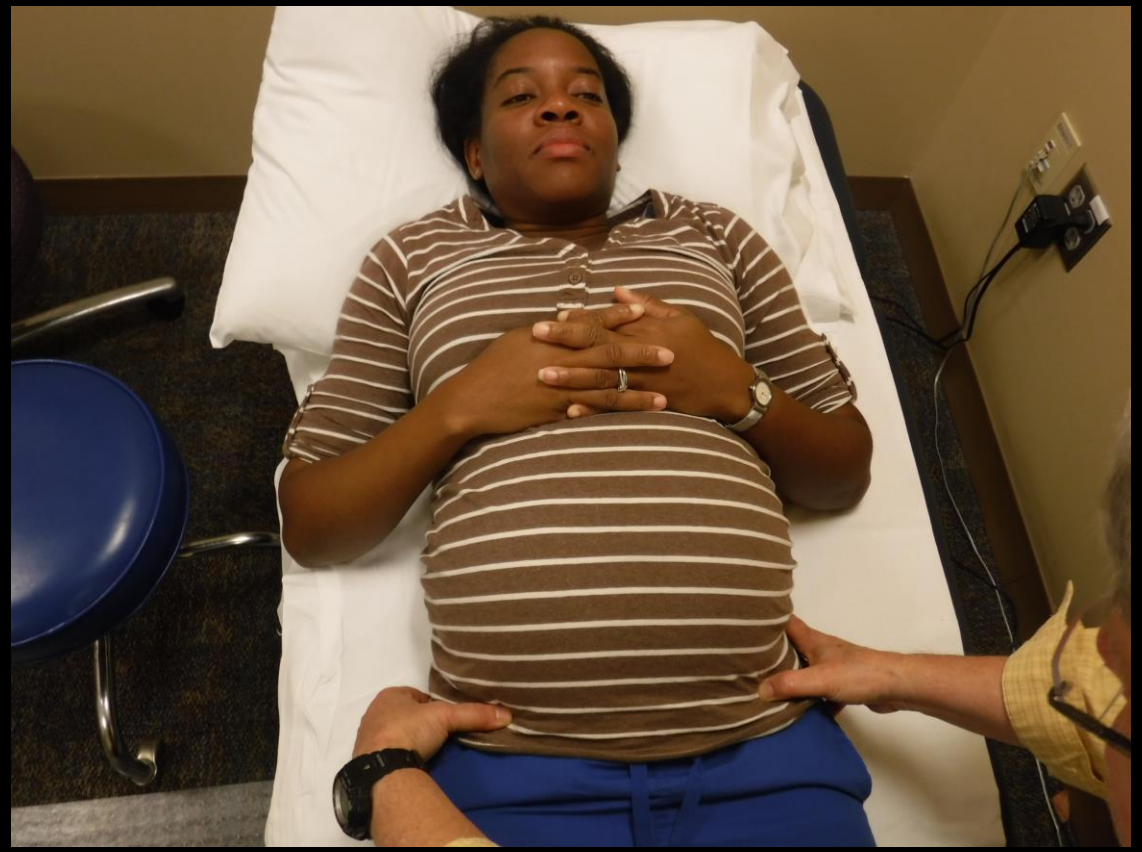
DISTRACTION AND THIGH THRUST

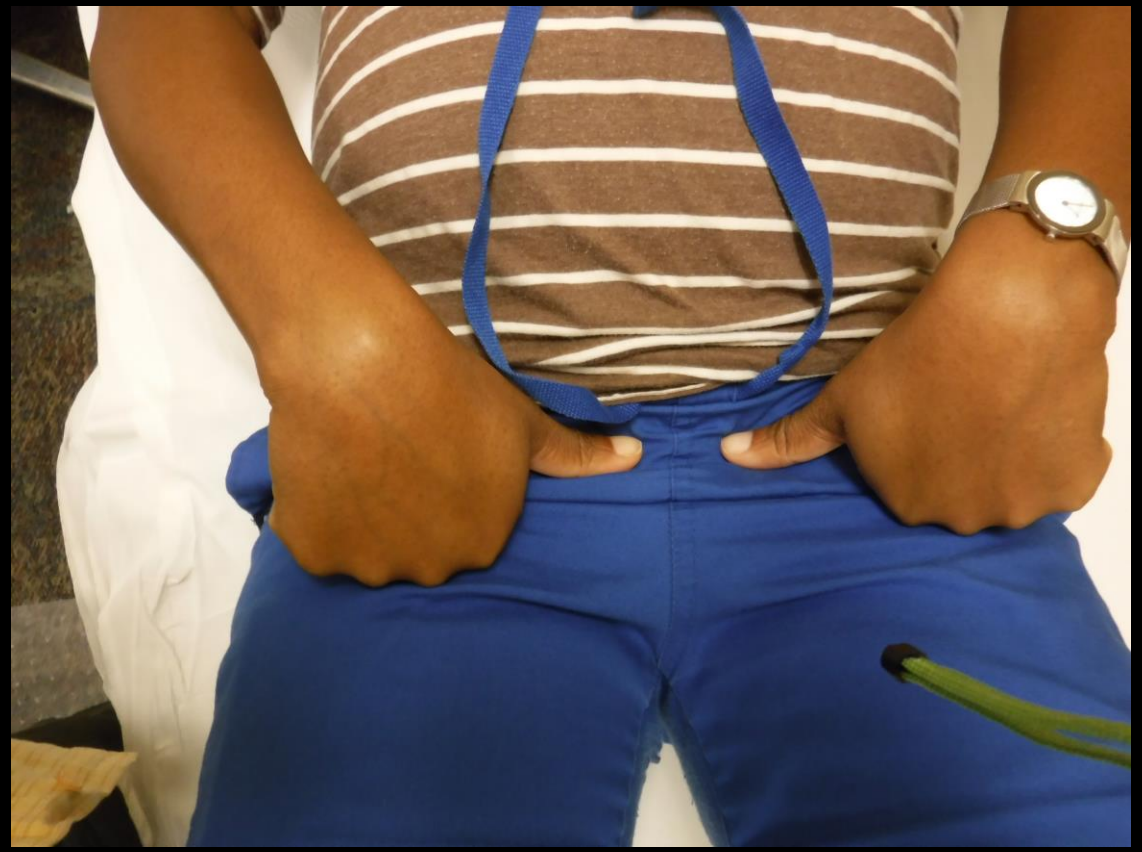




MARCH TEST FOR PELVIC PAIN

PUBIC PAIN



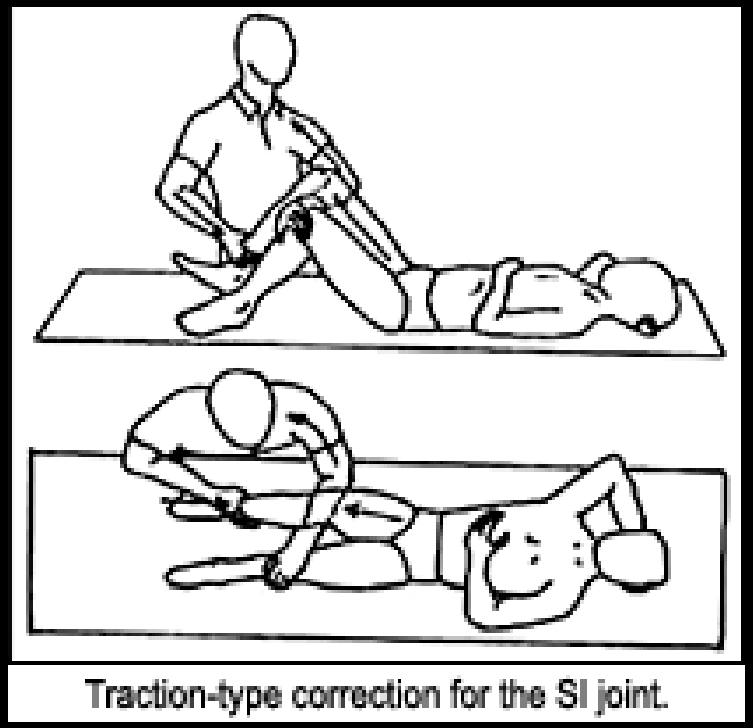


PUBIC PAIN

- Some gal's pain is so severe they cannot walk without assistive device
- Crutches or if really severe a rolled walker may be needed
- PT will usually measure the distance they can ABDuct their legs so they don't exceed this in L&D or tearing or fracture can occur!!!! This is usually documented in the PT note and pt given a copy as well as issued positions to use for L&D
- Treatment Muscle energy techniques to balance the pelvis and pubes.
- May not correct if also restricted SI jt
- SI jt treated first- sometimes the pelvis will automatically correct
- Pelvic SI belt sinched tight

BEDROOM PAIN RELIEVERS

STABILIZATION OF SI JT AND PUBIC JT
THEY MAY DEFINITELY NEED POST PARTUM

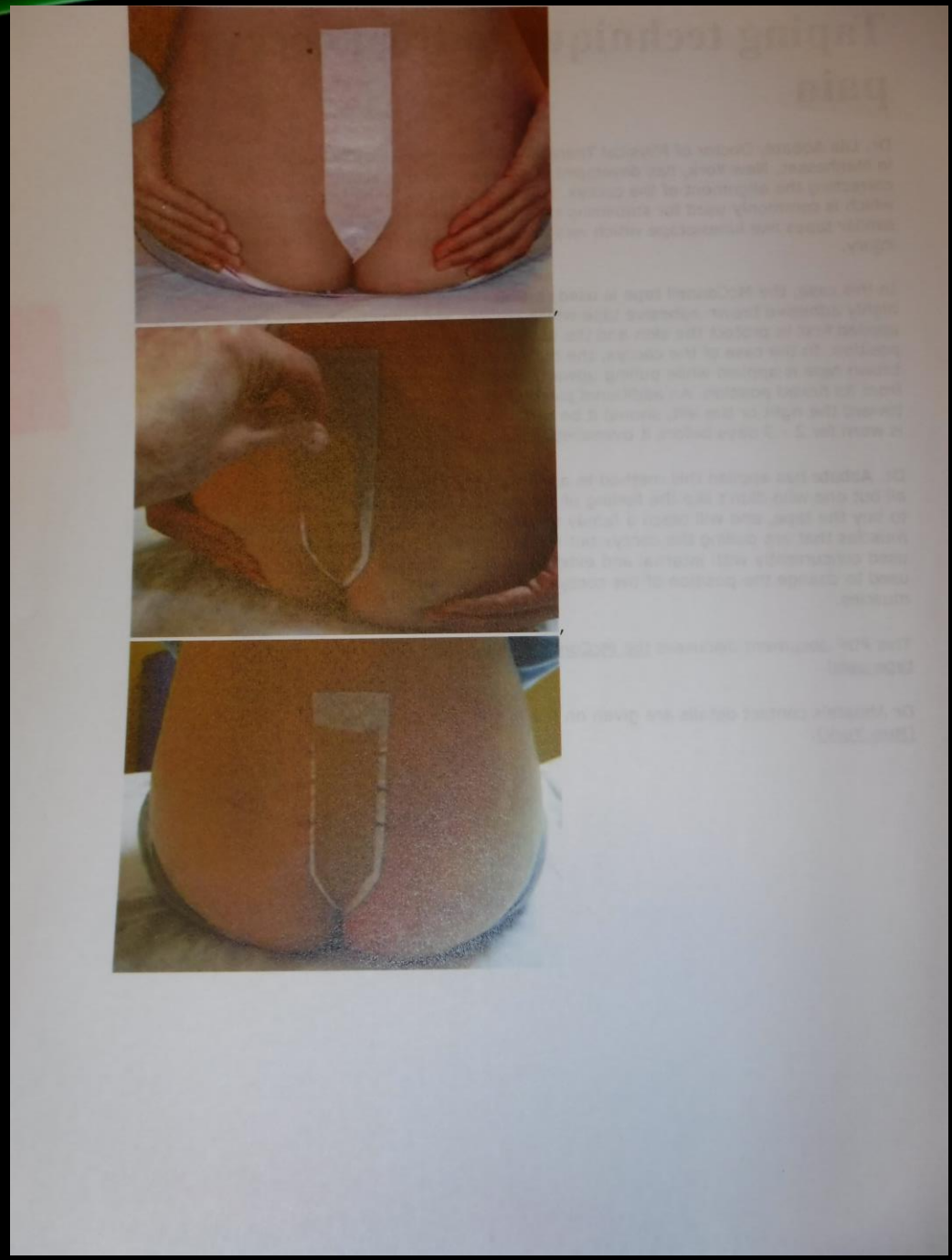


Traction-type correction for the SI joint.

