

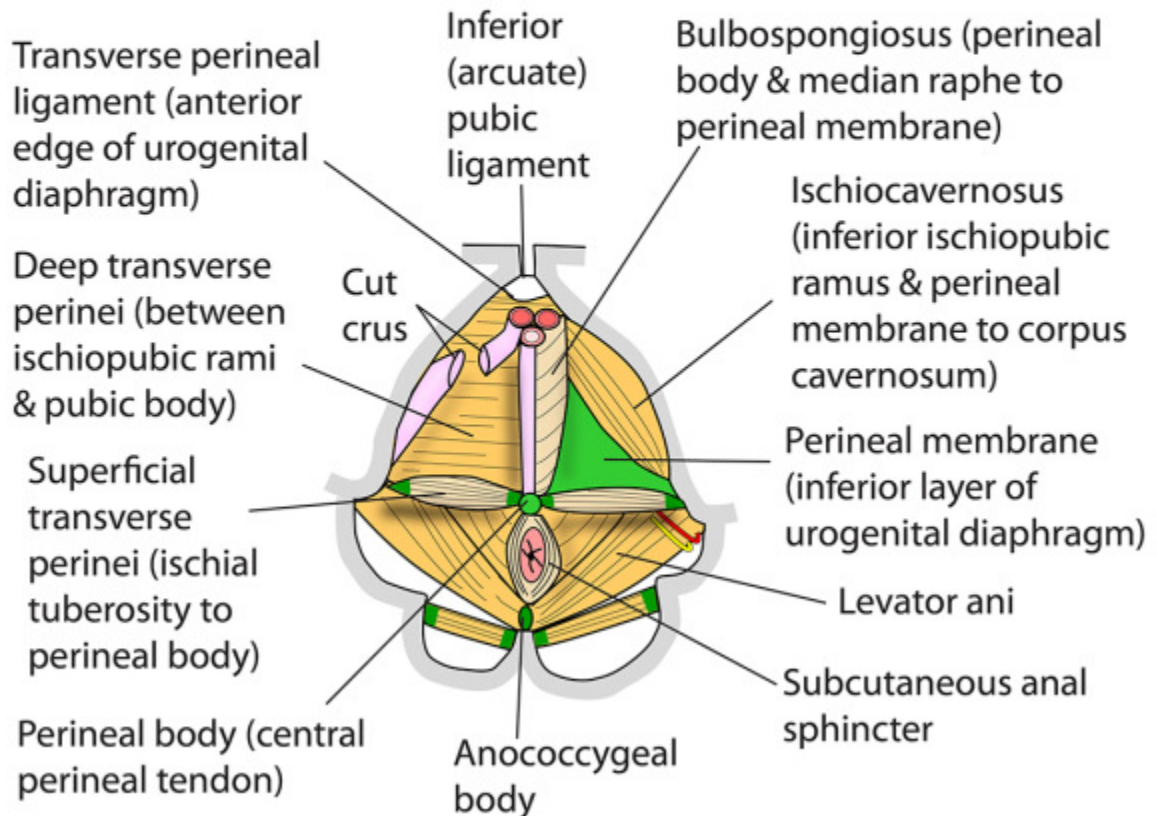
The Perineum

## MALE PERINEUM

The perineum is that part of the trunk distal to the pelvic diaphragm  
2 triangles lying at nearly a right angle to each other

**Urogenital** - covered in below with urogenital diaphragm

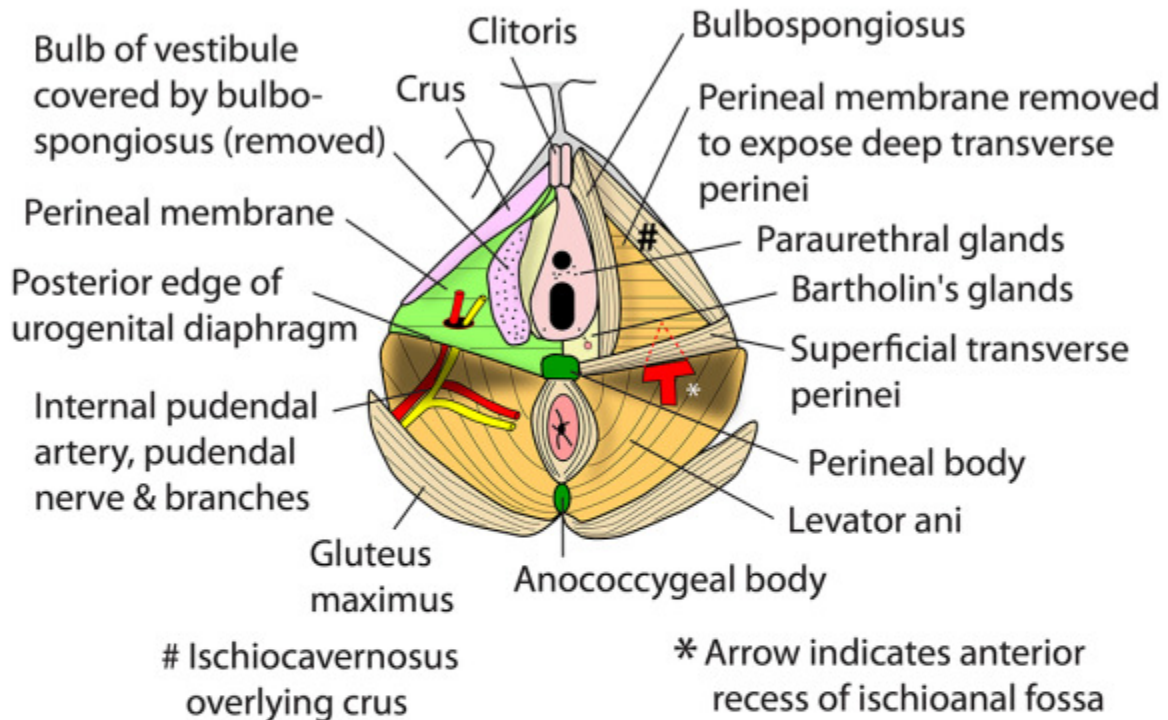
**Anal** - covered only with skin & fascia (+/- gluteus maximus)



