

A vertical gold-colored bar with a textured, metallic appearance runs along the left edge of the slide.

*OT Elevate*

THE OT COLORECTAL VIEW OF  
THE PELVIC FLOOR

# PELVIC FLOOR FUNCTIONS

1 Support

2 Elimination

3 Sexual

# The pelvic floor has:

1

anticipatory postural control

2

volitional + automatic control

3

works with breath for  
co-contraction

## UROGENITAL TRIANGLE

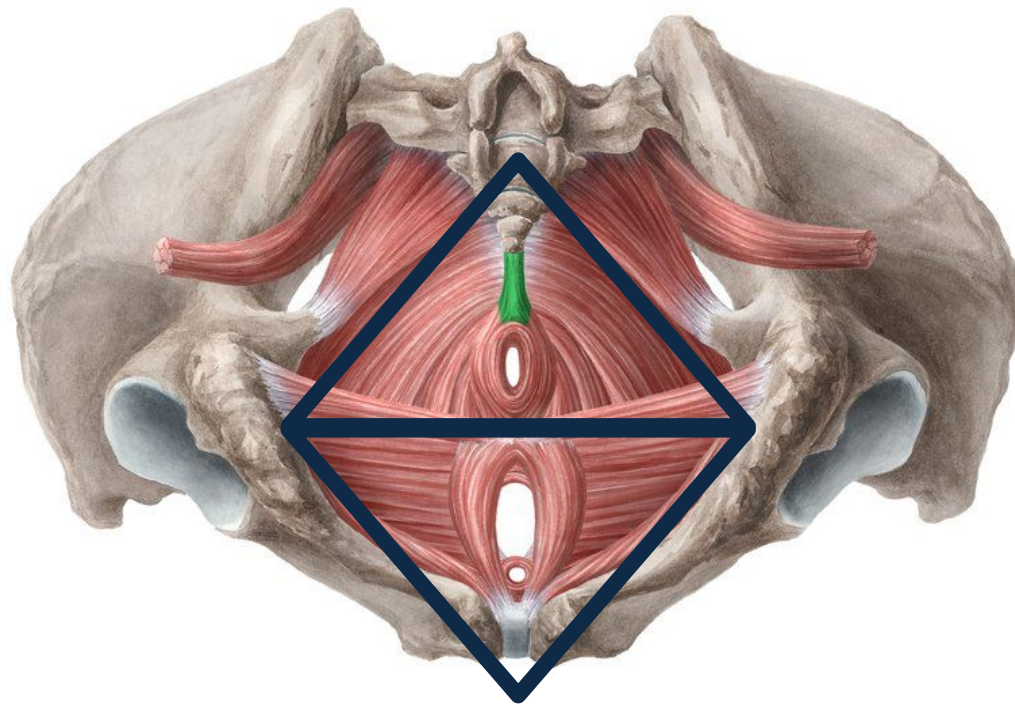
- Bulbocavernosus
- Ischiocavernosus
- STP / DTP

