PELVIC BONES:

- Right and left innominate bones
- Sacrum
- Coccyx

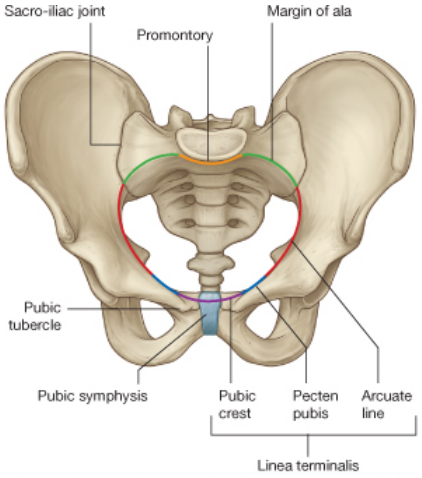
- Innominates articulate with the sacrum posteriorly @ sacroiliac joints – synovial joints
- Innominates articulate with each other anteriorly @ pelvic symphysis; secondry cartilagenous

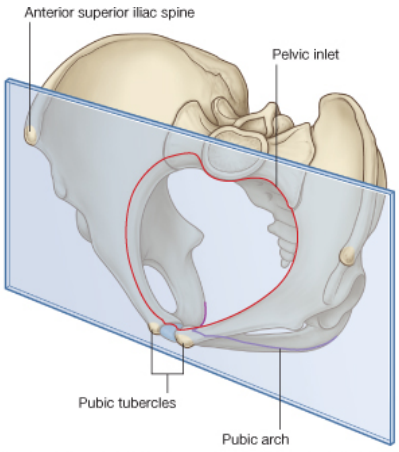
- Above the pelvic inlet = 'false pelvis' – belongs to abdomen
- Below the pelvic inlet = 'true pelvis' – contains the pelvic cavity.

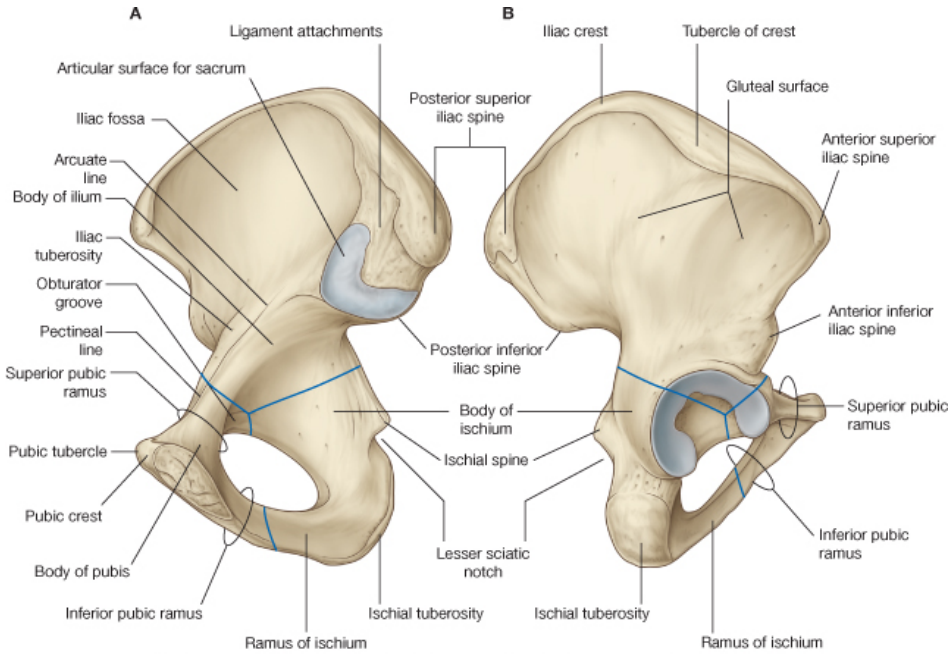
- Acetabulum is the large articular socket on the lateral side of innominate which forms the hip joint with the head of the femur.

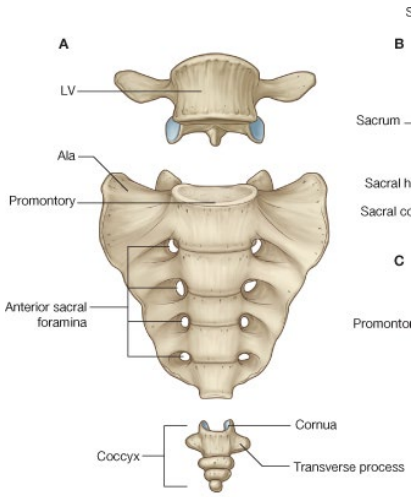
Pelvic inlet:

- Defined by the bony pelvic brim made up by:
    - Sacral promontory →sacral ala → A P C
    - **Arcuate line**
    - **Pectin pubis**
    - **Crest (pubic)**









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Sacrum:

- **5** fused segments of vertebral column
- Weight from trunk is passed onto the alae (lateral masses)
- Sacral promontory - most forward point of superior sacrum

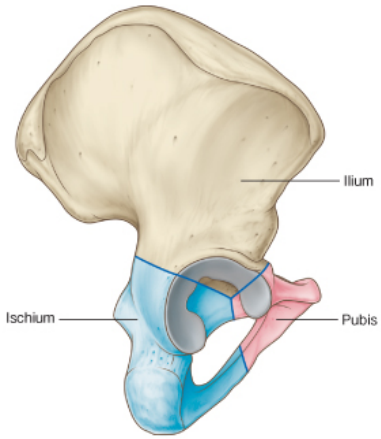
Coccyx:

- **4** fused vertebrae

- Innominate bone consists of 3 fused bones:
    - Ilium
    - Pubis
    - Ischium
- Fuse at puberty (before this they are separated by Y-shaped **triradiate** cartilage in the acetabulum)

Pubis*:*

- Has a body and 2 arms (rami)
- Articulate anteriomedially at the pubic symphysis
- Pubic tubercle
- Superior pubic ramus joins to ilium and ischium
- Pectineal line = sharp superior border of superior ramus (forms part of border of pelvic inlet)
- Inferior pubic rami joins with ramus of the ischium



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Ischium:

- Posterior inferior part of innominate
- Posterior border has ischial spine
- Ischial spine seperates:
    - Greater sciatic notch
    - Lesser sciatic notch
- Ischial tuberosity is on posterioinferior aspect of ischium – part of the pelvis that we sit on.

- Ligaments pass between:
    - Ischail spine and sacrum; **sacrospinous ligament**
    - Ischial tuberosity and sacrum: **sacrotuberous ligament**
- This turns the greater and lesser sciatic notches into:
    - Greater sciatic foramen
        - Allows communication: pelvic region ←→ gluteal region
    - Lesser sciatic foramen
        - Allows communication: gluteal region ←→ perineum

Obturator foramen:

- Formed by superior and inferior pubic rami, and by ischium and ramus of ischium posteriorly.
- Covered with obturator membrane
- Internal and external obturator muscles lie either side of the membrane.
- Small 'obturator canal' allows obturator nerves and vessels through.

Subpubic angle:

- **Ischiopubic ramus** runs from pubic symphysis anteriorly → ischial tuberosity posteriorly.

- Angle between left and right ischiopubic rami = subpubic angle.

Differences between male and female pelvises:

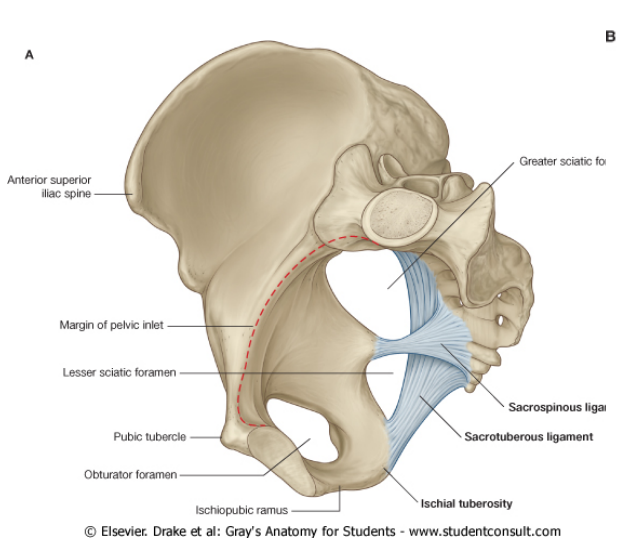
Male	**Female**
Narrow, heart-shaped, pelivic inlet:	***Wider pelvic inlet***
• Larger acetabulum • Acetabulum diameter = length of superior pubic ramus	• Smaller acetabulum • Acetabulum diameter is smaller than superior pubic ramus
• Sacral promontory projects further forward	• Sacrum is positioned further back • Wider alae of sacrum (sacral bodies make up less of sacral width)
Smaller pelvic outlet	***Larger pelvic outlet***
• Sacrum positioned forward	• Sacrum positioned backwards
• Larger ischial spines	
• J-shaped greater sciatic notch	• L-shaped, more opened out, greater sciatic notch.
• Subpubic angle = 60	• Subpubic angle = 90
• Ischial tuberosity and spines positioned more medially	• Ischial tuberosity and spines positioned more laterally
Taller true pelvis	***Shorter true pelvis***