For anterior recess of ischioanal fossa, see female perineum

## FEMALE PERINEUM - GENERAL

- The perineum is that part of the trunk distal to the pelvic diaphragm
- 2 triangles lying at nearly a right angle to each other
  - Urogenital - covered in below with urogenital diaphragm
  - Anal - covered only with skin & fascia (+/- gluteus maximus)



### Greater vestibular glands (Bartholin)

Round (<1cm) glands at 4 & 8 o'clock behind bulb. 2cm duct into posterolateral vaginal orifice. In superficial perineal pouch. Homologues of Cowper's glands in males. Cysts & infection possible

### Paraurethral glands (Skene)

Mucous glands opening just inside urethra. Homologue of prostate

### Lesser vestibular glands

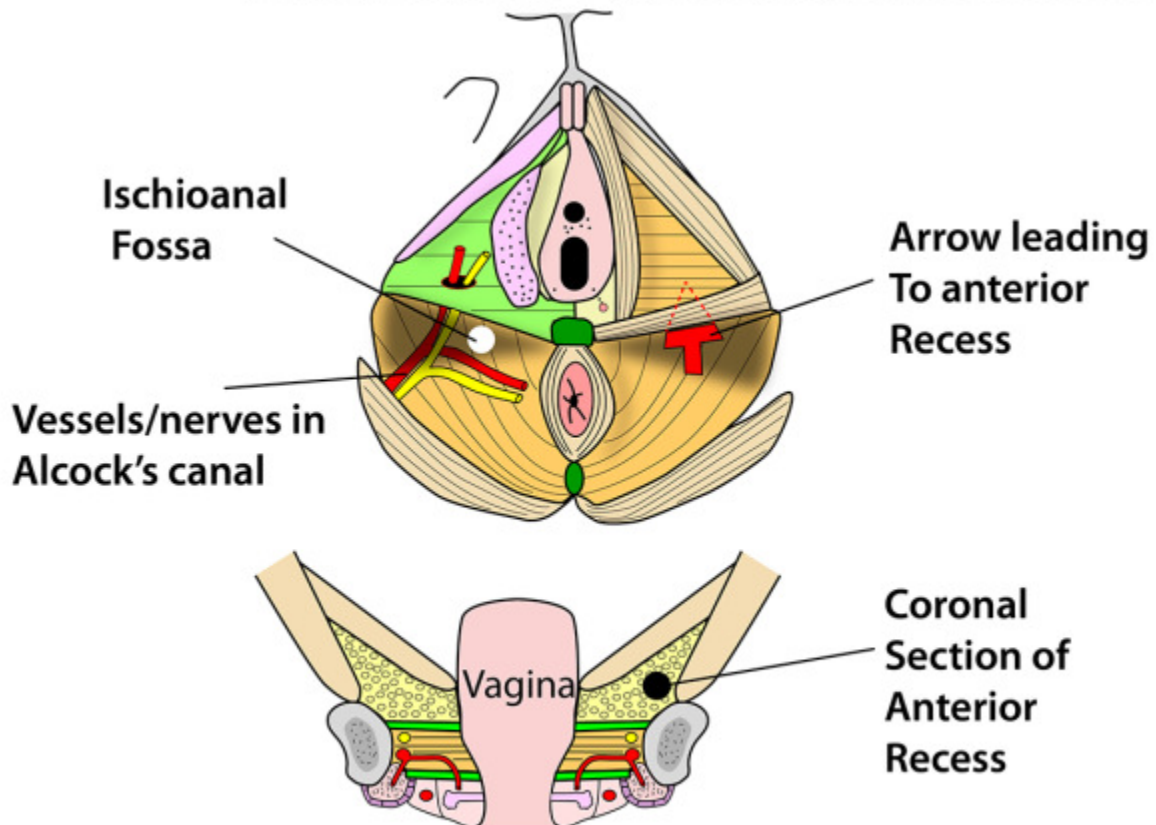
Not shown. Multiple small mucous glands opening between vagina & urethra

**Labia majora** - joined back & front by anterior & posterior commissures. Round ligament of uterus ends anterior end of each.