## ANAL TRIANGLE

- External Anal Sphincter
- Pubococcygeus, Puborectalis  
+ Pubovaginalis

Obturator Internus

- Coccygeus
- Piriformis
- Iliococcygeus
- Glute Max



Urogenital +  
Anal Triangle

Ischiorectal  
Fossa

Anal Canal

Anal  
Sphincters

Dentate Line

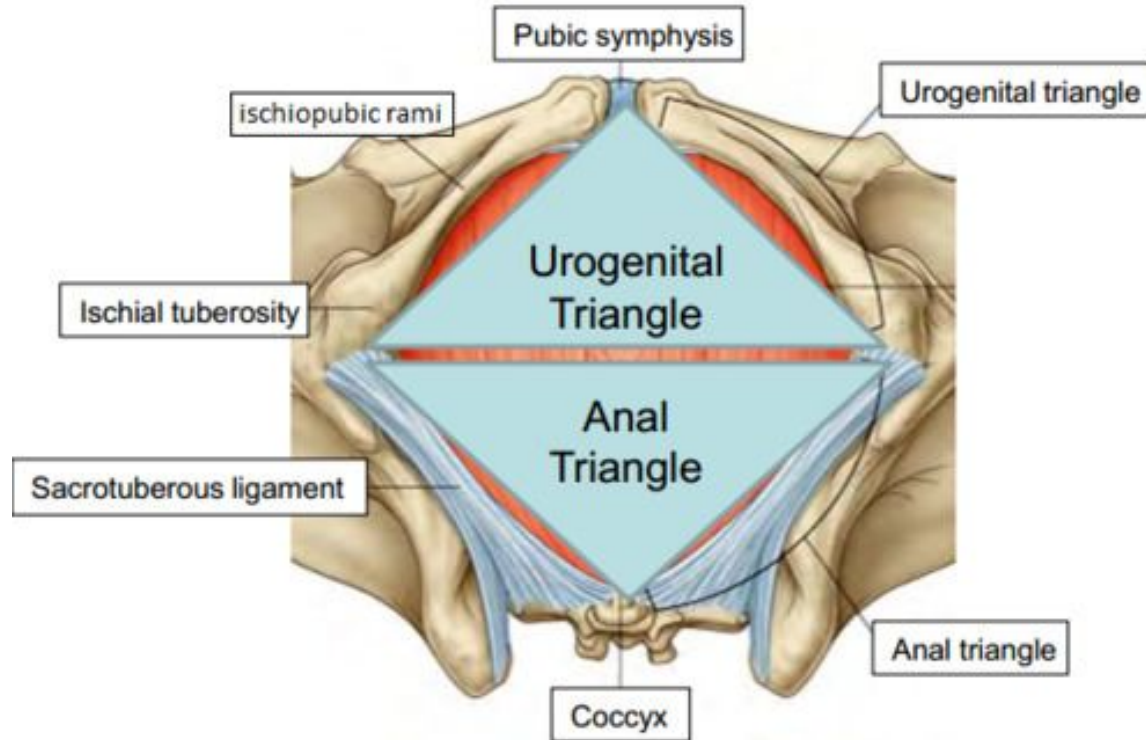
Coccyx

Pouch of  
Douglas

Ileocecal Valve

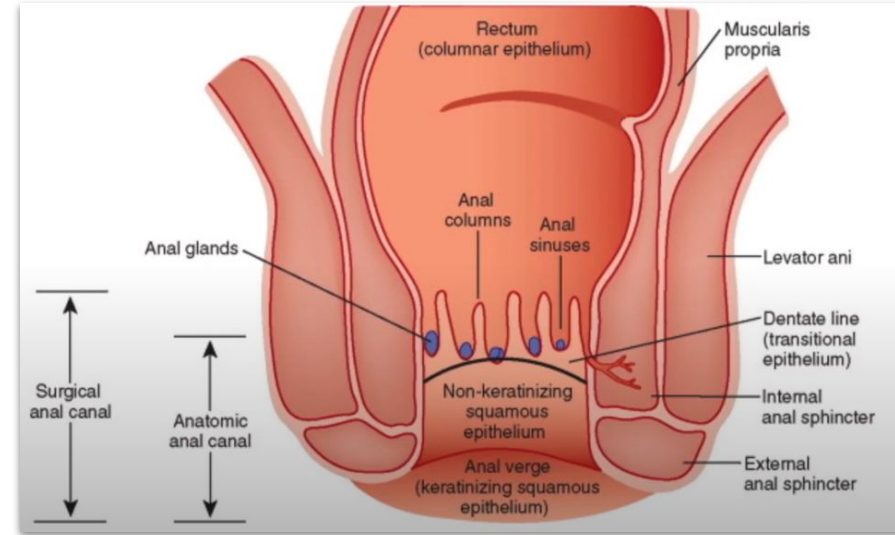
Pudendal  
Nerve

# Urogenital Triangle and the Anal Triangle



# Anal Canal

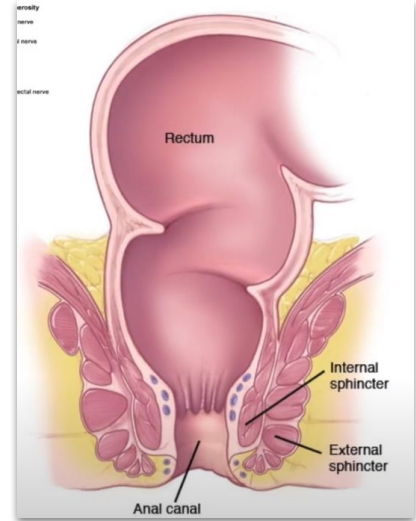
- 1.5-2.5 inches long
- Has anal valves, mucosal folds, anal sinuses
- Superior + inferior rectal vein
- Dentate line
- Anal verge
- Skin around the anal verge = peri-anal skin



<https://medicalsolar.org/anal-canal>

# Anal Sphincters

The anal sphincters are a **group of muscles** at the end of the rectum that surrounds the anus and **controls the release of stool**, thereby maintaining continence.