COCCYX PAIN

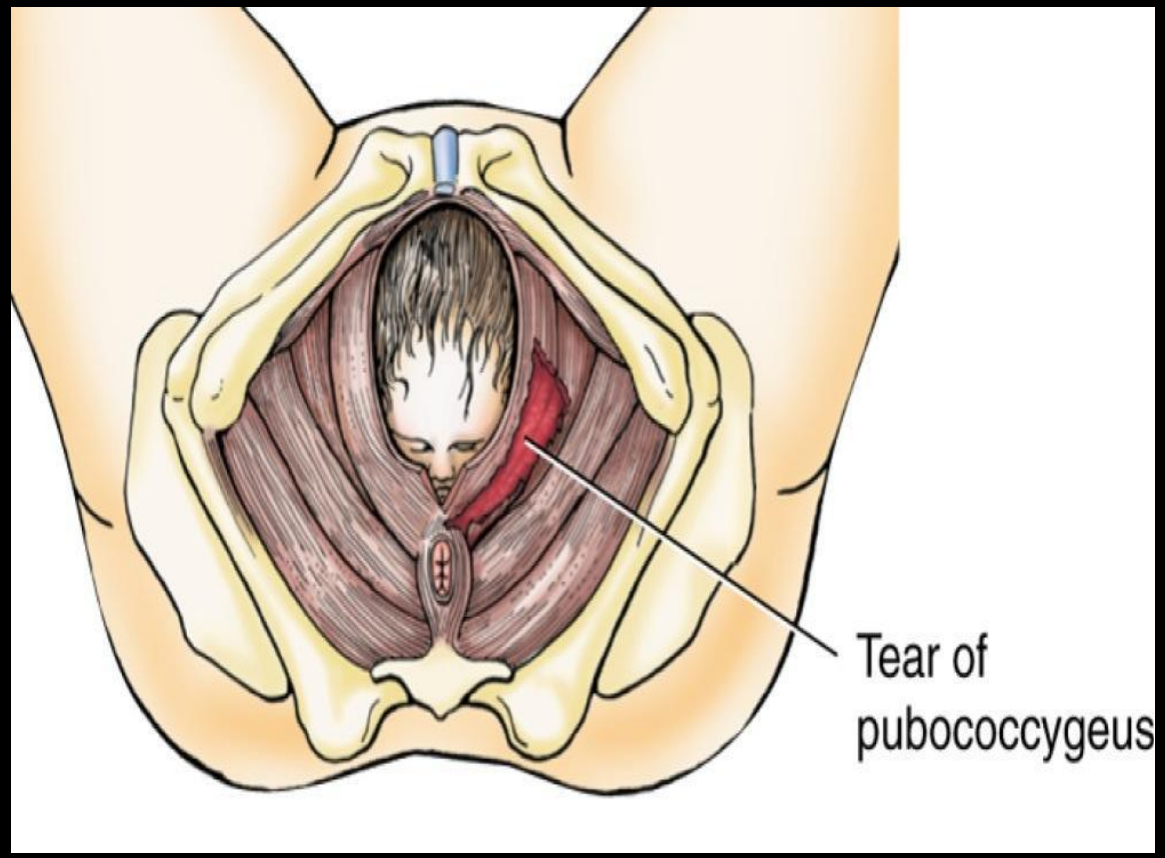
Falls or old injuries
Bad posture
Post partum

Treatment release tight muscles
Mobilization internal
taping



POST PARTUM ISSUES

HOW FAR CAN A MUSCLE OR LIGAMENT STRETCH BEFORE IT TEARS?



POSTPARTUM THE FACTS WHY THEY ALL NEED PT PRENDERGAST 'S ARTICLE

21% of women undergoing vaginal delivery had levator ani avulsion[1]

29% of women undergoing vaginal deliveries had pubic bone fractures[2]

60% of postpartum women reported Stress Urinary Incontinence (SUI)[3]

64.3% of women reported sexual dysfunction in the first year following childbirth[4]

77% of women had low back pain that interfered with daily tasks[5]

References

Van Delft et al. Levator ani muscle avulsion during childbirth: a risk prediction model. BJOG 2014 August; 121(9):1155-63.

Miller et al. Evaluating maternal recovery from labor and delivery: bone and levator ani injuries. AJOG 2015 August; 213:188e.1-11).

Mannion et al. The influence of back pain and urinary incontinence on daily tasks of mothers at 12 months postpartum. PLoS One 10(6):e0129615.

Kajehi M et al. Prevalence and risk factors of postpartum sexual dysfunction in Australian women. J Sex Med. 2015 Jun;12(6):1415-26. doi: 10.1111/jsm.12901. Epub 2015 May 11.

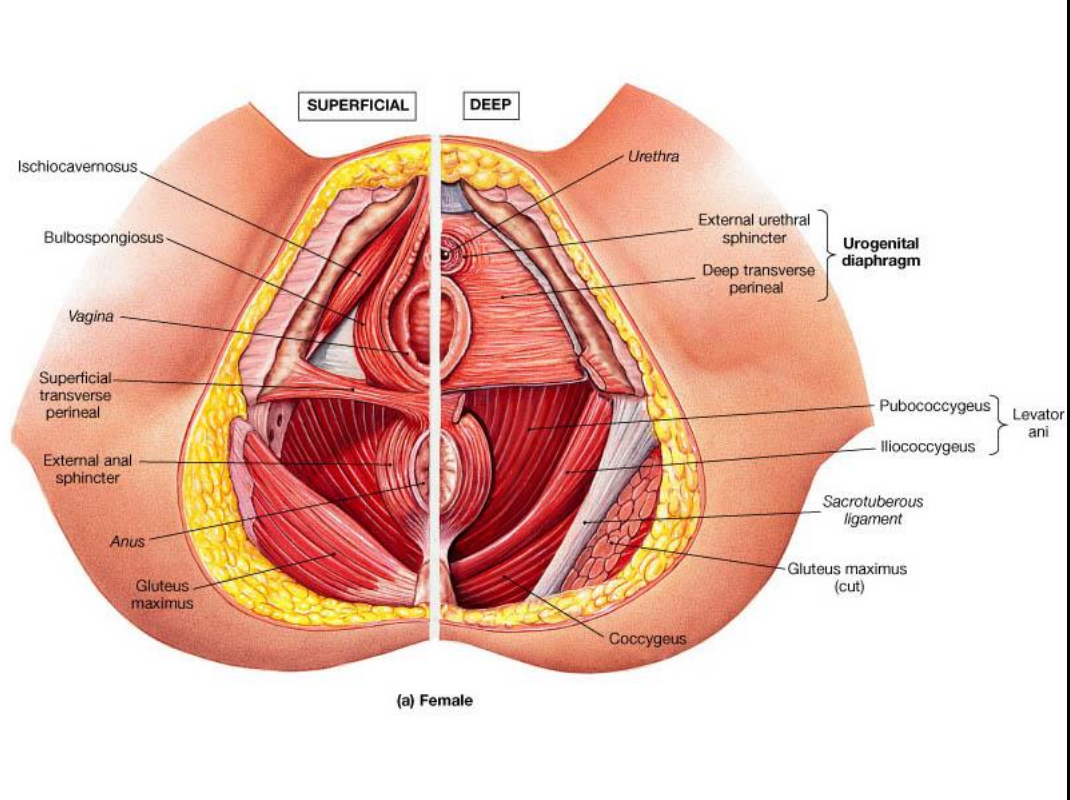
Mannion et al. The influence of back pain and urinary incontinence on daily tasks of mothers at 12 months postpartum. PLoS One 10(6):e0129615.

BATHROOM ISSUES CONSTIPATION WITH PREGNANCY AND POSTPARTUM

- F.O.R.M.S. METHOD developed by BJ Garlick
- 8 f's: Fluid, Fiber, Fitness, Flexed posture on toilet to poop, flora, First meal of the day to stim gastric reflex, Fingers, and Finite time
- O: OHHHH sound, nO Valsalva
- R: respirations good diaphragmatic breathing to help move stools along

  M: Massage, ILU-R massage
- MMMMM sound, Magnesium and Meds
- S Stretch to any tight muscles in trunk or pelvis

BATHROOM ISSUES INCONTINECE

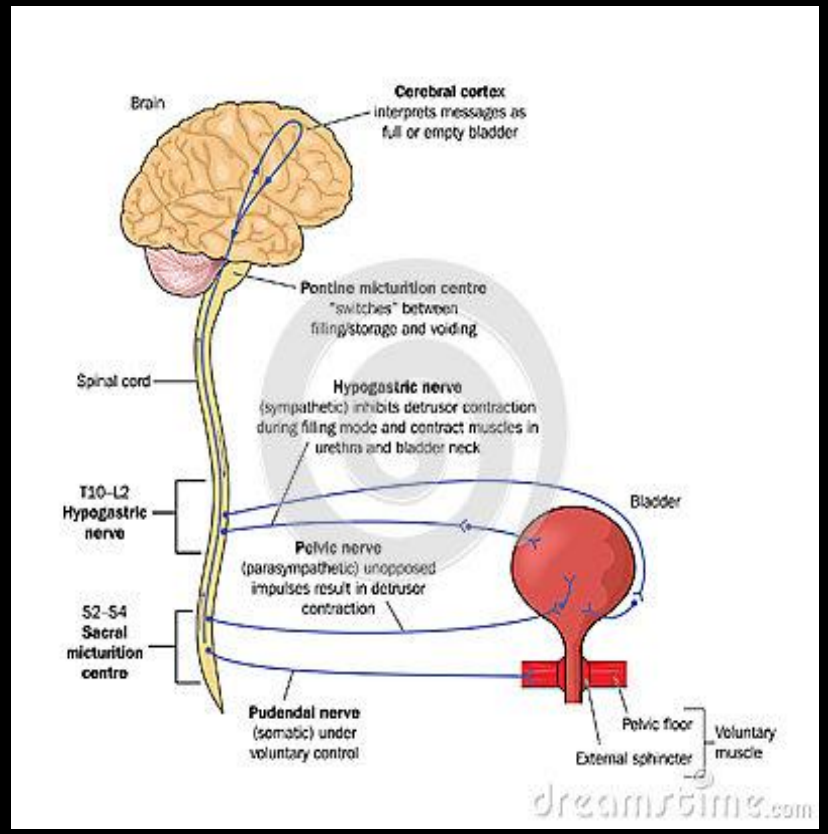


- Urge
- Stress
- Mixed

- Fecal

TREATMENT FOR UI

- Urgency
- Education education education!
- 3 M's: really 4
- Muscles
- Mind or behavior modification
- Meds
- Mental health anxiety can made this very difficult to overcome
- Biofeedback (muscles)