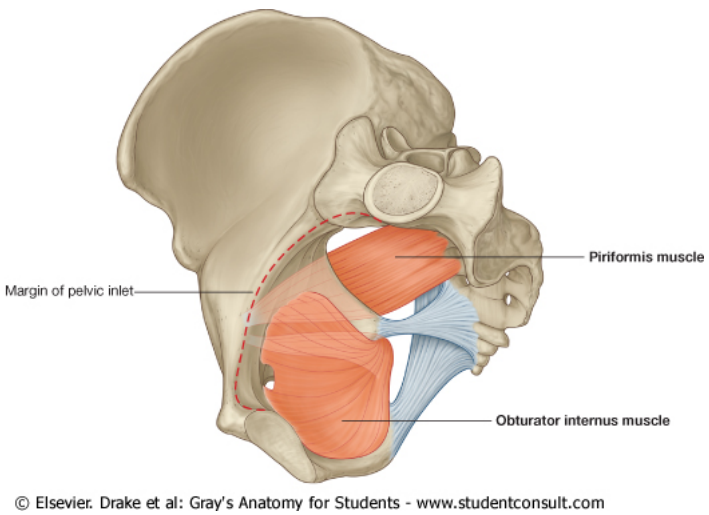
Women:

- Pelvic inlet: wider than it is deep
- Pelvic outlet: deeper (anteroposteriorly) than it is wide
- Accomodates the fact that baby changes orientation through 90^{o} during childbirth.

Muscular walls of the pelvis:

Muscle	**Origin**	**Insertion**	**Function**
Obturator internus	• Bone surrounding obturator foramen • Obturator membrane	Passes through <u>lesser</u> sciatic foramen, turning through 90^{o} and inserting into the greater trochanter of femur.	**<u>Lateral rotation</u>** of the **<u>thigh</u>**.
Piriformis	• Anterior side of S2, 3 & 4 of sacrum	Passes through <u>greater</u> sciatic foramen to insert in posterior part of greater trochanter of femur	**<u>Lateral rotation</u>** of the **<u>thigh</u>**. Proprioception.





Muscles of the pelvic diaphragm:

- **Main purpose is to support the pelvic viscera and prevent them falling out** (prevent <u>prolapse</u>)
- Convex downwards
- Covered on superior surface by extension of transversalis fascia – *the superior fascia of the pelvic diaphragm*
- Rectum, vagina and urethra pass through diaphragm.

Muscle	Origin	Insertion
Levator ani	Inner surface of pubic bone, at lower margin of pubic symphysis → **Arcus tendineus**, which runs as a line around pelvic wall to the ischial spine.	Muscle fibres sweep inwards towards the midline to join with muscle fibres from the other side at the **midline raphe**.
Coccygeus	Ischial spine	Lateral margin of coccyx and sacrum

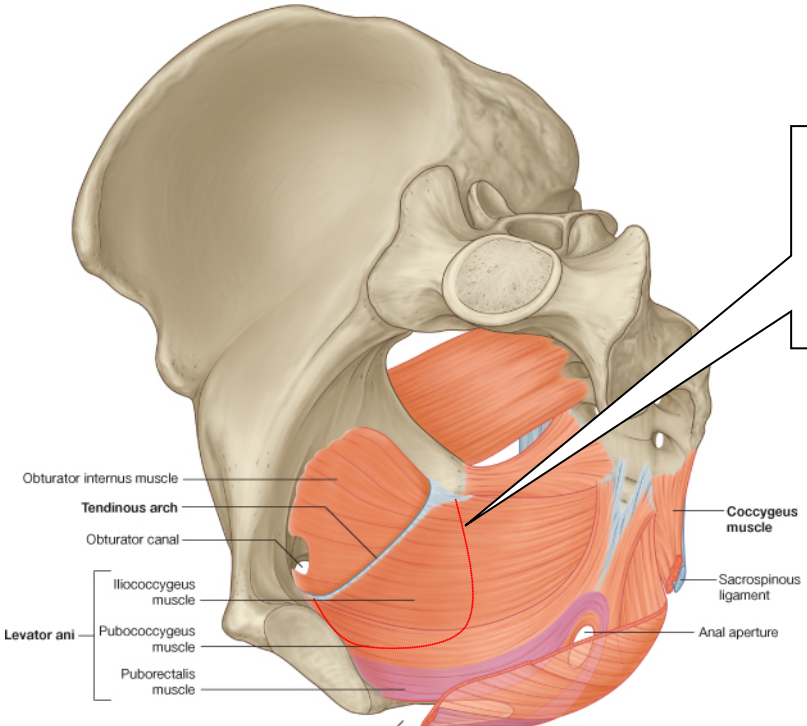
- Arcus tendineus = thickening of obturator internus fascia
- 2 gaps in the midline of the levator ani:
  - Urogenital hiatus – allows passage of urethra and vagina
  - Anal aperture – allow passage of anus
- These two gaps split the midline raphe into:
  - Section between rectum and urogenital hiatus – tough and fibrous **<u>perineal body</u>**
  - Longer section behind rectum – **<u>anococcygeal raphe</u>**

- Much of the coccygeus is regressed to the above described **sacrospinous ligament**

Levator ani can be further divided in 3 muscles:
Described most medial → most lateral origin

➢ **Only need to learn puborectalis muscle**

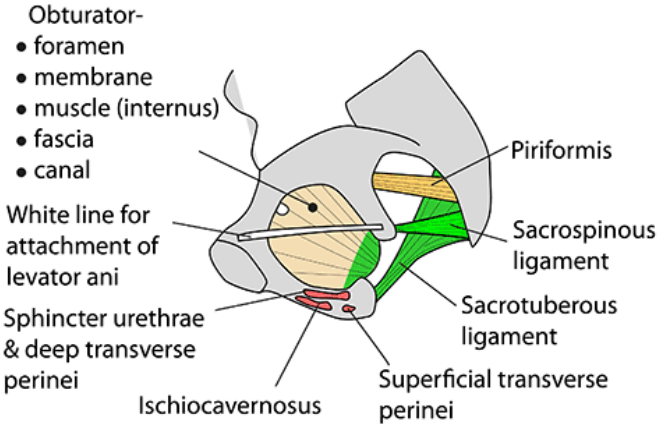
Muscle	Function
Pubococcygeus muscle	Form sling around vagina → form a potential sphincter 1/3 way up the vagina
Puborectalis muscle	Form **puborectal sling** that loops round the rectum and pulls it towards the pubis.
Iliococcygeus muscle	Feeble muscle fibres which are mainly fibrous.



Obturator internus continues downwards; levator ani arises from a <u>thickening of its fascia</u>, the **arcus tendineus**.

PELVIS - GENERAL

- True pelvis is below pelvic brim
- False pelvis is above pelvic brim



LATERAL WALL

- Ilium, ischium, pubis
- Obturator membrane & internus muscle
- Sacrotuberous & sacro-spinous ligaments
- Pelvic fascia
- Piriformis

ANTERIOR WALL

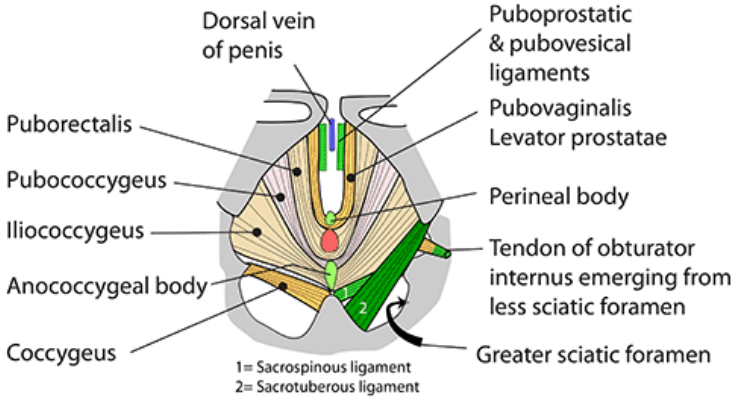
- Symphysis pubis
- Body of pubis
- Pubic rami

POSTERIOR WALL

- Sacrum
- Coccyx
- Piriformis
- Sacral plexus
- Sacralfascia

PELVIC FLOOR FROM BELOW

- Covered superiorly and inferiorly with fascia (epimysium)
- Nerve supply for levator ani is perineal branch of S4. S5 for coccygeus



Urinary bladder:

- Anterior part of true pelvis
- Above urogenital hiatus
- Expands into abdomen when full (as high as umbilicus)
- Pubic bones mould the anterior surface into a point
- Domed, triangular shaped superior surface
- Flat posterior 'base'.