<https://medicalschor.org/anal-canal/>



# Different **Anatomy**, Different **Functions**

## EXTERNAL ANAL SPHINCTER

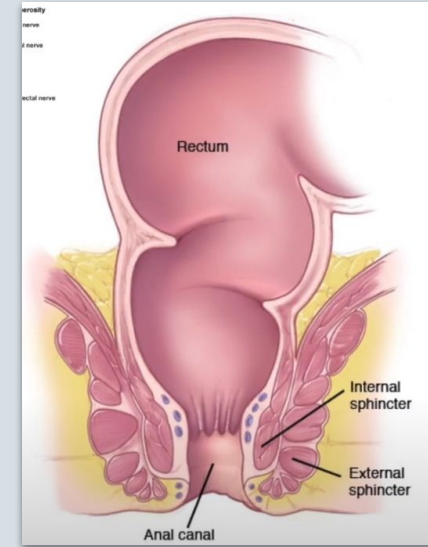
*expansion of levator ani muscle group*

0.6-1.0 cm thick

## INTERNAL ANAL SPHINCTER

*circular smooth muscle layer of the rectum*

0.3-0.5 cm thick



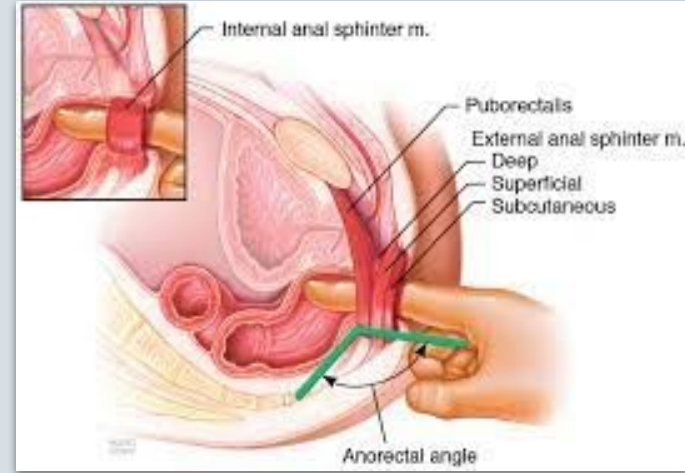
**INTERNAL + EXTERNAL ANAL SPHINCTERS**

- **Expansion** of the circular smooth muscle layer of the rectum
- **Involuntary**
- **Contracts** through **sympathetic tone** and **relaxes** under **parasympathetic influence**
- When your body is ready to poop, the IAS relaxes and allows stool to go into the anal canal where EAS contracts until you are ready to go

## INTERNAL ANAL SPHINCTER (IAS)

### 3 PARTS:

- **Subcutaneous** - attaches to perineum + anococcygeal ligament
- **Superficial** - the one part that is attached to coccyx
- **Deep** - some fibers are connected to puborectalis muscles



<https://medicalscholar.org/anal-canal/>

*The EAS has attachments to the perineal body, anococcygeal ligament, coccyx puborectalis!*

**EXTERNAL ANAL SPHINCTER (EAS)**

**INTERNAL ANAL SPHINCTER** is made up of smooth muscles with no cognitive control.

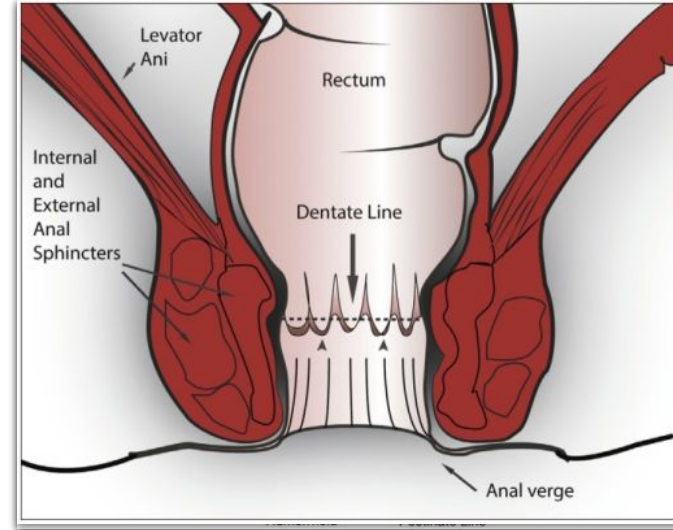
**EXTERNAL ANAL SPHINCTER** is made up of skeletal muscles.