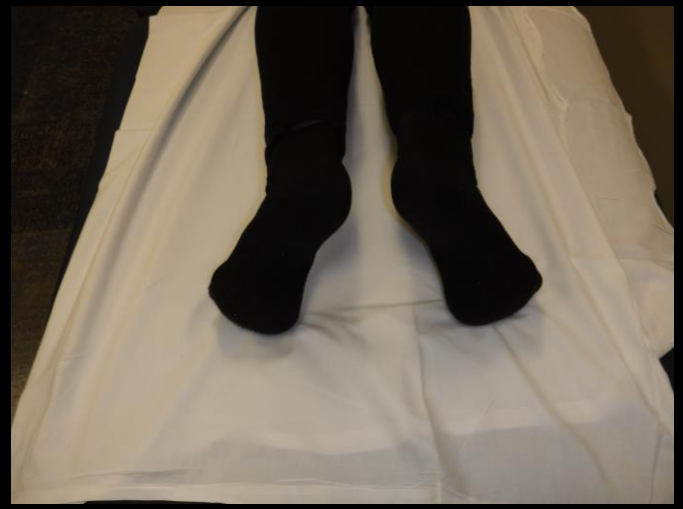


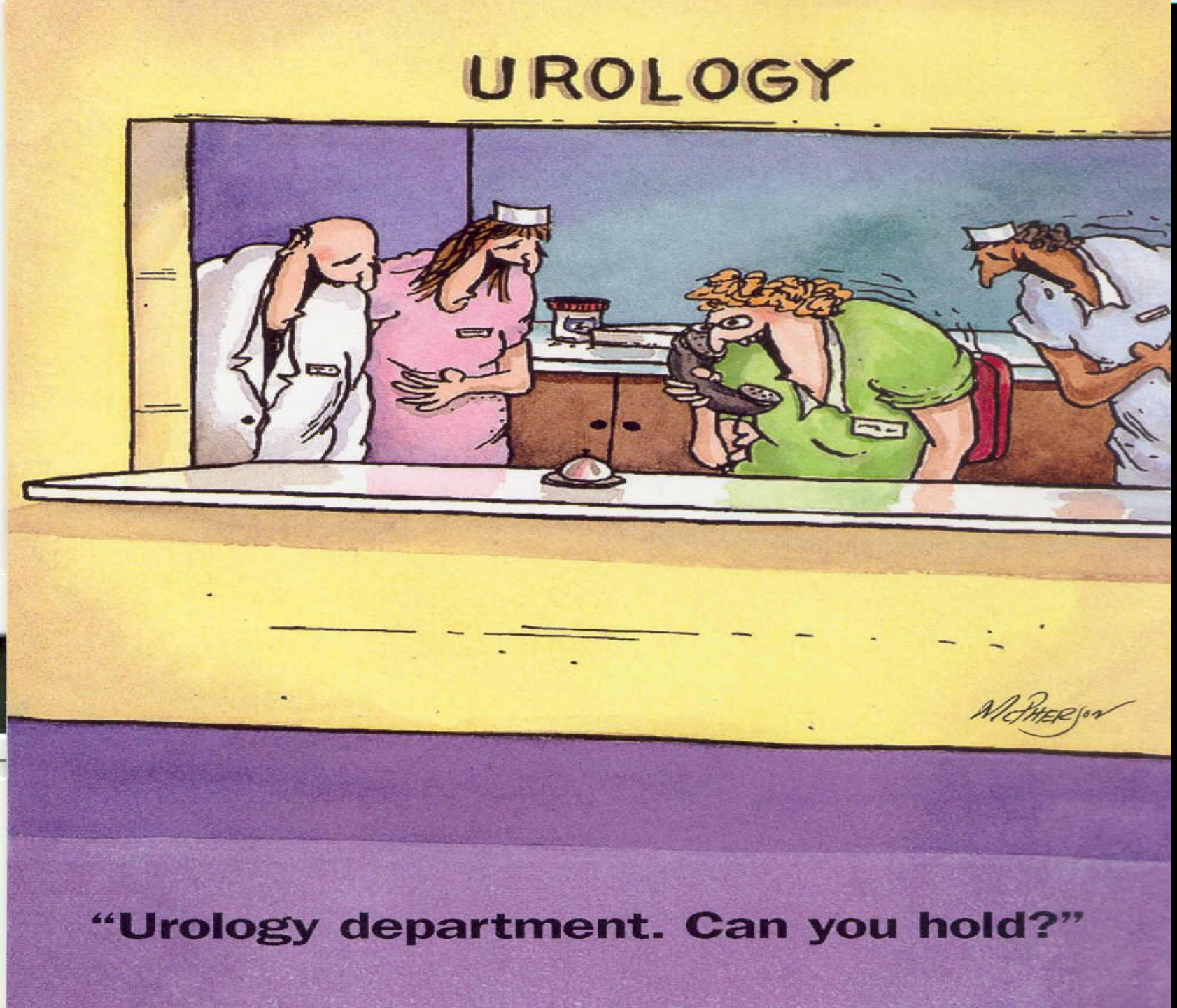
INCONTINENCE TREATMENT CONT

- Beyond Kegels
- Pelvic rotator cuff ex
- "In order to have a good floor you need a good core"

- Basic and advanced ex

- Interesting note we know total hip pt's can have incontinence
- I am finding in 100's of my pts with a one sided limb old injury, pelvic floor weakness on that side sometime 20-30%. In rehab we treat the total limb concept I never once thought to take it up one more level to do Kegels!

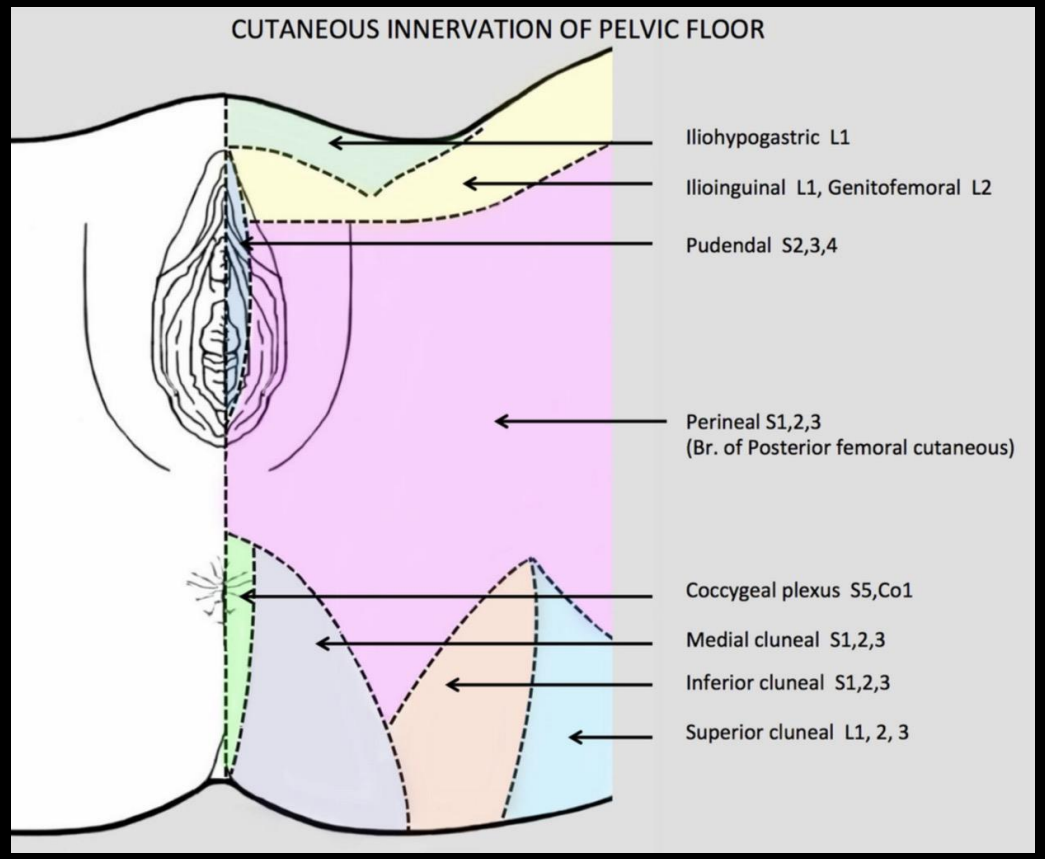



UROLOGY
"Urology department. Can you hold?"

PAIN THE LAYERED APPROACH

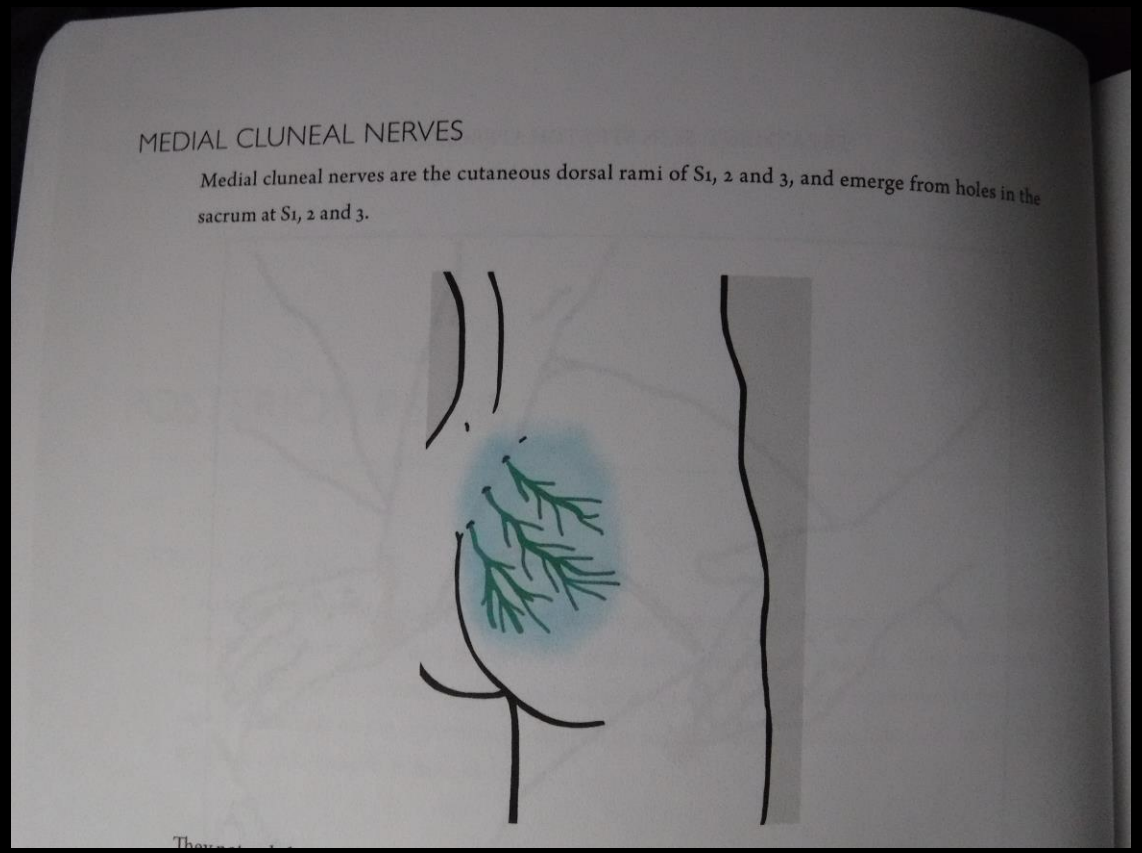
SKIN
SUB Q
FASCIAL
MUSCLES
TENDON
LIGAMENTS
JOINTS