Superior relations:

- Abdominal viscera via peritoneum

Posterior relations:

- M: rectum
- F: vagina & uterus

Embryolocial remnants:

- In embryo anteriosuperior margin of bladder was connected to umbilicus via a duct – the **urachus**.
- After birth, the urachus degenerates to **median umbilical ligament**
- Gives rise to **median umbilical fold** in adult peritoneum.

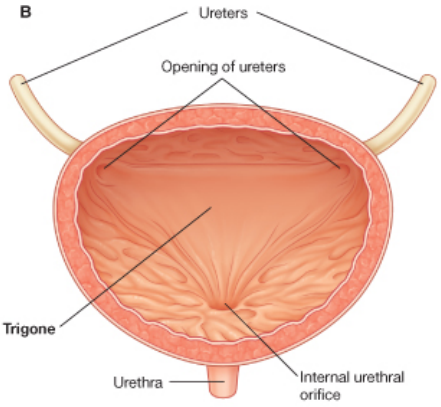
Structure of bladder:

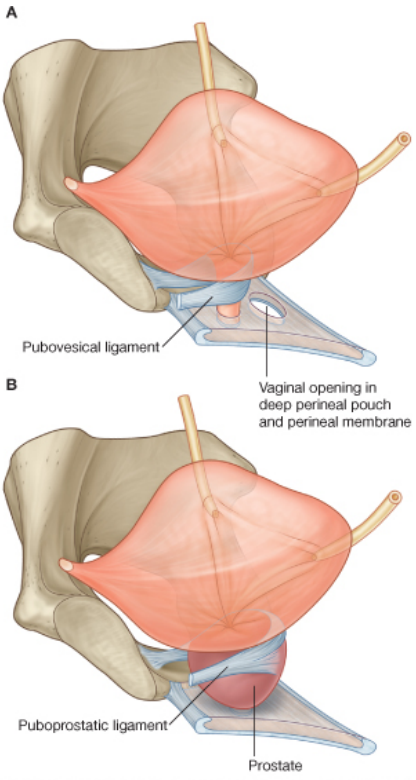
- Wall contains smooth muscle fibres – **detrusor muscle** (**u** for urinary bladder)
- Empty; interior folds
- Full; smooth interior
- **Trigone** = smooth triangular area whose corners are the posterior openings of the ureters, and the more anterior opening of the urethra.
- Trigone does not expand when bladder fills, and is very sensitive to pain.

- **Internal sphincter urethrae –** around internal urethral orifice:
  - Sympathetic – constricts
  - Parasympathetic – relaxes
- Mainly prevents semen entering bladder on ejaculation

➢ **Detrusor muscle** of bladder is innervated by **parasympathetic pelvic splanchnic nerves (S2,S3,S4)**

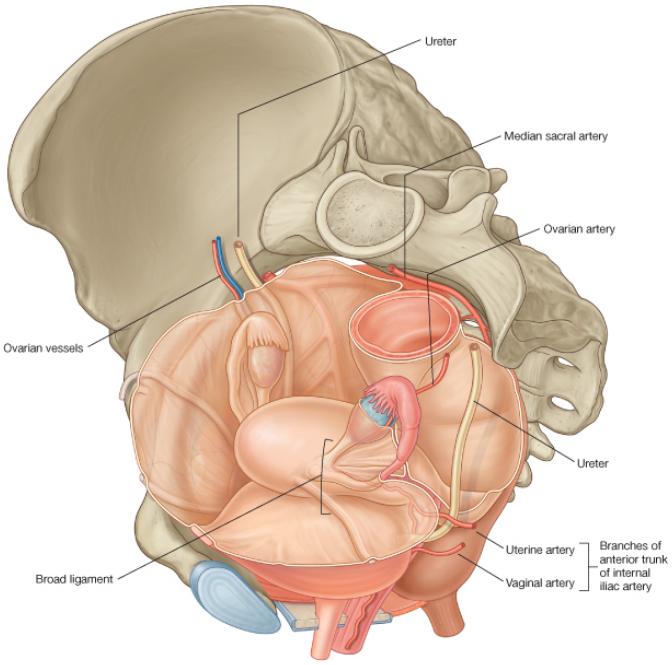
➢ ***"S2, 3, & 4 control det-ru-sor"***





URETERS:

- Cross the common iliac arteries in abdomen
- → run into true pelvis
- → <u>cross over internal iliac vessels, obturator vessels & nerve</u>
- → reach pelvic floor
- → run forward to enter bladder at its base (posterior surface)
- In males, the **<u>ductus deferens hooks over ureters</u>** here.
- In female, **<u>uterine artery runs over top of ureter</u>** as it runs under broad ligament (see diagram R)



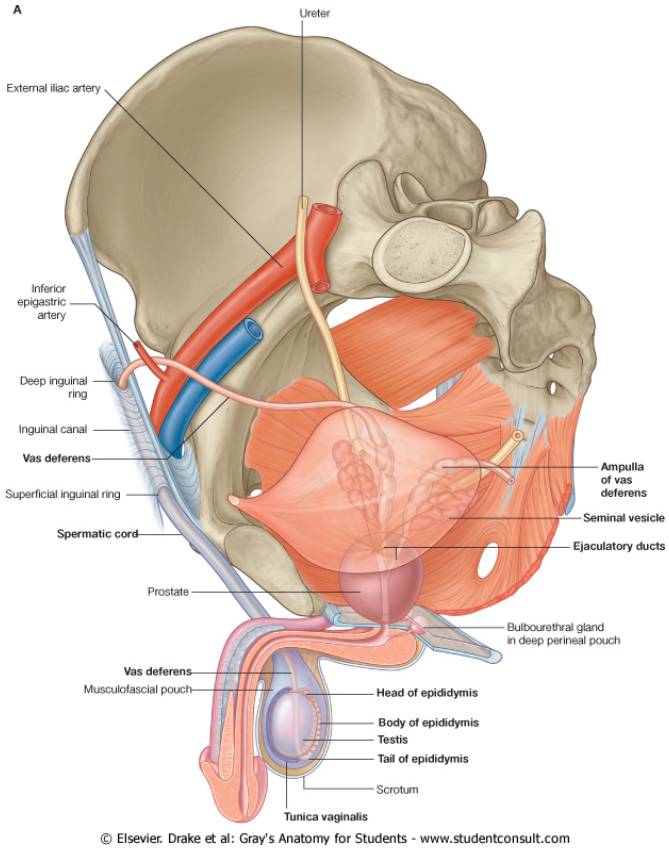
- Ureters have both sympathetic and parasympathetic nervous supply.
- Peristaltic action in the ureters moves urine into bladder.

Ureters:

- **Over psoas covered by peritoneum**
- **Behind gonadal ateries**
- **But over genitofemoral nerve and obturator vessles+nerve**

Male bladder:

- Neck of bladder sits on **prostate gland**
- Both bladder and prostate gland lie anterior to rectum.
- (can palpate prostate and bladder *per rectum* up to the margin of the rectovesical pouch).
- Urethra passes through substace of prostate gland
- **Puboprostatic ligament** secures neck of bladder and prostate to pubic bone.



- Vas deferens run from deep inguinal ring → over top of ureter → runs down posterior wall of bladder → widens to an **<u>ampulla</u>**
- **<u>Seminal vesicles</u>** sit lateral to the ampullae
- Ducts from seminal vesicles + ampullae = **<u>R & L ejaculatory ducts</u>**
- Ejaculatory ducts pass through prostate and open obliquely onto seminal colliculus of prostatic urethra, lateral to prostatic utricle.