Exercises will  
only assist the

**EXTERNAL ANAL SPHINCTER.**

# Dentate Line

- Marks where rectum ends and anal canal begins.
- Different nerve innervation



# Dentate Line

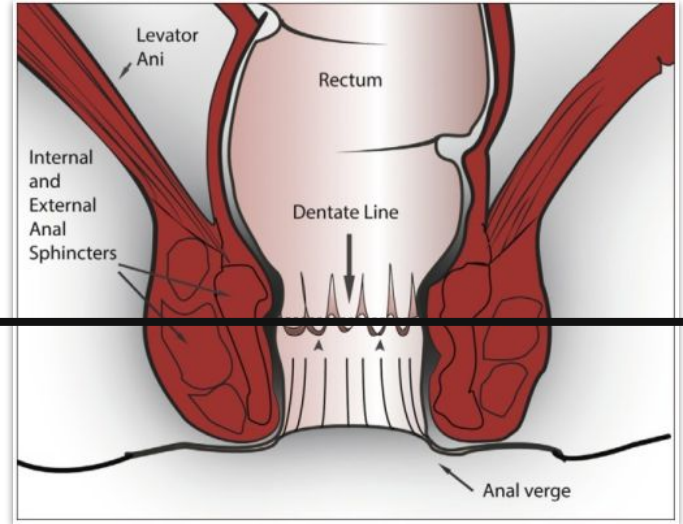
## RECTUM

*sensitive to stretch + pressure*

Dentate Line

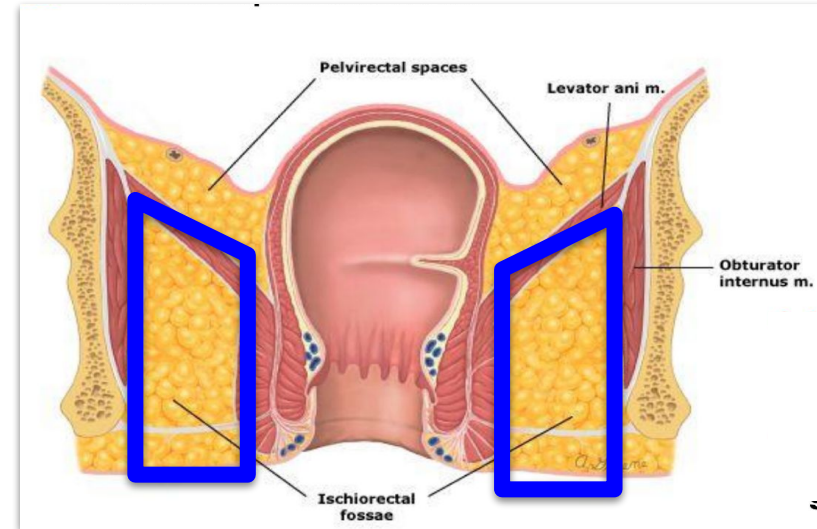
*sensitive to pain, touch, temperature*

## ANAL CANAL



# Ischiorectal Fossa

Provides a **cushion-like support** to the anal canal and the rectum and allows for the **anal canal to expand** during defecation.