PELVIC PAIN



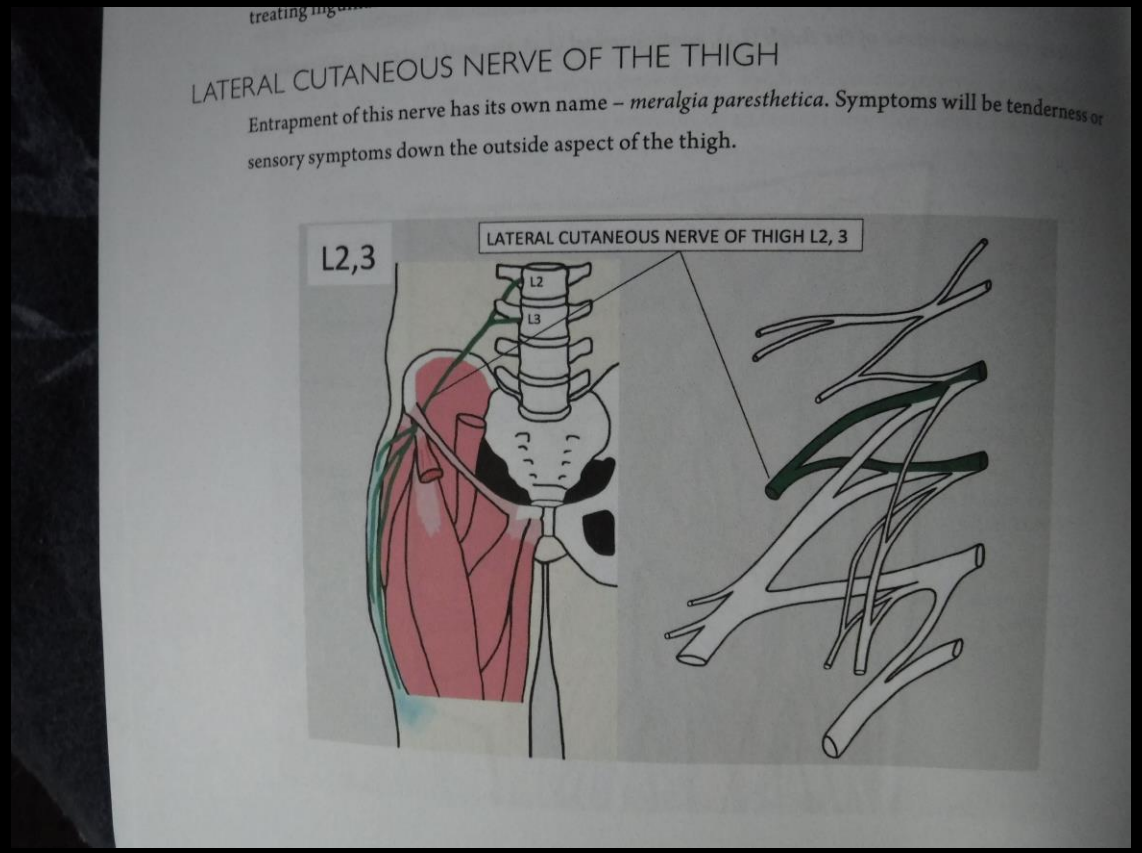
- **Pain**
- The widely accepted definition of pain was developed by a taxonomy task force of the International Association for the Study of Pain: "Pain is an unpleasant sensory *and* emotional experience that is associated with actual or potential tissue damage or described in such terms." A key feature of this definition is that it goes on to say, "pain is always subjective."

PAIN



MEDIAL CLUNEAL NERVES

Medial cluneal nerves are the cutaneous dorsal rami of S1, 2 and 3, and emerge from holes in the sacrum at S1, 2 and 3.



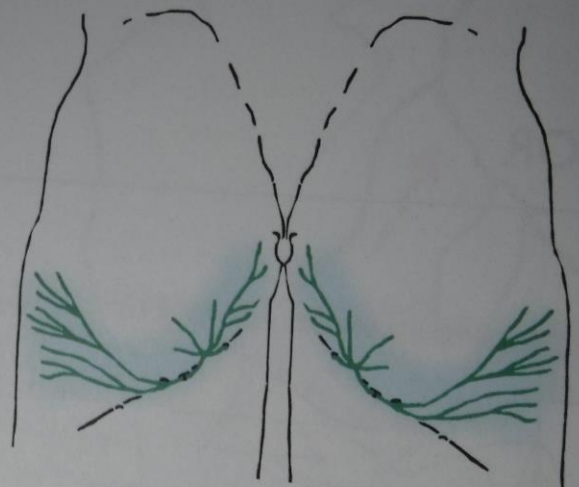
LATERAL CUTANEOUS NERVE OF THE THIGH

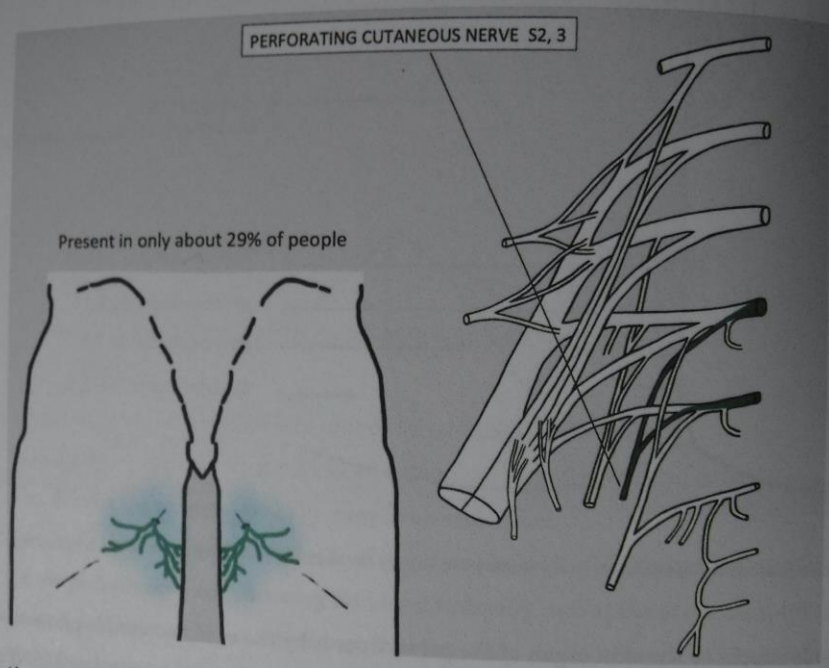
Entrapment of this nerve has its own name – *meralgia paresthetica*. Symptoms will be tenderness or sensory symptoms down the outside aspect of the thigh.

PAIN

INFERIOR CLUNEAL NERVES:

These branches of the large posterior cutaneous nerve of the thigh sweep upward to supply the skin organ at the bottom of the buttocks.



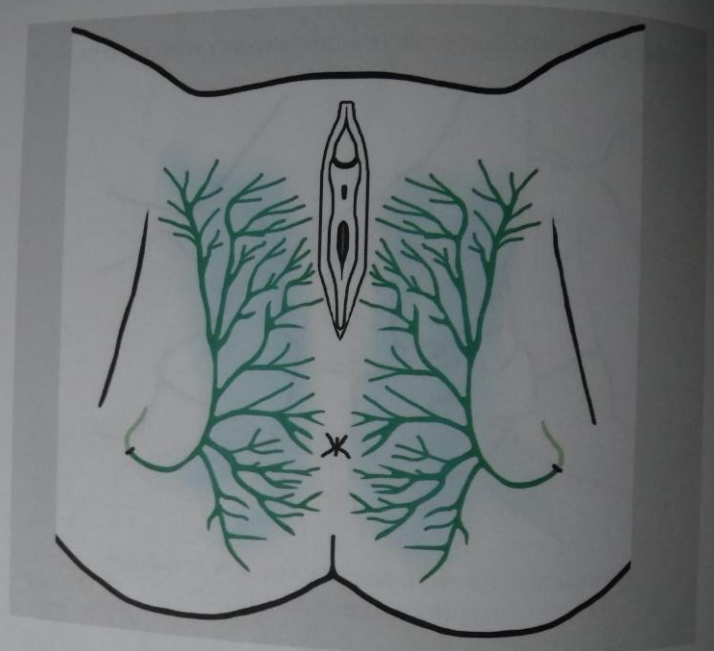


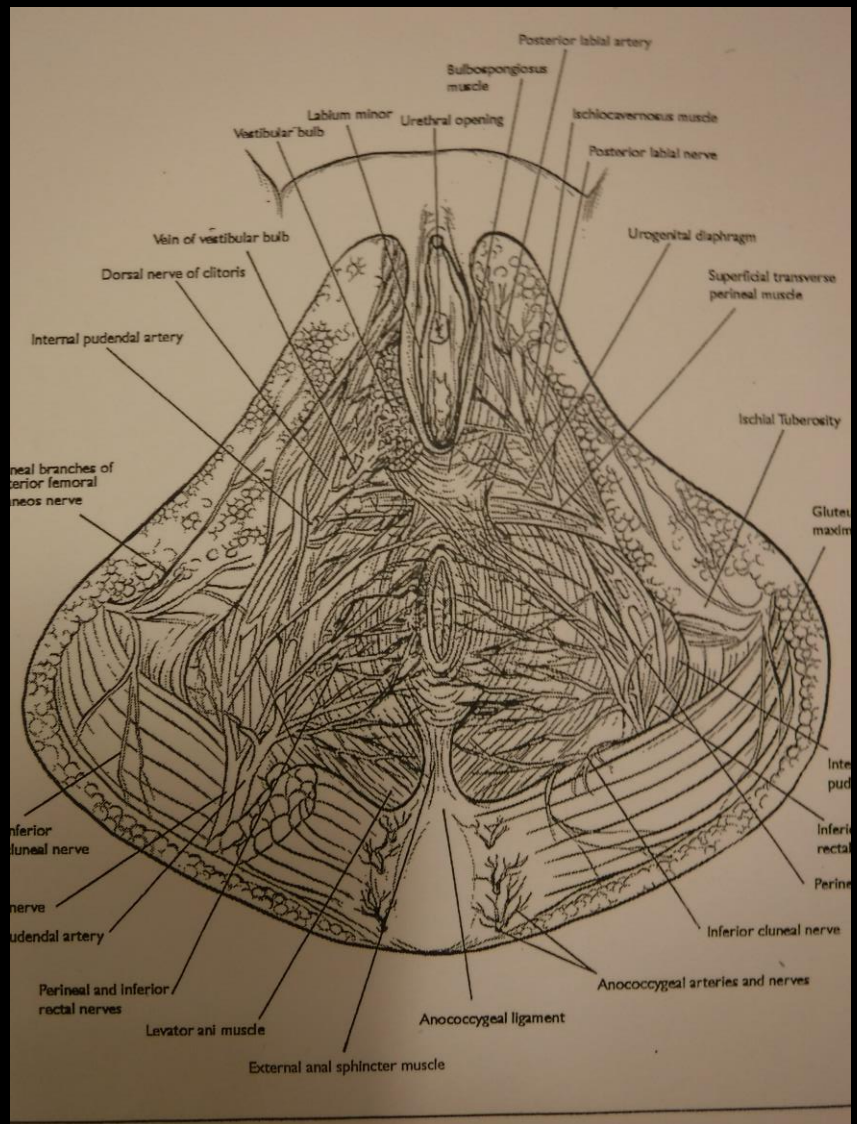
Perforating cutaneous nerve is an accessory nerve, estimated to be present in just under a third of the population.

PAIN

PERINEAL NERVE

The ***perineal nerve***, a branch of the posterior femoral cutaneous nerve of thigh, sweeps medially into the skin of the pelvic floor. Entrapment of this nerve can be responsible for a great deal of pelvic floor pain, in my opinion. It may be treated along with the coccygeal plexus.