Prostate gland:

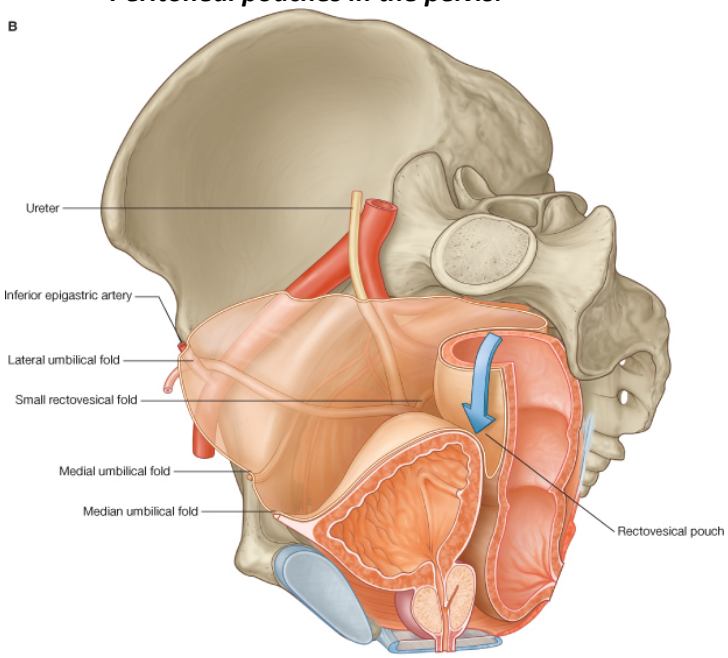
- Below bladder
- Surrounds proximal urethra (prostatic urethra).
- Palpable *per rectum* (especially when full bladder pushes it down)
- Encapsulated in fibrous sheath
- Associated with **<u>prostatic venous plexus</u>** <u>anteriorly</u> and <u>laterally</u>
- Ejaculatory ducts divide prostate into

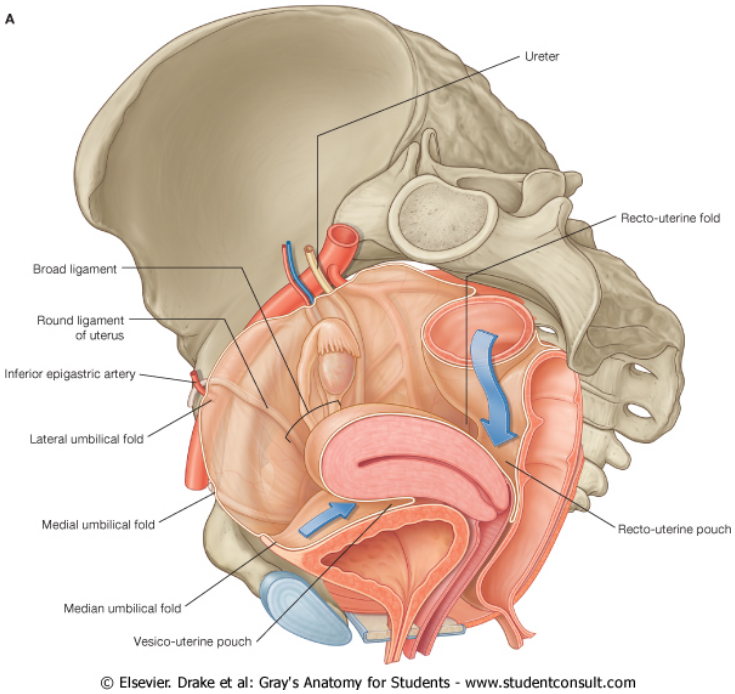
    - Upper **'median lobe'**
    - **Right & left lateral lobes** (lower part behind urethra)
    - **Anterior lobe** (lower part in front or urethra)
- ~20 ducts from prostate gland which open onto the urethra.
- Prostate enlarges at puberty and again at adulthood (↑↑ enlargement → blocks urethra)
- **Prostatic venous plexus** *anastomoses* with **vertebral venous plexus** → allows cancer cells (which commonly form in prostate) to metastasise.

Female bladder:

- Lies directly over urogenital hiatus
- Fixed to pubic bone by **pubovesical ligaments**
- *Posterior relations:*
    - Upper part of anterior vaginal wall
    - Cervix
    - Uterus

Peritoneal pouches in the pelvis:





Male:

- Rectovesical pouch

Female:

- Uterovesical pouch
- Rectouterine pouch (pouch of Douglas)

UTERUS, VAGINA AND OVARIES:

- Uterus is in midline behind bladder

Broad ligament of the uterus:

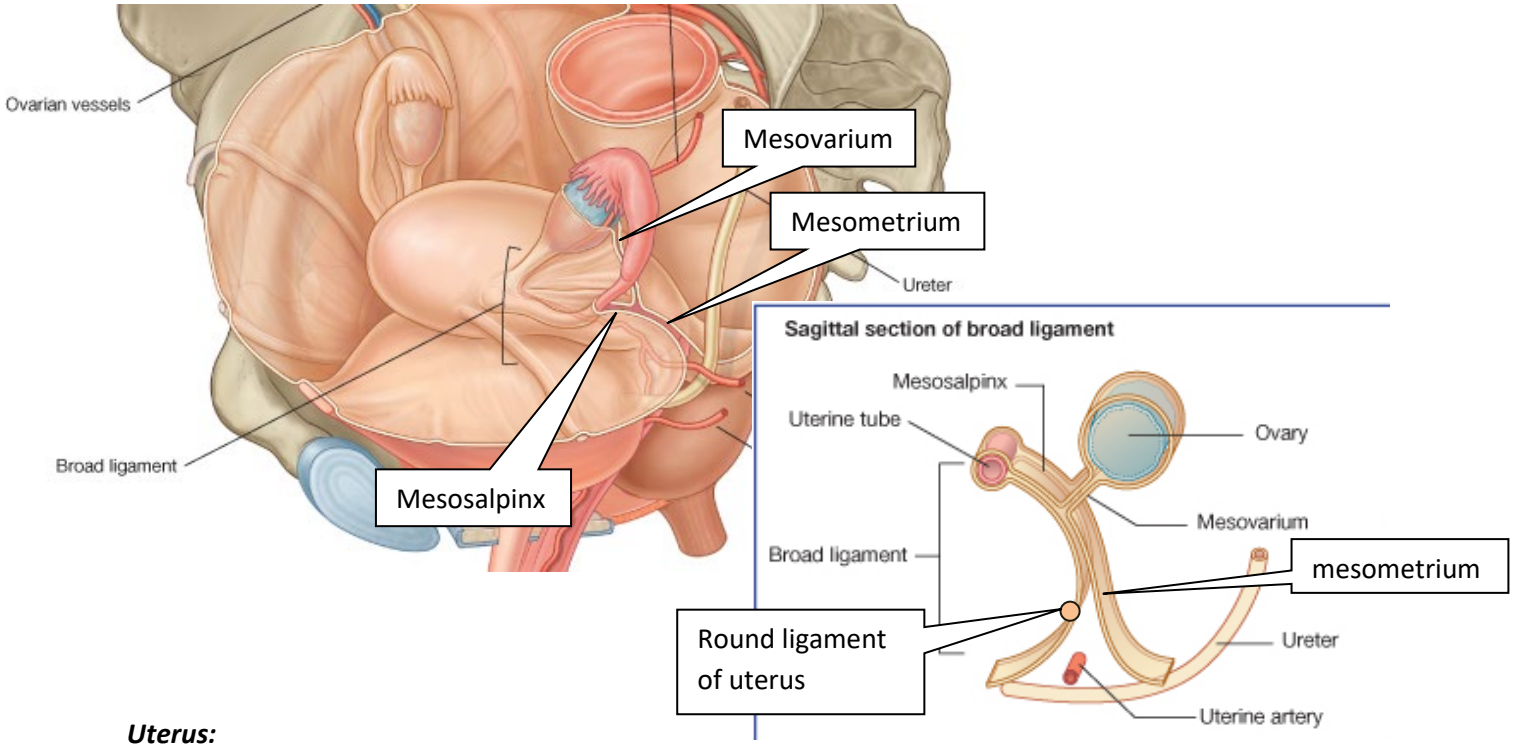
- Peritoneum hanging over the uterine tubes
- **Root** of broad ligament = point of attachment to lateral wall of true pelvis, and the pelvic diaphragm.