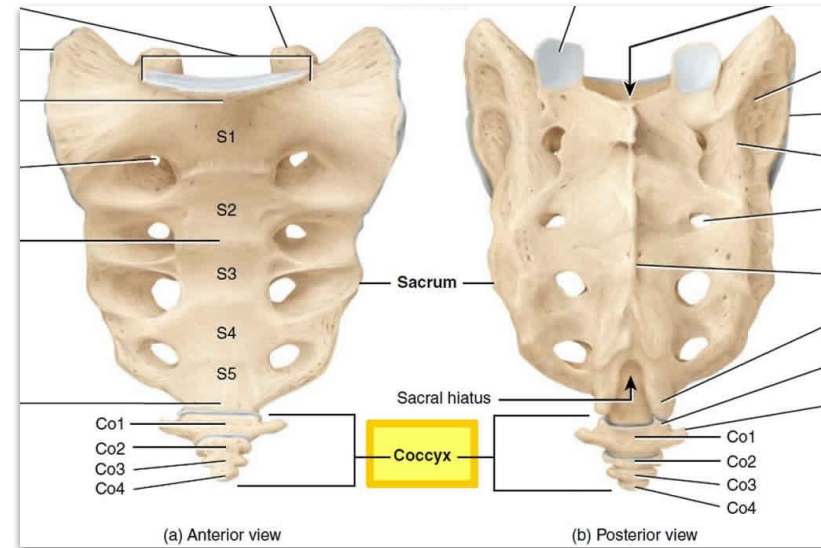


# Ischiorectal Fossa

- 15-20% of **resting anal pressure**
- During **defecation**, IAS relaxes so the **blood in the cushions drain**
- Enlarged Ischiorectal Fossa leads to **hemorrhoids**
- Loss of this fat may cause **rectal prolapse**
- Lots of **vascularity**

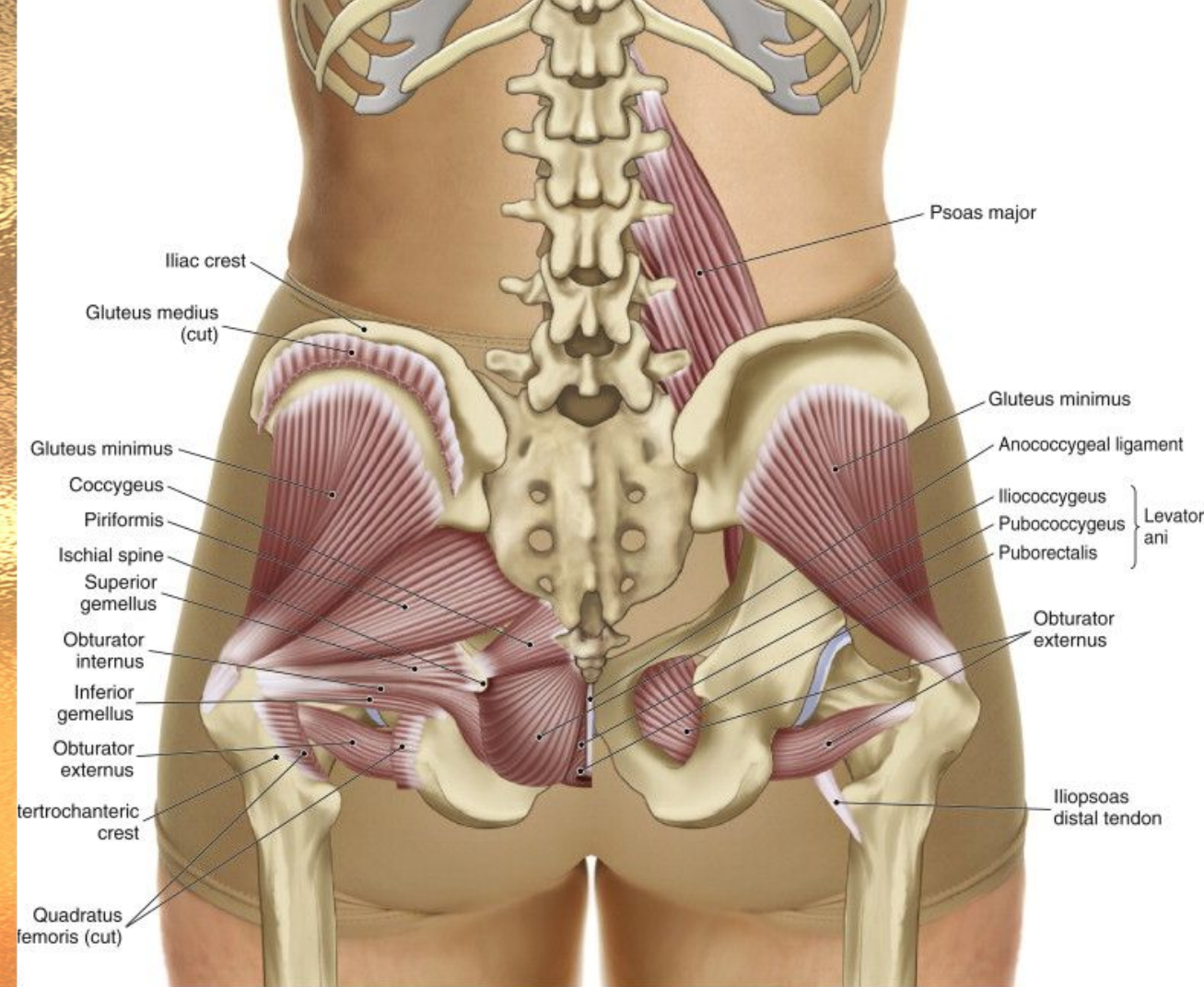
# Coccyx

- Very bottom of sacrum
- Also called the **tailbone**
- **3-5 fused segments**
- Several very important functions



<https://healthjade.com/coccyx/>

# Attachments to the Coccyx



These ligaments  
and muscles help  
support the pelvic floor  
and contribute to  
voluntary bowel control.