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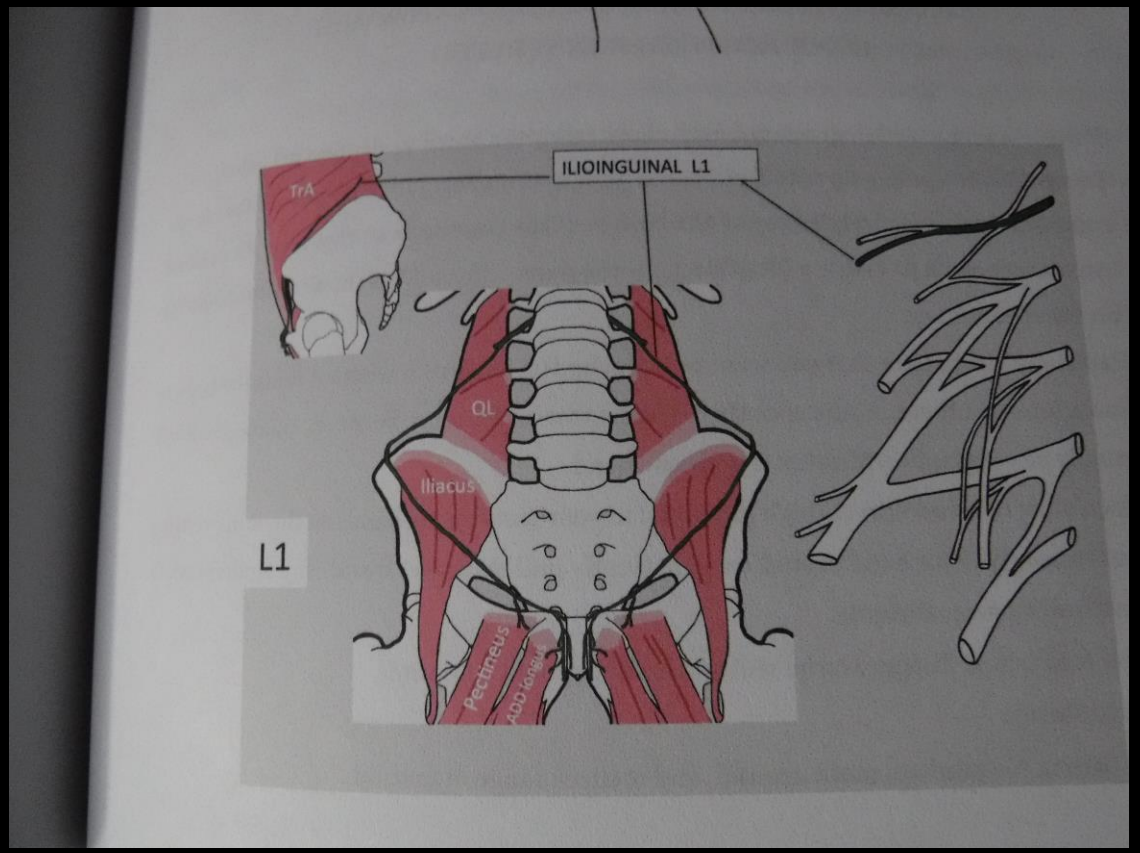
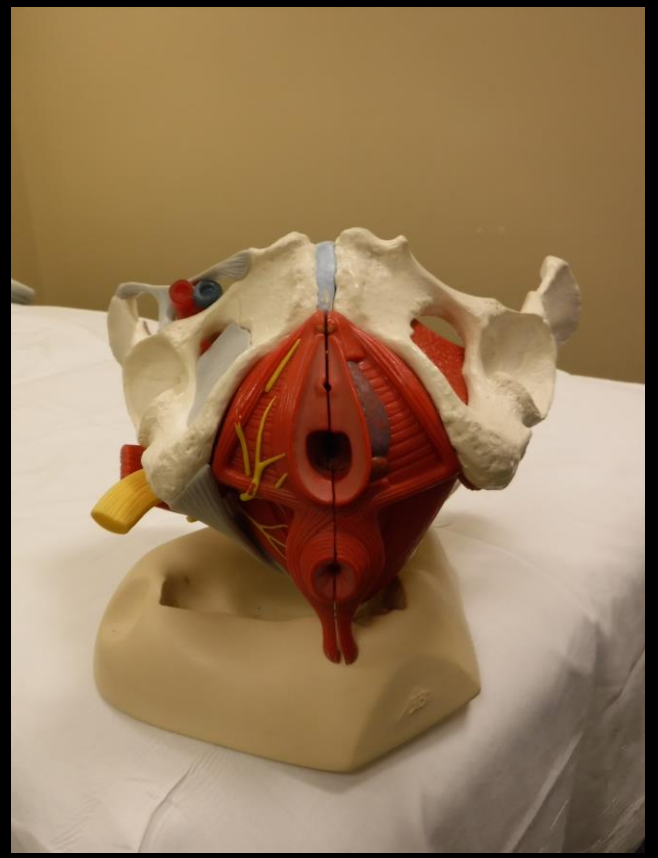
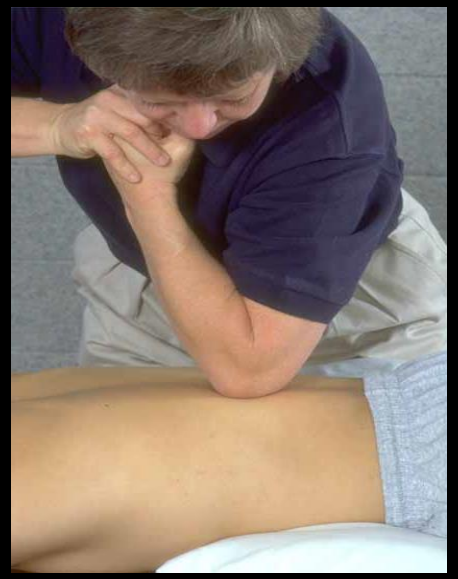




TRIGGER POINTS

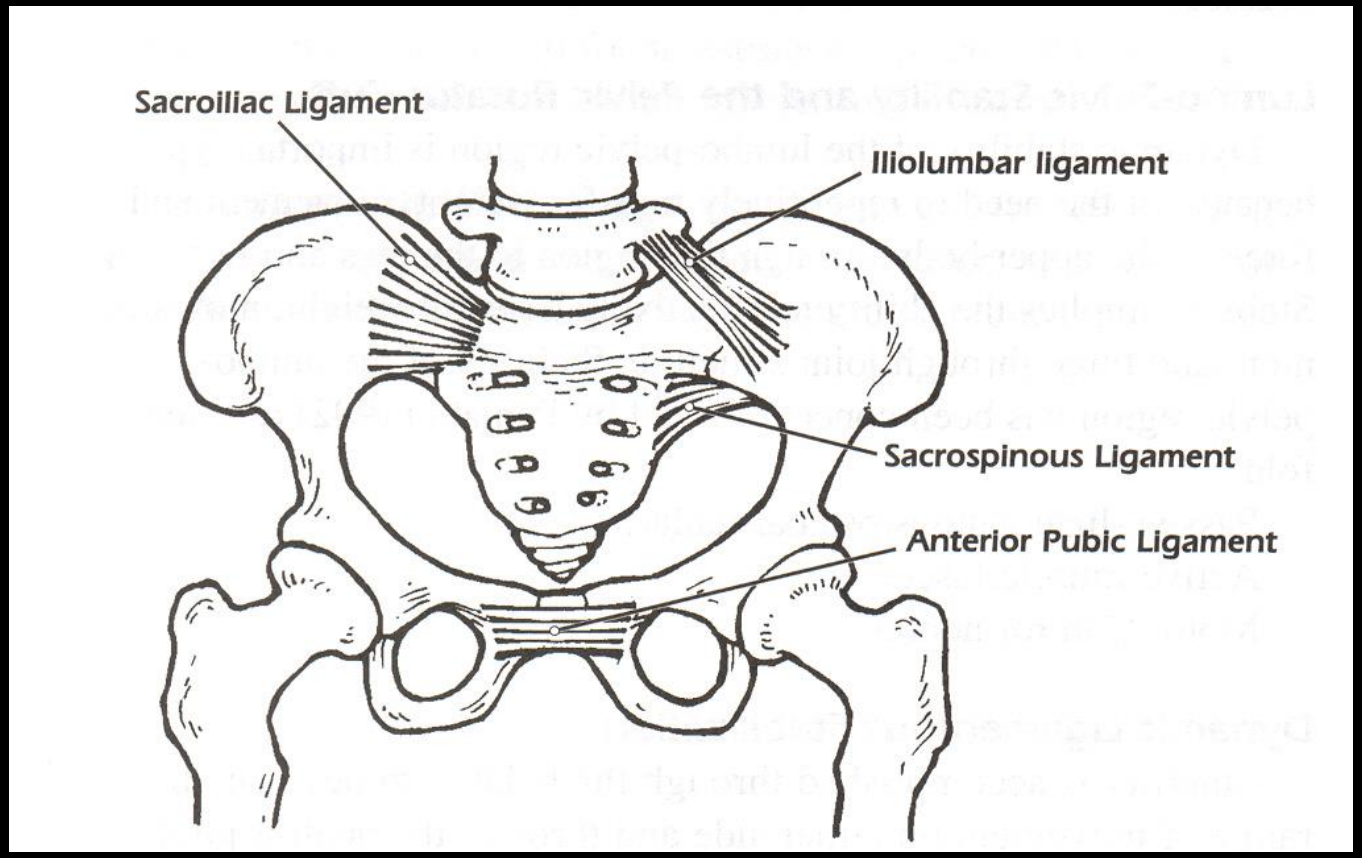
MANUAL RELEASE FOR PAINFUL STRUCTURES

- Not in the pelvic region



- Dermo Neuro Modulating, Manual Treatment for Peripheral Nerves and especially Cutaneous Nerves
- The auther Diane says we cannot touch anything but the skin and outer layers. SO true.

LIGAMENTS


Sacroiliac Ligament
Iliolumbar ligament
Sacrospinous Ligament
Anterior Pubic Ligament

PELVIC PAIN

- Golf ball in the vagina
- Something is falling out
- How much pressure till muscles and ligament fail?
- Prolapse can cause urgency

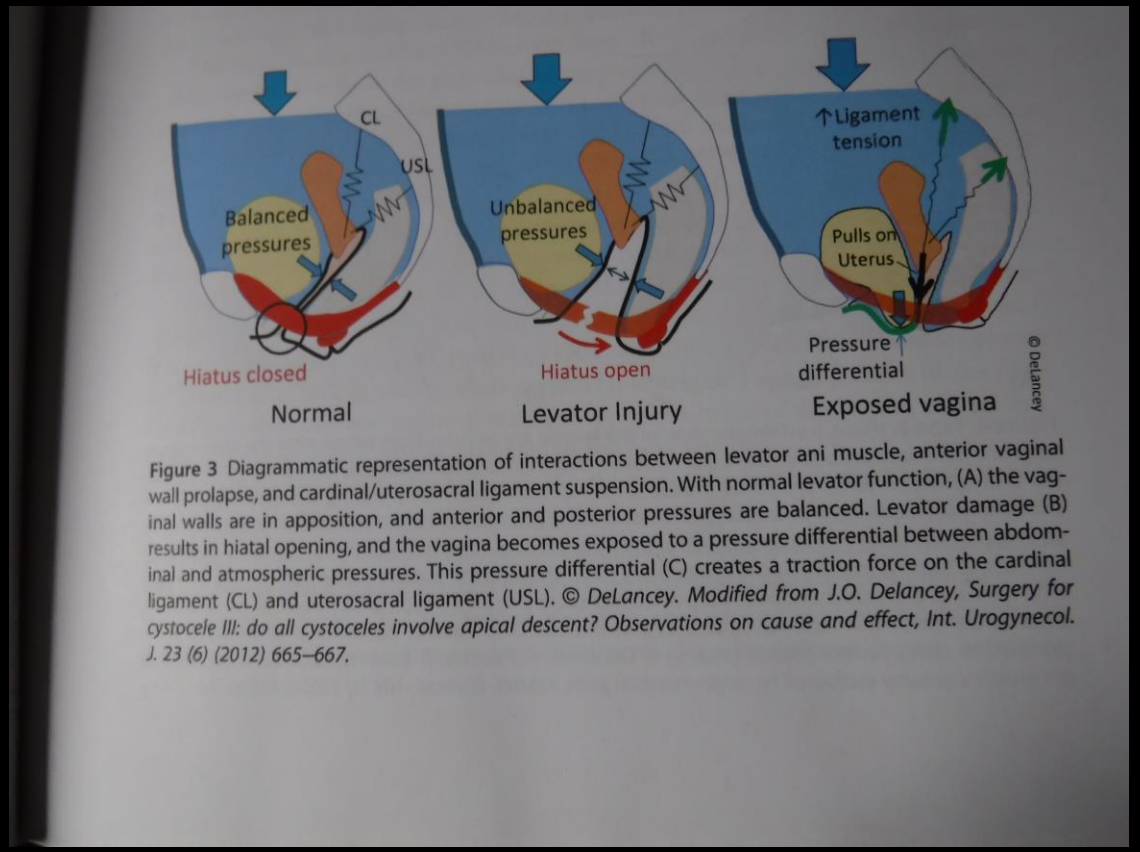
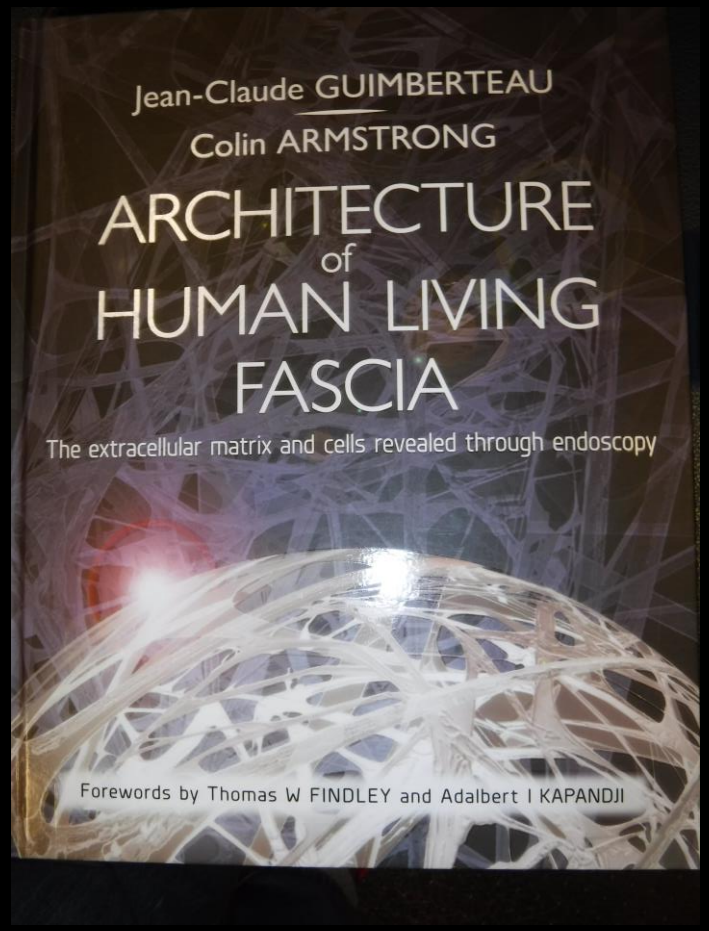