- Broad ligament divides the female pelvic cavity into:
    - **Anteroinferior compartment** (containing bladder)
    - **Posterosuperior compartment** (containing rectum)

- **Broad ligament contains:**
    - **Two things:**
        - **Uterine tube**
        - **Ovary**
    - **Two sets of vessels:**
        - **Uterine artery & vein**
        - **Ovarian artery & vein**
    - **Two ligaments:**
        - **Round ligament of uterus**
        - **Ligament of the ovary**

- Outer quarter of broad ligament containing **ovarian artery and vein** is called **suspensory ligament of the ovary** – (do not confuse this with the 'ligament of the ovary')
- NOTE:
    - Ovarian artery – from aorta (gonadal artery)
    - Uterine artery – from anterior internal iliac artery

- **Mesovarium** – 'mesentry' connecting ovary to broad ligament
- **Mesosalpinx** – bit of broad ligament above mesovarium
- **Mesometrium** – bit of broad ligament below mesovarium



Uterus:

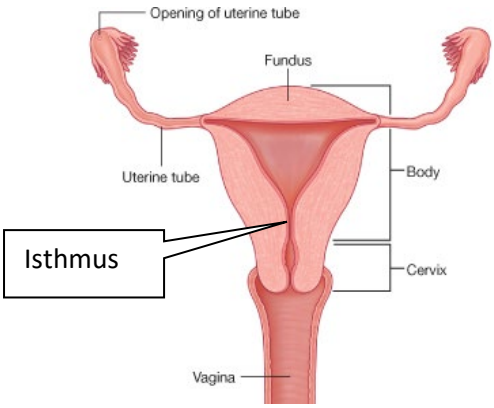
- Fundus – above level where uterine tubes open
- Body
- Cervix
- ***Uterine anteflexion***
    - Bend between body and cervix → body lies more anteriorly than cervix.

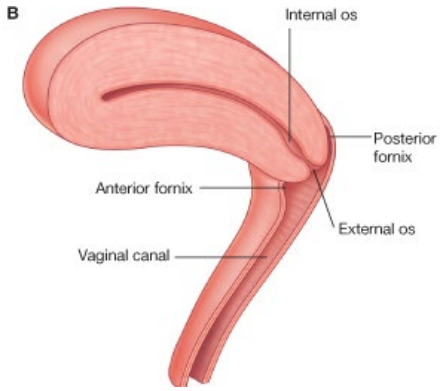
- ***Anteversion of the uterus***
    - 90º angle between axis of vagina and axis of cervix
    - Altered by distended bladder / rectum
- Thus uterus is usually anteflexed and anteverted (other combinations though)

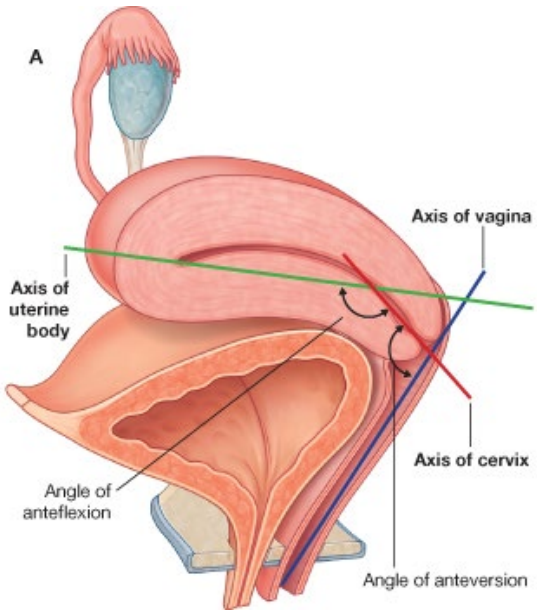
- Uterus has thick fibromuscular walls
- Uterus lumen; **isthmus → cervical canal → external uterine os** of vagina.

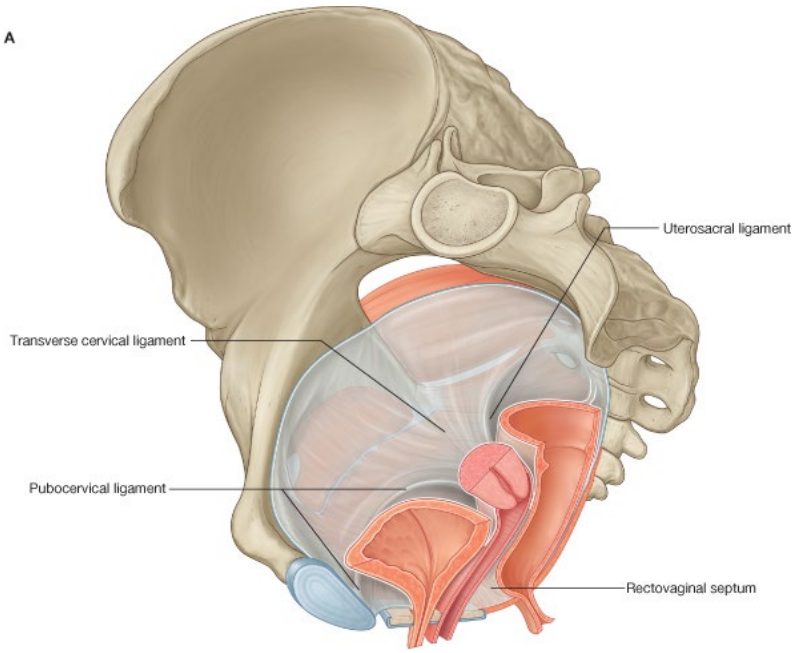
- Rim of vaginal lumen surrounds cervix = **fornix** (anterior, posterior and lateral fornix)
- Fibromuscular thickenings attach uterus and fornix to floor and walls of pelvis:

    - **Cardinal / transverse cervical ligaments**: run in base of broad ligaments towards lateral walls of pelvis.
    - **Uterosacral ligaments**: run in lateral folds of rectouterine pouch to attach cervix to sacrum.