# Important Functions of the Coccyx

- **Support** for pelvic floor
- **Insertion site** for crucial muscles, ligaments and tendons
- Provides **positional support** for anus
- Key indicator in ability to coordinate **contraction** and **relaxation**

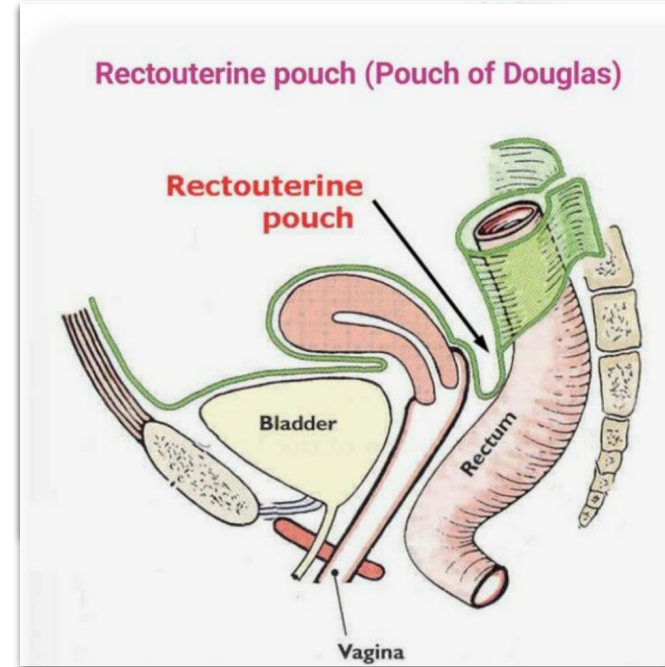
# Injured Coccyx Can Refer Pain To

- OI
- Coccygeus
- Puborectalis
- SIJ
- L5/SI
- Piriformis
- Adductors

The coccyx is  
always going to be  
better palpated  
through the rectum.

# Rectouterine Pouch (Pouch of Douglas)

- **Only** in female body
- Small **cul-de-sac** like area between uterus and rectum
- **Fluid** and **infection** can build there
- Common site for **endometriosis**

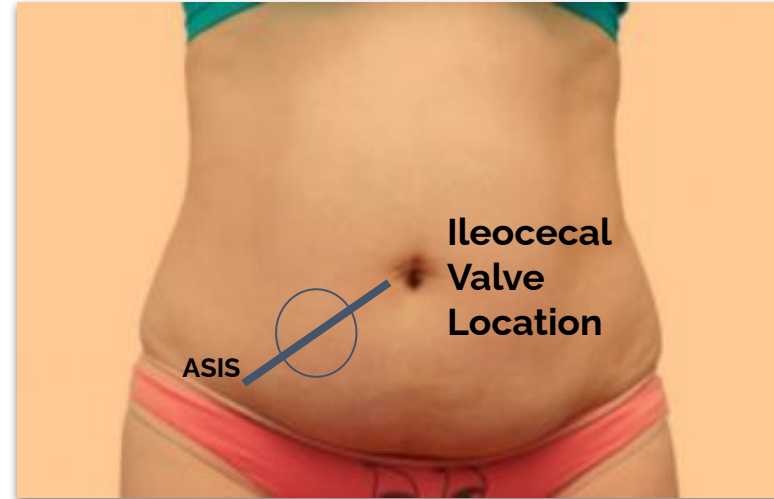


<https://www.drhagmeyer.com/ileocecal-valve-release-and-sibo-how-to-massage-the-ic-valve/>