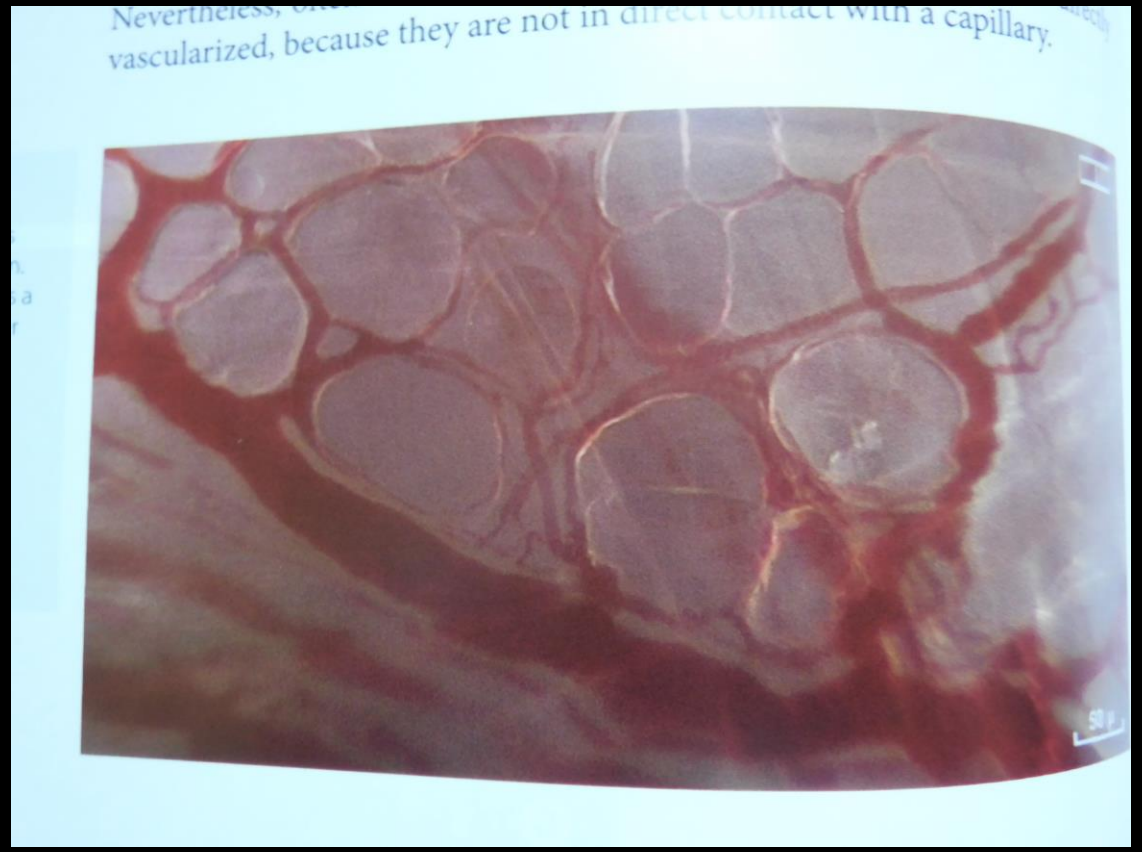
Figure 3 Diagrammatic representation of interactions between levator ani muscle, anterior vaginal wall prolapse, and cardinal/uterosacral ligament suspension. With normal levator function, (A) the vaginal walls are in apposition, and anterior and posterior pressures are balanced. Levator damage (B) results in hiatal opening, and the vagina becomes exposed to a pressure differential between abdominal and atmospheric pressures. This pressure differential (C) creates a traction force on the cardinal ligament (CL) and uterosacral ligament (USL). © *DeLancey. Modified from J.O. Delancey, Surgery for cystocele III: do all cystoceles involve apical descent? Observations on cause and effect, Int. Urogynecol. J. 23 (6) (2012) 665–667.*

PROLAPSE

PROLAPSE, PELVIC CONGESTION

EXCITING NEW FRONTIER FOR MYOFASCIAL THERAPY





WHAT YOU ALL HAVE BEEN WAITING FOR

BEDROOM stuff

Painful pelvis with sex

Pelvic rest 6 weeks is up now what?