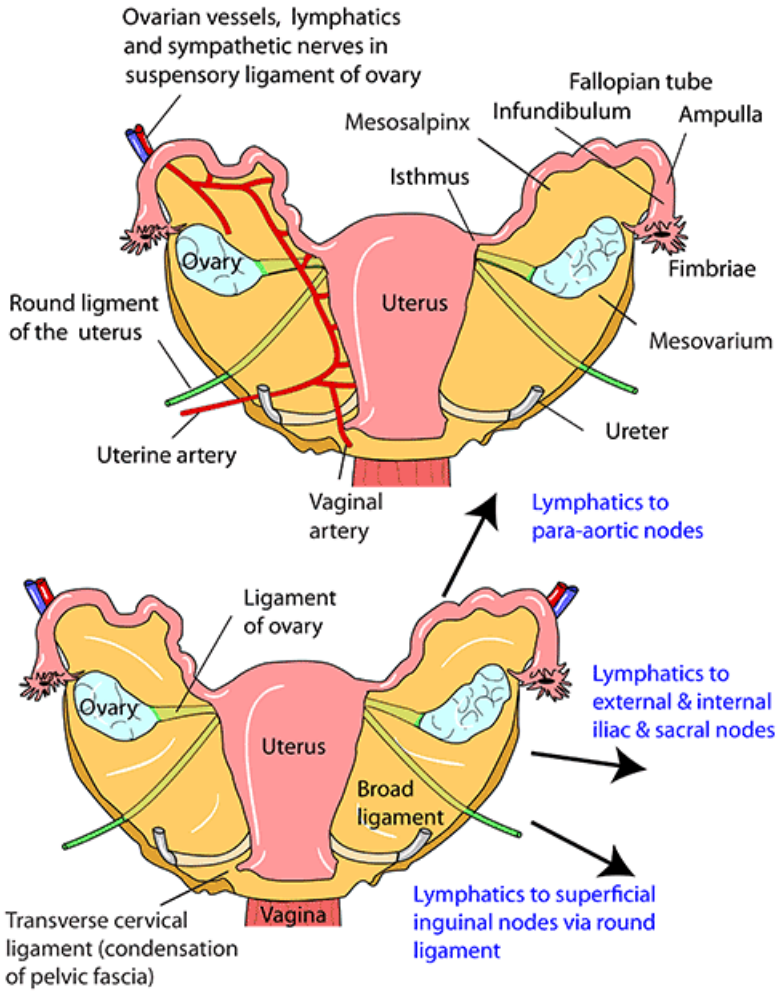




UTERUS - BROAD LIGAMENT

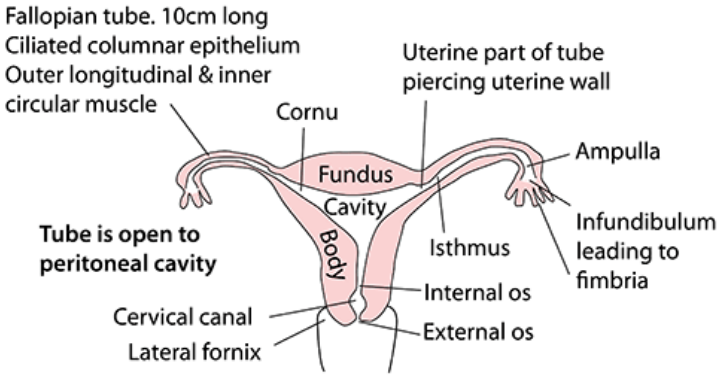
- Double layer of peritoneum draped over uterus and tubes. Distal ends of tubes stick out of posterior layer of it and lie free.
- Between two layers are arteries and veins, round ligament, ligament of ovary, lymphatics. The ovary is partially covered by a separate posterior fold of the broad ligament (mesovarium) but the surface of the ovary is devoid of peritoneum to allow exit of the ova.
- The tubes lie in the upper edge of the broad ligament (mesosalpinx).
- The ureters pass through the base of the broad ligament in close relationship to the uterine artery which lies in base of broad ligament, at level of os, to supply uterus, vagina and anastomoses with ovarian artery superior to ureter.
- Fallopian tube is 10cm long. Outer longitudinal & inner circular muscle and ciliated columnar lining.
- Round ligament of uterus passes to labium majus. Blood supply branch of ovarian & inferior epigastric arteries.
- Sensory: General visceral afferents via pelvic plexus. In parasympathetics from cervix; in sympathetics for rest of uterus and tube. No parasympathetics to ovary

POSTERIOR ASPECT OF BROAD LIGAMENT



UTERUS - GENERAL

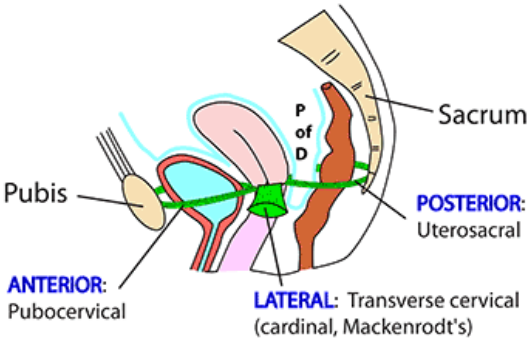
- Pear shaped
- Usually anteverted to 90 degrees & anteflexed to 170 degrees
- Has no submucosa
- Histology - Cervix: Tall columnar epithelium becoming squamous outside, alkaline mucus
  Rest of uterus: Endometrium with glands, arterioles, smooth whorls of muscle, columnar epithelium
- Nerves - Motor: Parasympathetic activate muscle
  Sympathetic relax muscle. Both from pelvic plexus
  Sensory: Parasympathetic for cervix
  Sympathetic for uterus
- Blood supply (see broad ligament)
- Venous drainage: Highly plexiform to vesical and rectal plexuses
- Relations: Anterior- vesicouterine pouch, posterior/superior bladder anterior fornix, small bowel
  Posterior- Pouch of Douglas, ileum, sigmoid
  Lateral- Uterine vessels, ureter, lateral fornix, broad ligament



Cervix only has parasympathetic innervation
Ovary only has sympathetic (like testicle)

UTERUS - SUPPORTS & DEVELOPMENT

- Suspensory ligament of ovary, round ligament & broad ligament are NOT supportive
- Ligaments:
  - LATERAL:Transverse cervical (cardinal, Mackenrodt's)
  - POSTERIOR: Uterosacral
  - ANTERIOR: Pubocervical
- Muscles: Pubovaginalis & puborectalis are part of levator ani, perineal body & urogenital diaphragm



These ligaments/Supports are condensations of fascia known as parametrium.

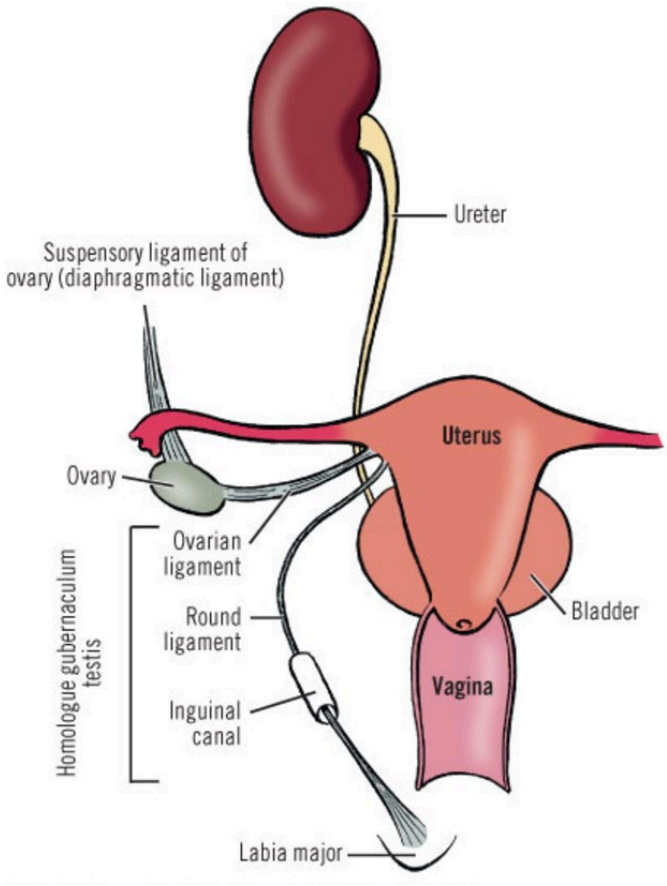
Uterine tubes:

- Pass out of uterus at superiolateral corners (**cornu**)
- Narrow initially – **isthmus** of uterine tubes
- Widen into **ampulla** laterally
- Expands into **infundibulum** – opening onto peritoneal cavity at the **abdominal ostium**
- Wall of infundibulum has **fimbriae**
- Infundibulum attached to wall of pelvis by **infundibulopelvic ligament**.

Ovaries:

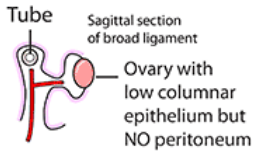
- Each ovary lies against pelvic wall (at level of acetabulum)
- Upper pole – associated with fimbriae
- Lower pole – connected to uterus (just beneath uterine tube) via fibromuscular cord – **ligament of the ovary**.
- **Round ligament of the uterus** = a continuation of the ligament of the ovary; travels through broad ligament → inguinal canal → labia majora.
- Both these ligaments are remnants of the gebernaculum.

- Ovary is covered with cuboidal epithelial layer, continuous with the peritoneum.

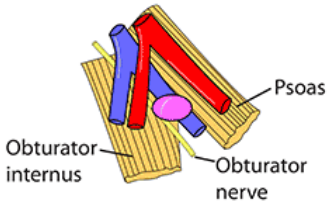

Ureter
Suspensory ligament of ovary (diaphragmatic ligament)
Uterus
Ovary
Ovarian ligament
Round ligament
Inguinal canal
Homologue gubernaculum testis
Bladder
Vagina
Labia major

OVARY

- Almond shaped - 4cm x 2cm
- Attached to posterior aspect of broad ligament by mesovarium
- Attached to uterus by ligament of ovary
- Attached to lateral pelvic wall by suspensory ligament of ovary
- Artery: Ovarian from aorta at L2
- Vein: Left to left renal. Right to inferior vena cava
- Lymphatics: Para-aortics. (Inguinal via round ligament & opposite ovary in disease)
- Nerves: Sympathetic fom aortic plexus. Vasoconstriction & pain
  Parasympathetics - probably nil
- Development: Intermediate cell mass of genital ridge. Mesonephric remnants are epoophoron, paroophoron, Gaertner's duct

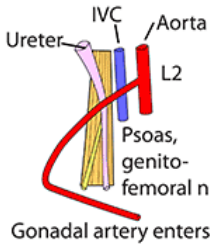


OVARY RELATIONS



Ovary lies in fossa between bifurcation of common iliac artery, on obturator nerve & external iliac vein. Overlaid by Ileum & sigmoid colon

GONADAL VESSELS



Gonadal artery enters suspensory ligament of ovary at pelvic brim

Oogonia (primative germ cells) give primary oocytes. Add single layer of granulosa cells to give primary follicle. Add more layers to give secondary follicle (6 million of these by 5 months inter-uterine, one million at birth, 40,000 at puberty). At maturation these secondary follicles give an ovarian follicle. With meiosis these give secondary oocyte (ovum)

Vagina:

Anterior wall relations:

- Bladder (through loose CT)
- Urethra (firmly adherent)

Posterior wall relations:

- Rectouterine pouch (puch of Douglas)
- Rectum
- Fibres of levator ani which form a sling around vagina (pubovaginalis)

- Posterior wall is longer than anterior wall

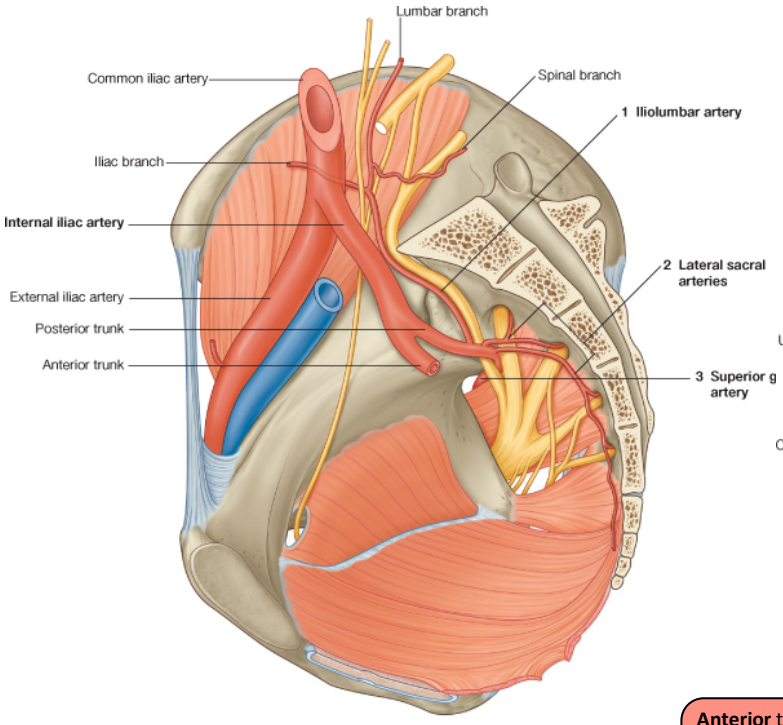
BLOOD SUPPLY TO THE PELVIS:

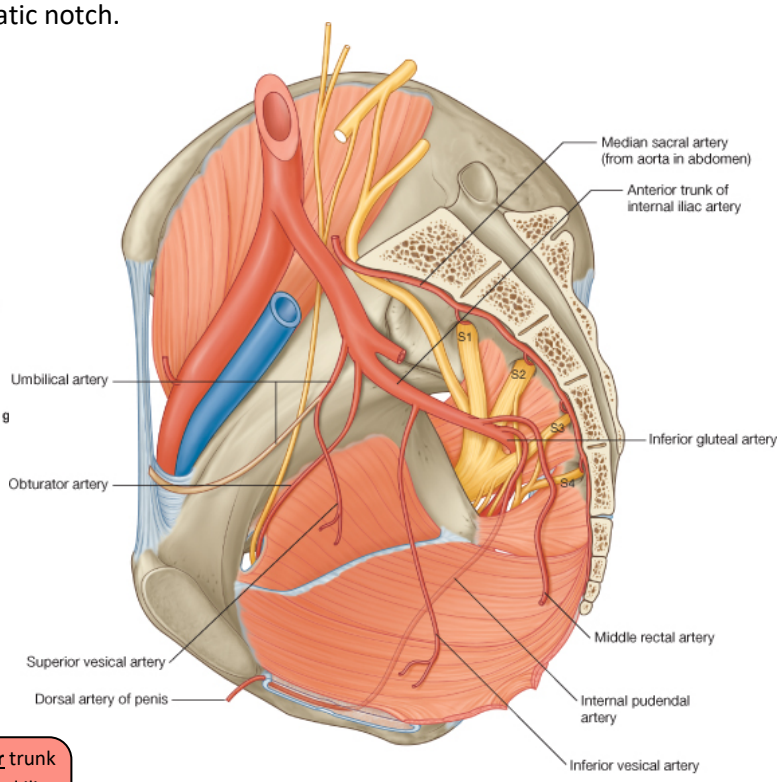
- From **internal iliac artery**
- In true pelvis, just above the greater sciatic notch, it divides into:
    - **Anterior internal iliac artery**
    - **Posterior internal iliac artery**

- Branches of the internal iliac which go into lower limb and don't supply pelvis:

    Branch of posterior internal iliac:
    - Superior gluteal artery

    Branches of anterior internal iliac:
    - Obturator artery:
        - Passes through obturator foramen with obturator nerve
    - Trunk of internal iliac passes through **<u>greater sciatic foraman</u>** and gives rise to:
        - Inferior gluteal artery
        - **Internal pudendal artery**
    - Superior and inferior gluteal arteries are separated by the piriformis muscle which runs between them through the greater sciatic notch.





<u>Anterior</u> trunk of internal iliac artery

- Ubilical artery
    - Superior vesical artery
        - Inferior vesical artery
    - Medial umbilical ligament
- Obturator artery
- Uterine artery
- Inferior vesical artery / vaginal artery
- Middle rectal artery
- Trunk passing through **<u>greater</u> sciatic foramen**
    - Inferior gluteal artery
    - Internal pudendal artery
        - Inferior rectal artery

- In both male and female, the umbilical vein continues over top of bladder (after giving off superior vesical artery) → runs over inner aspect of anterior abdominal wall
- Lumen degenerates → **medial umbilical ligament**, giving rise to the **medial umbilical fold** in the peritoneum.

BRANCHES OF <u>INTERNAL ILIAC ARTERY</u> WHICH DO SUPPLY PELVIS:

MALE:

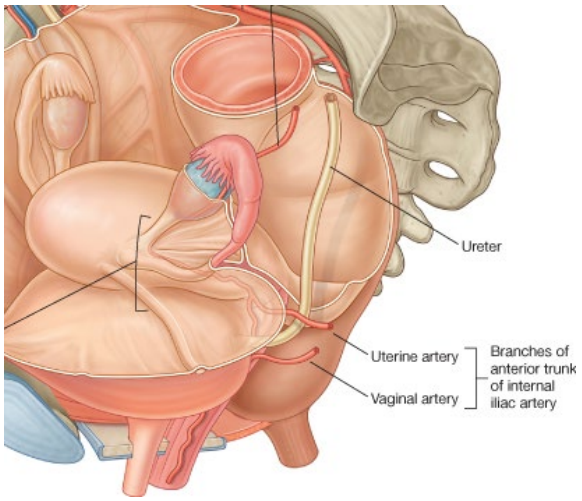
- **Superior vesical artery**
- **Middle vesical artery**
- **Inferior veiscal artery**
- All supply bladder, seminal vesicles and prostate gland.
- **<u>Vesical arteries all anasomose with one another</u>**

- **Middle rectal artery –** supplies muscle in wall of rectum
- (superior rectal artery – from inferior mesenteric artery)
- (inferior rectal artery – branch of internal pudendal artery)

FEMALE:

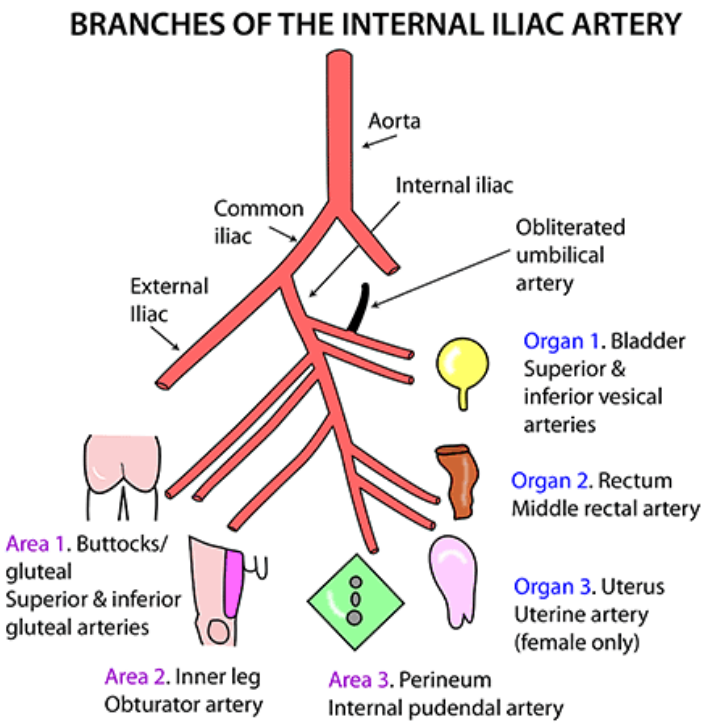
- **Superior vesical artery** (branch of umbilical artery)
- **Uterine artery** (direct branch of anterior internal iliac)
- **Vaginal artery** (direct branch of anterior internal iliac)