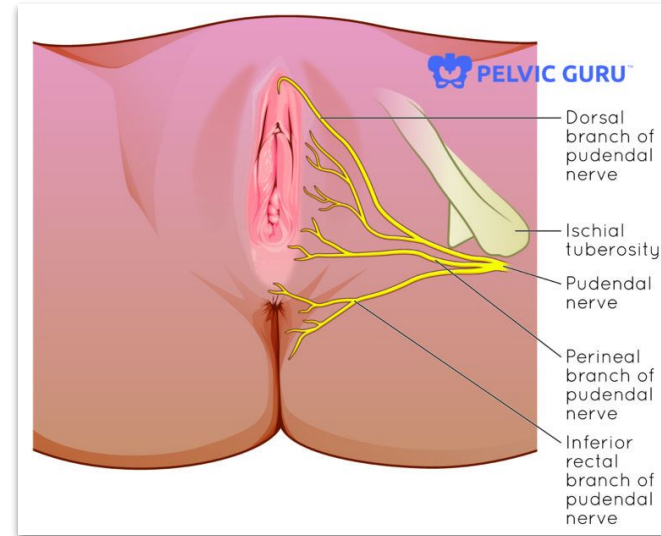
# Ileocecal Valve

- Small sphincter that **connects** small intestine to large intestine
- Can become **inflamed easily**
- Ileocecal Valve can be chronically **opened or closed**



# Pudendal Nerve

- **Major nerve** in the pelvic region
- Sends **motor** and **sensory information** from the genital area
- Involved in any sort of **pelvic pain** issue



## Pudendal Nerve **Controls Movement** of:

- Anal sphincter muscles
- Urethral sphincter muscles

*pudendal nerve:* **MOTOR FUNCTIONS**

Provides information about  
**touch, pleasure, pain** and **temperature** to the:

- Penis
- Vagina
- Perineum
- Anal Canal + Anus

*pudendal nerve:* **SENSORY FUNCTIONS**

- Pudendal nerve for **each side** of the body
- Arises from the **sacral plexus**

*pudendal nerve:* **LOCATION**

- Connects to the **S2 -S4 sacral spinal nerve roots** in the sacral plexus
- Runs through the **pelvis** and **gluteal region** at the upper end of the femur
- Passes through an opening in the pelvic bone (**greater sciatic foramen**)
- Exits the gluteal region through a smaller opening (**lesser sciatic foramen**)
- Travels alongside the pudendal artery and vein into the **pudendal canal**
- Divides into **smaller nerve branches**

*pudendal nerve:* **PATH**

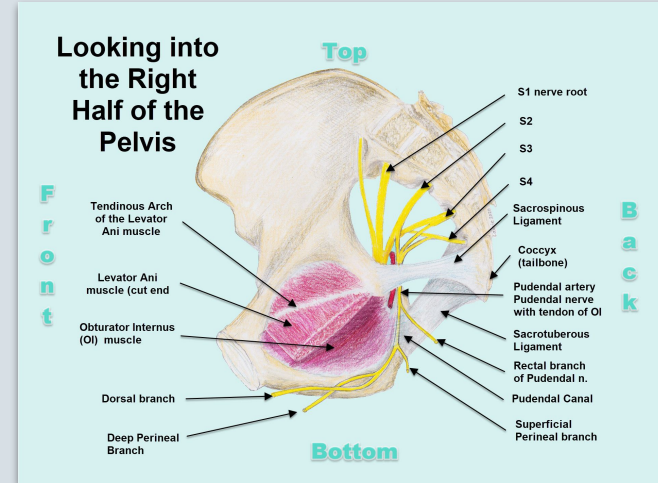
**INFERIOR RECTAL NERVE:** Controls the anal sphincter muscle and sends sensory information to the anal sphincter and anal canal.

**PERINEAL NERVE:** Controls the pelvic floor muscles and the urethral sphincter. Provides sensory information to the perineum and the labia or scrotum

**DORSAL NERVE:** Sends sensory information (touch, pleasure, pain) to the skin of the penis or clitoris

*pudendal nerve:* **BRANCHES**

- Damage to the nerve can lead to pain
- Can affect ability to have or enjoy sex
- Pressure on nerve causes **PUDENDAL NERVE ENTRAPMENT SYNDROME**
- If body is trying to protect the pudendal nerve, it will **tighten** the pelvic floor muscles (leading to **vulvodynia** or **anorectal pain**)



## PUDENDAL NERVE PAIN



Urogenital +  
Anal Triangle

Ischiorectal  
Fossa

Anal Canal

Anal  
Sphincters

Dentate Line

Coccyx

Pouch of  
Douglas

Ileocecal Valve

Pudendal  
Nerve