Tired, not sleeping

Has not lost baby fat yet

Has no desire

Prolapse deep pelvic pain with sex

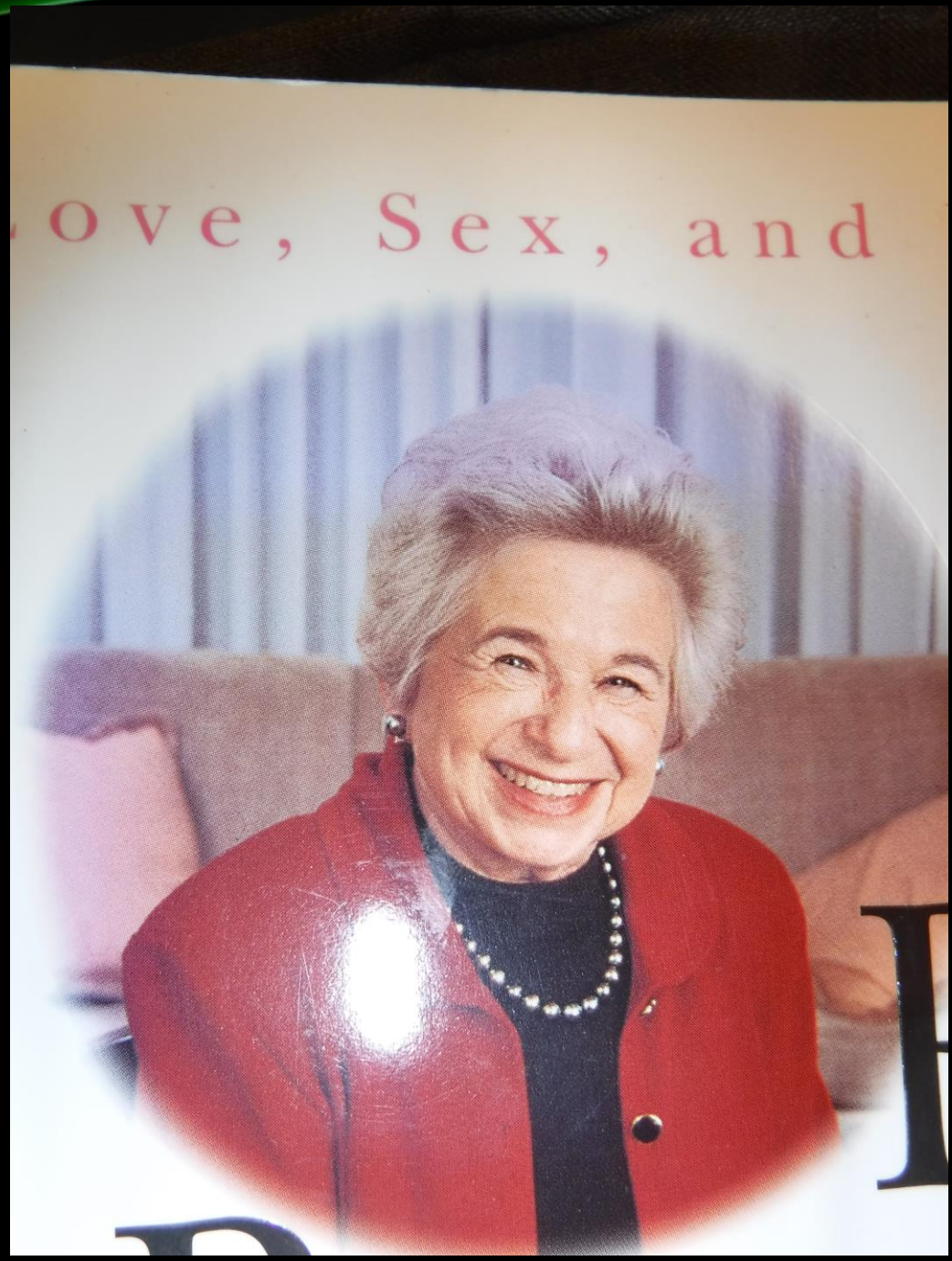
Dry – lots of lube

Incontinent

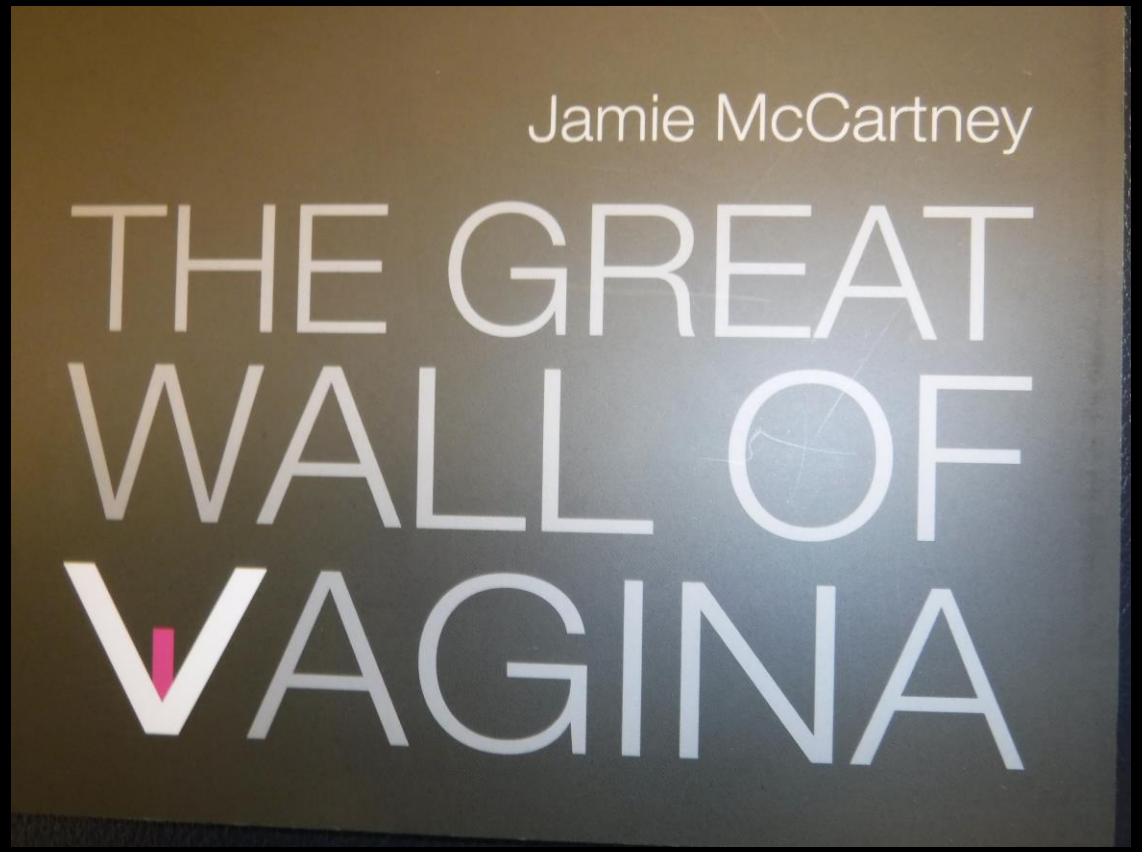
Weak pelvic floor

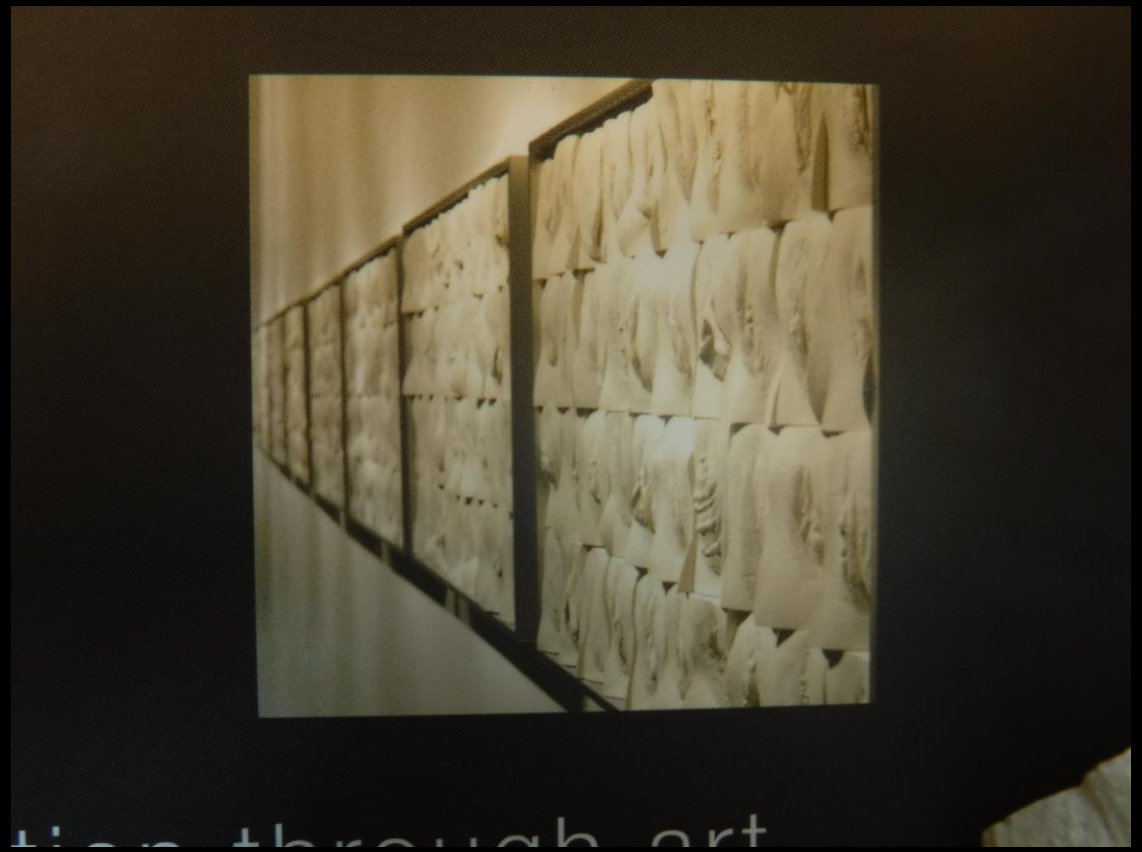
Pubic jt pain (or other pelvic jt's)

C section scar painful



BODY IMAGE PSYCHE

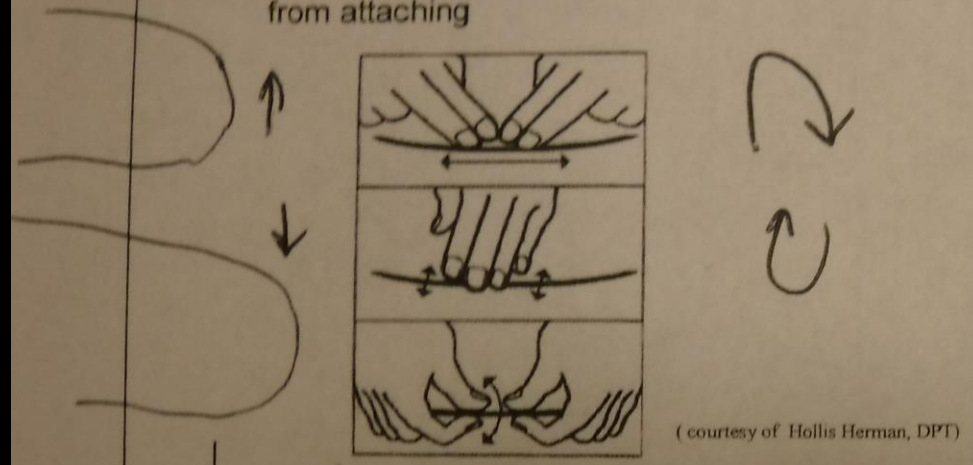




How Do You Perform Scar Massage?

Begin scar massage ***only after the incision is fully healed***. Warm your hands by rubbing them together Warm compresses or natural oils can be used, but are not needed.

- Massage the scar by working it with a rubbing motion along the line of the scar.
- Stroke back and forth across the scar
- Roll the scar between your thumb and your forefinger.
- Pick up and lift the fully healed scar to prevent it from attaching



(courtesy of Hollis Herman, DPT)

How Can You Decrease the Sensitivity of a Sensitive Surgical Site?

Some women experience sensitive skin in the surgical area. After surgery, even clothing may be painful if it touches the incision area. The nerves in the area are sometimes overly sensitive. Women with sensitive scars should try "desensitization" on a daily basis to decrease the pain and tenderness of the scar.

Desensitization Techniques

Massage or rub the sensitive area with a soft material such as a cotton ball. Later try using a rougher material like a towel. Patting and tapping along the sensitive area are also used to desensitize the area.

- Massage the sensitive area of skin with hand lotion and rub in circles with gradually increasing pressure
- Gently rub and tap the sensitive areas starting with the softest materials listed below. Gradually work up to rougher materials.

Cotton Ball - Silk - Cotton Material - Terrycloth (towel)
Paper Towel - Soft Velcro - Corduroy

- Rub for 5-10 minutes, three times per day.

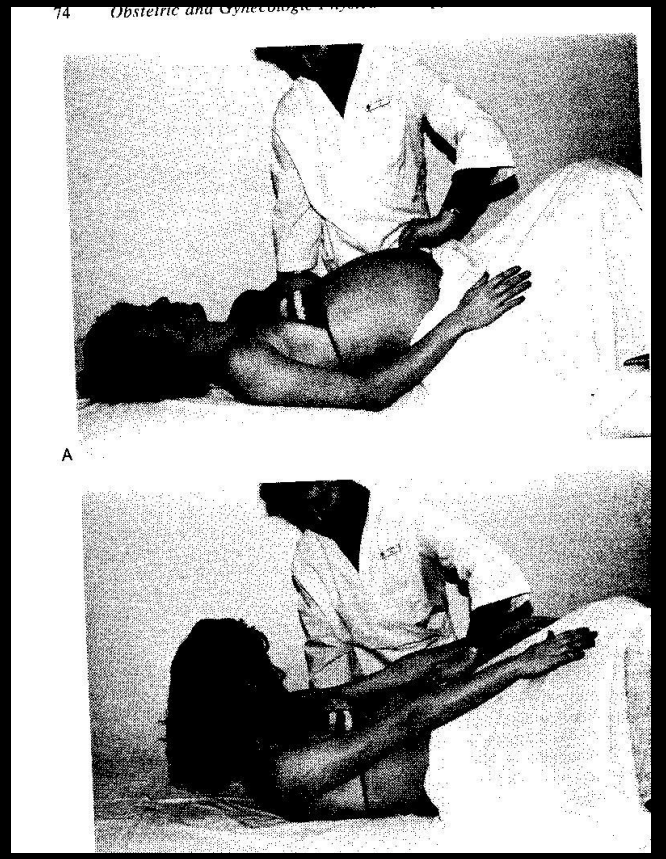
If You Need Help, Consult a Physical Therapist for Evaluation and Instruction in Scar Management

PELVIC WAND

Internal and external massage, trigger point release and stretching

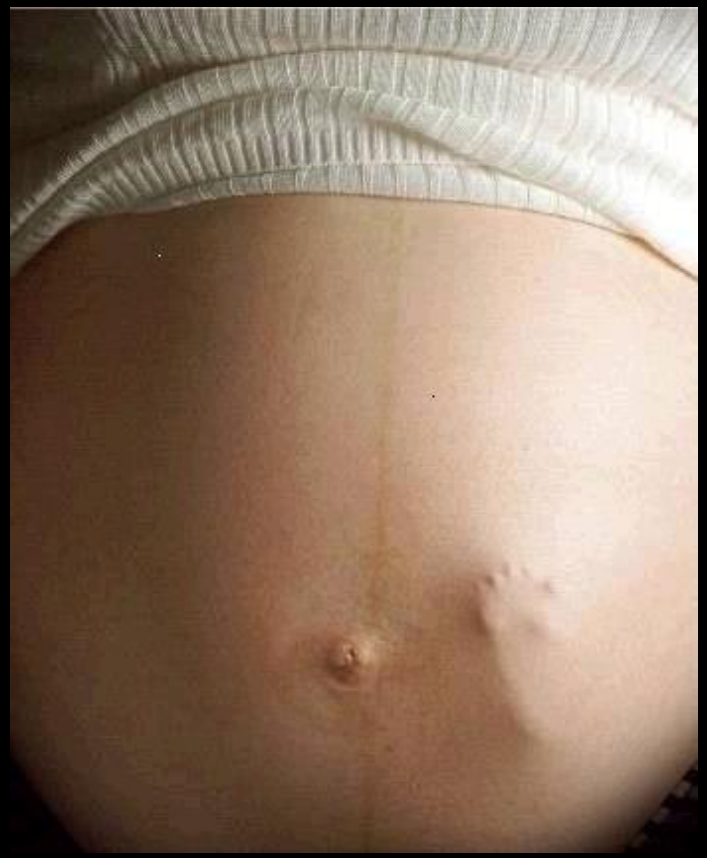
BEYOND DEPT

- Abdominal diastasis

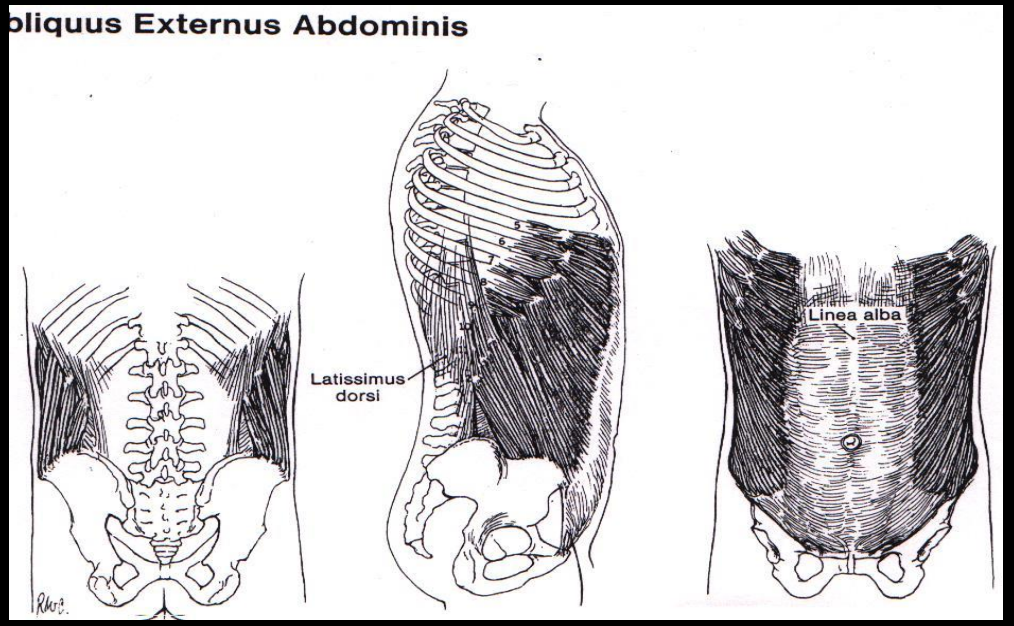


DIASTASIS RECTI

- Loss if integrity of linea alba
- ? Etiology
  - hormonal effects
  - prolonged stretch
  - mechanical stress as baby grows