- *Vaginal artery:*
  - (replaces inferior vesical artery of male)
  - Supplies:
    - Vagina
    - Part of bladder anterior to vagina
    - Part of rectum posterior to vagina
- *Uterine artery:*
  - Runs down wall of true pelvis to lower border of broad ligament
  - Runs medially between 2 layers of broad ligament <u>over the top of the ureters</u>
  - → cervix and turns upwards over body of uterus
  - Gives rise to lateral branches:
    - Uterine tube
    - Round ligament of uterus
    - Ligament of the ovary



- **Ovarian artery** – a branch of the **<u>abdominal aorta</u>**
- Arises from abdominal aorta just below the level of the renal artery.
- → runs down posterior abdominal wall → over brim of pelvis → <u>suspensory ligament of the ovary</u> → mesovarium → ovary
- Uterine + ovarian arteries anastamose

- **The ovarian, uterine and vaginal arteries all anastomose**



A simple representational diagram of the branches of the internal iliac artery. An easy way to remember them is to think of them in 2 groups, each with 3 branches. Group 1 has 3 branches to organs (bladder, rectum and uterus) and Group 2 has 3 branches to areas (buttocks/gluteal, adductor compartment and perineum).

ILIOLUMBAR: Passes laterally, behind obturator nerve & psoas. Lumbar branch to psoas, quadratus lumborum & spine. Iliac branch to iliacus, iliac bone, anastomosis at anterior superior iliac spine
LATERAL SACRAL: Passes inferiorly, lateral to anterior sacral foramina & anterior to nerve roots & piriformis
ARTERY TO VAS: Usually off superior vesical (or inferior vesical)
UTERINE ARTERY: In female it largely replaces middle rectal (or inferior vesical)

Branches of the internal pudendal artery:

- Gives off:
    - **Inferior rectal artery**
    - **Perineal artery** (superficial to perineal membrane)
- Gives 3 arteries to the penis :
    - **Dorsal artery of the penis**
    - **Deep artery of the penis**
    - **Artery to the bulb of the penis**

VENOUS DRAINAGE OF PELVIC VISCERA:

- Each pelvic organ is surrounded by a plexus of veins
- → drain into internal iliac veins (tributaries travel with the above arteries)

- Exception is ovarian veins which do not drain into internal iliac veins:
    - Left ovarian vein: drains into left renal vein
    - Right ovarian vein: drains directly into IVC

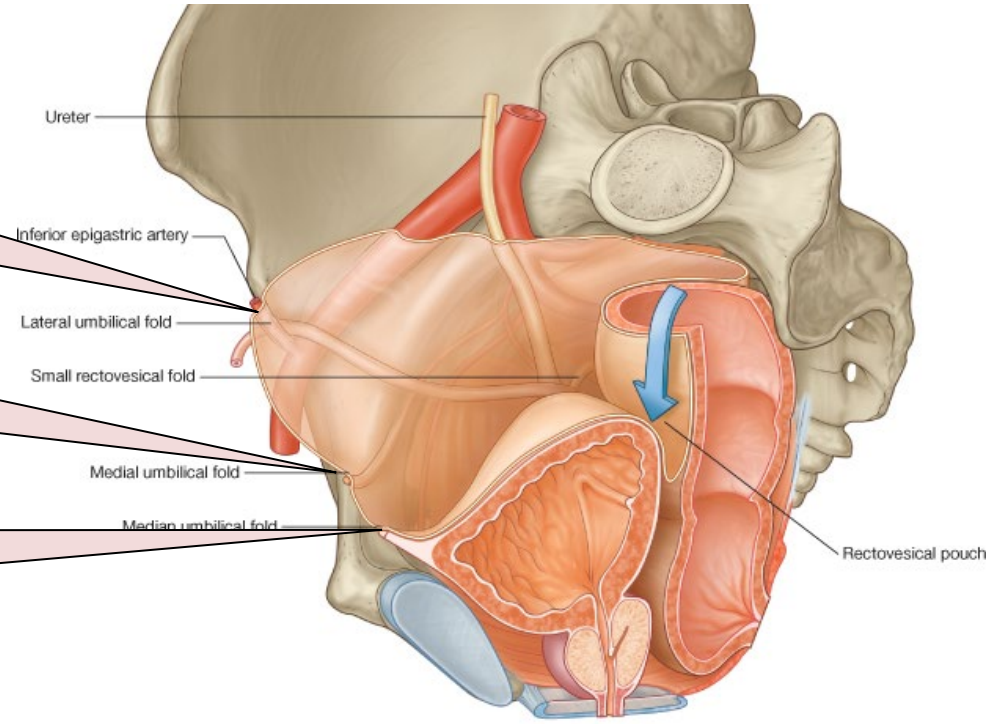
- Pelvic venous plexuses anastomose with vertebral venous plexus
- → easy spread of tumours.
- Pelvic venous plexuses communicate with portal system via superior and middle rectal veins.
- **This is a PORTOCAVAL ANASTOMOSE**

SUMMARY OF UMBILICAL FOLDS:

Lateral umbilical fold
containing
Inferior epigastric artery

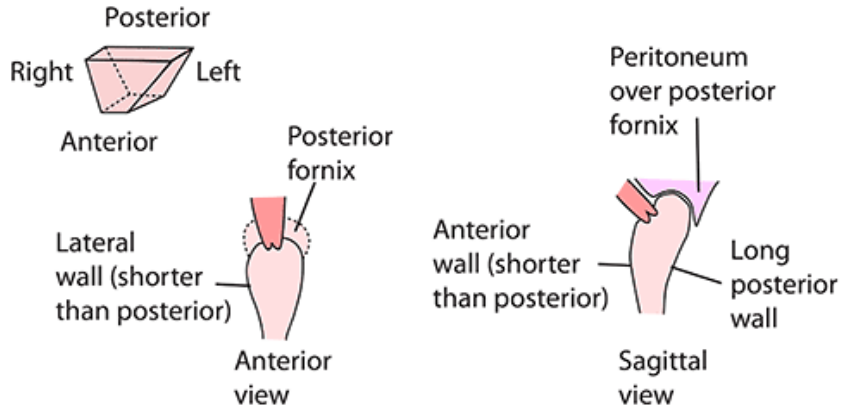
Medial umbilical fold
containing
Remnant of umbilical artery

Median umbilical fold
containing
Remnant of urachus



VAGINA - GENERAL

- 10cm long
- Potential space apart from posterior fornix which is real space
- Fornices: Anterior, lateral & posterior
- Artery: Vaginal branch of uterine, middle rectal, inferior vesical gives vaginal
- Veins: Pelvic floor plexus to internal iliac
- Nerves: Sympathetic from pelvic plexus for vasoconstriction, smooth muscle action, stretch sensation
  Somatic - perineal branches of pudendal, ilio-inguinal at anterior introitus
- Lymphatics: External/internal iliac, sacral, superficial inguinal below hymen
- Support: levator ani (pubovaginalis) & perineal body
- Structure: Non-keratinising stratified squamous epithelium, smooth muscle, sweat glands, no mucous glands
- Development: Upper third from paramesonephric ducts
  Lower two thirds from urogenital sinus
- Shape: Wider left to right at top
  Wider anterior to posterior at introitus

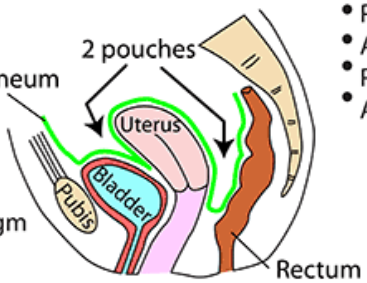


VAGINA - RELATIONS

ANTERIOR
- Bladder
- Urethra

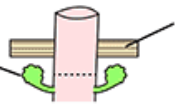
POSTERIOR
- Pouch of Douglas
- Ampulla of rectum
- Perineal body
- Anal canal

LATERAL
- Ureter
- Uterine artery
- Levator ani
- Urogenital diaphragm



FEMALE: In females the uterus "sticks up" into the pelvis between the bladder & rectum giving two pouches. The vesicouterine pouch anteriorly & the rectouterine pouch posteriorly

VESTIBULE OF VAGINA



Interrupted line gives site of hymen

Superficial pouch containing:
- Hymen
- Greater vestibular glands (Bartholin's glands)