ABDOMINALS



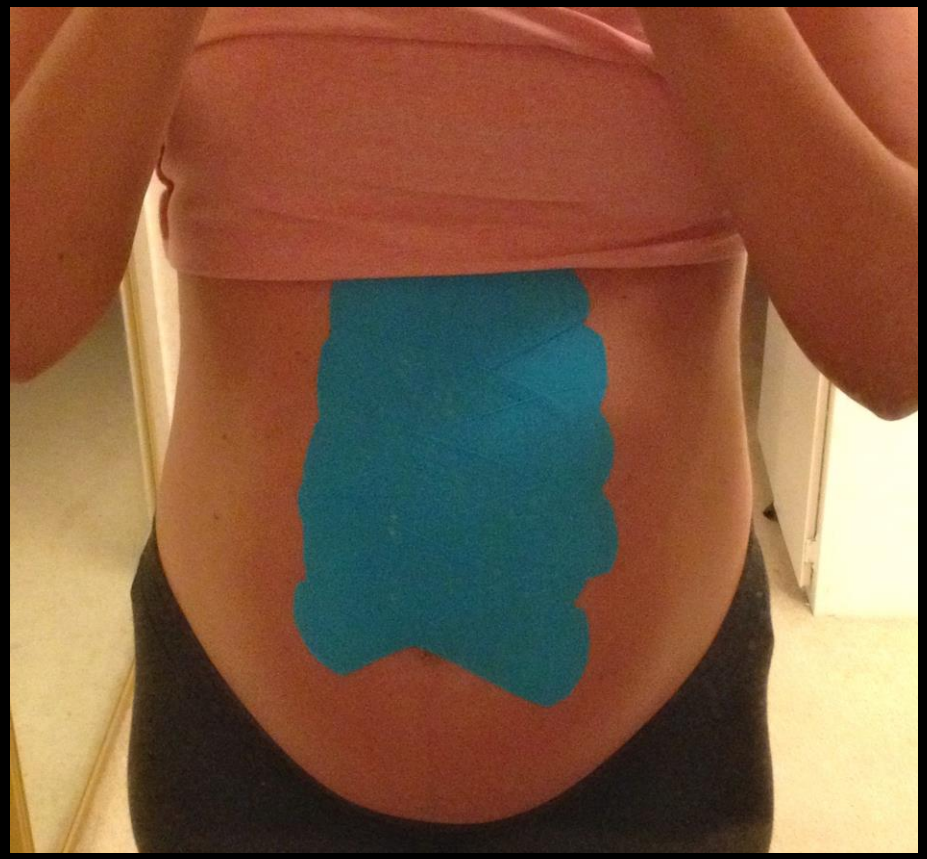
Ramifications

- loss of support for lumbar spine
- loss of effective drive angle during delivery
- ineffective contractions during 2nd stage of labor

TREATMENT

Abdominal support
Exercise
a. Breathing exercises (esp exhalation) and correct breathing for labor and delivery
b. Abdominal exercises
c. Back exercises
No Valsalva
Taping

TAPING +



BLOCKED MILK DUCTS

- International Breastfeeding Center Last undated June 2017
- Rule out mastitis

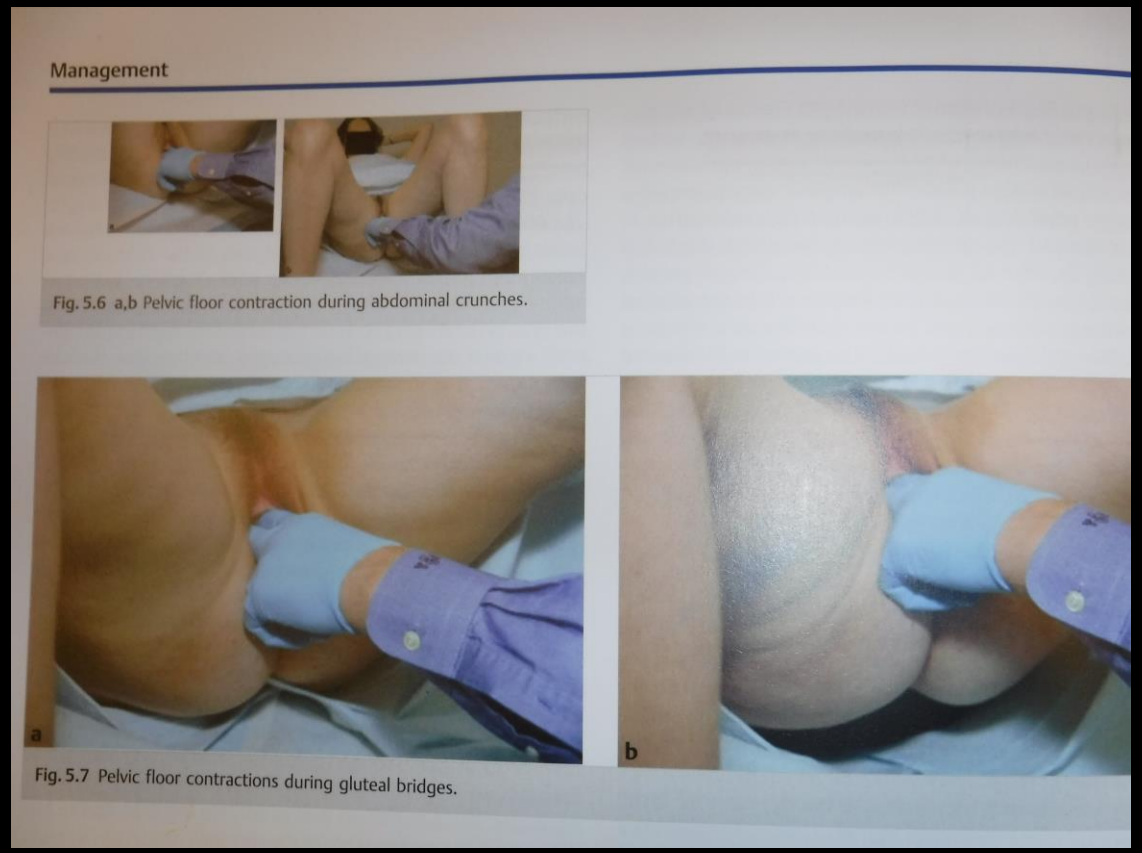
Most blocked ducts will be gone within about 48 hours. If your blocked duct has not gone by 48 hours or so, **therapeutic ultrasound** often works. Most local physiotherapy or sports medicine clinics can do this for you. However, very few are aware of this use of ultrasound to treat blocked ducts. An ultrasound therapist with experience in this technique has more successful results.

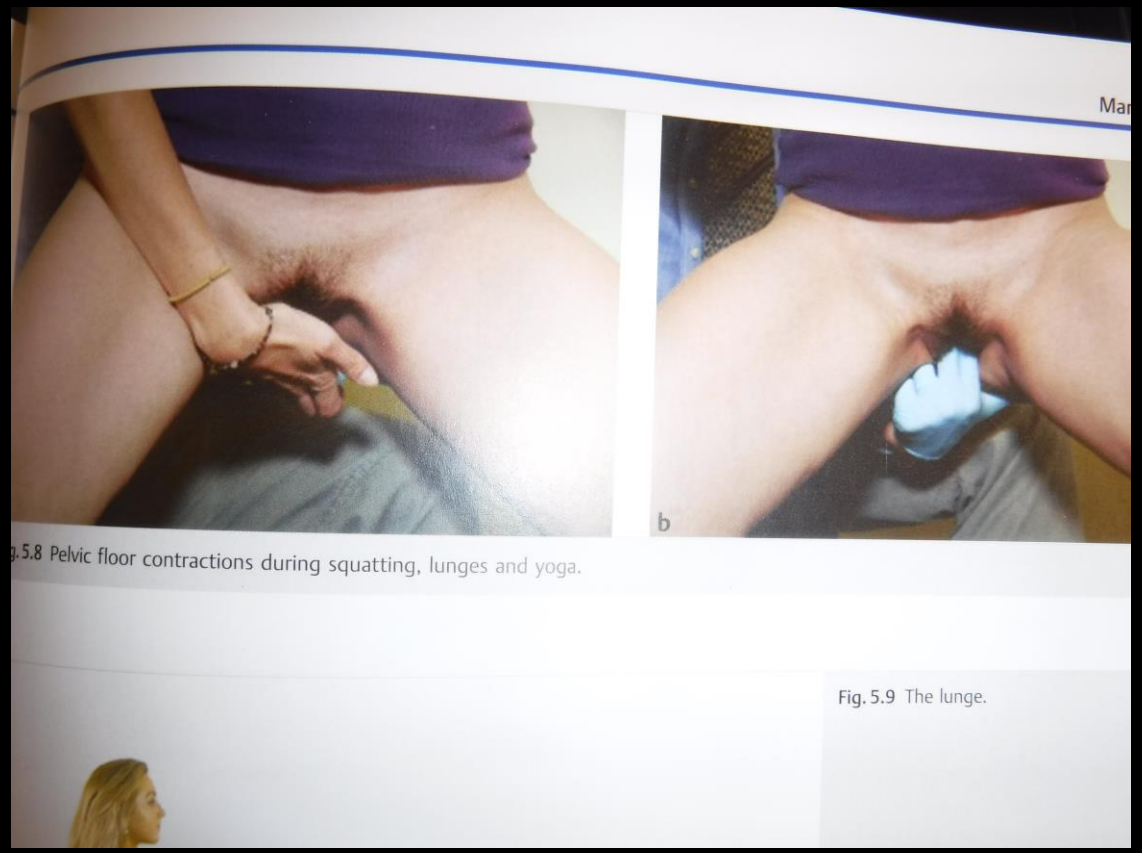
- Ultrasound may also prevent recurrent blocked ducts that occur always in the same part of the breast. The dose of ultrasound is **2 watts/cm² continuous for five minutes to the affected area, once daily for up to two treatments**.

BLOCKED MILK DUCTS

- Cupping to blocked region
- Over the years with my Sports Medicine practice I have used cupping to loosen scar tissue and separate adhered layers of connective tissue with good results so I thought I would try it with the blocked milk ducts also.
- It seems to help and the gals can do it at home also.
- Home treatment: Heat, massage, In different positions, fluids, cupping and now trial of home vibration with the smooth side of electric tooth brush

PELVIC FLOOR WEAKNESS PROLAPSE





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