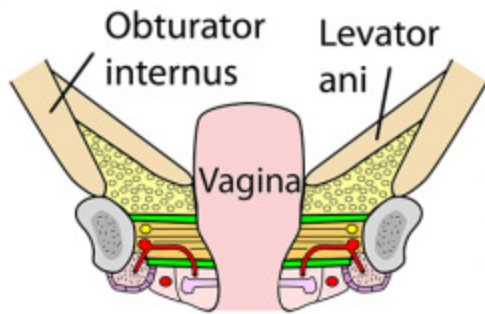
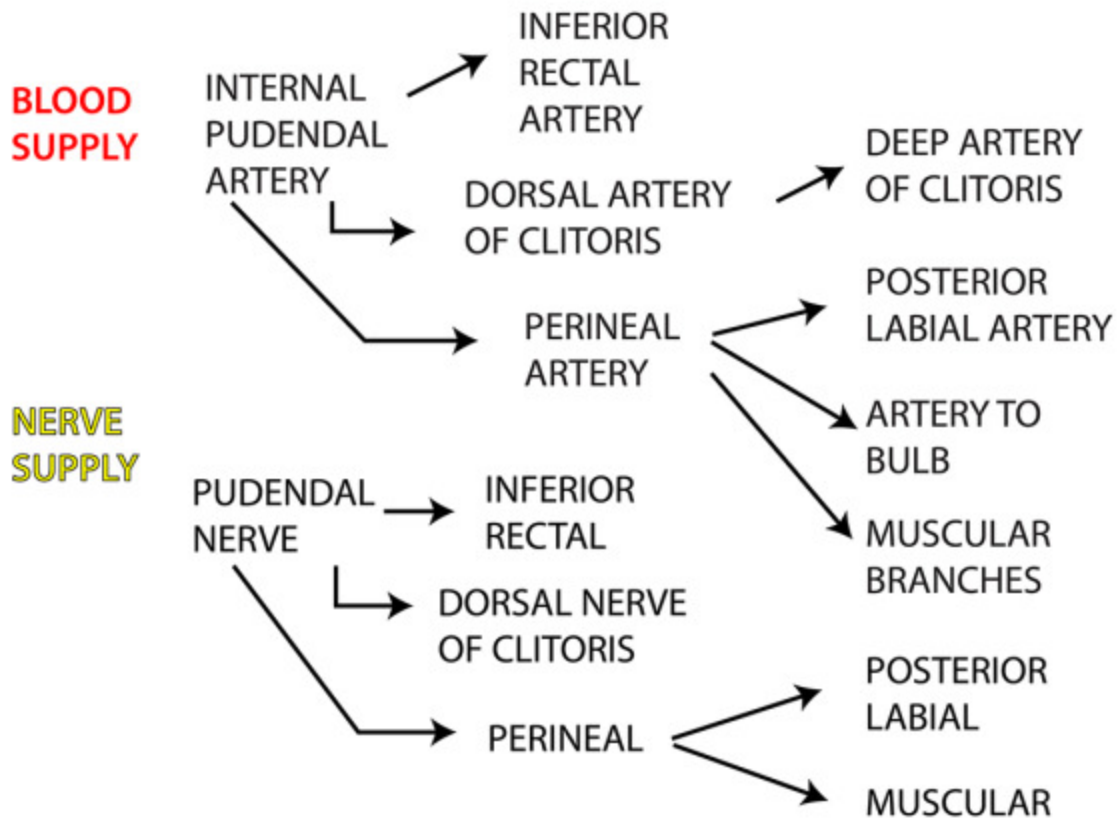
**labia minora** give clitoral prepuce. **Clitoris** - 2 small corpora cavernosa. **Bulb** - spongy erectile tissue in labia minora

## ISCHIOANAL (ISCHIORECTAL) FOSSA

- Wedge shaped & filled with fat
- Crossed by inferior rectal nerve & artery
- Has Alcock's canal in its lateral wall
- Base: Perineal skin
- Medial: Anal canal, levator ani
- Lateral: Ischial tuberosity, obturator internus
- Apex: White line
- Anterior: Perineal body, urogenital diaphragm, anterior recess
- Posterior: Posterior recess, gluteus maximus, sacrotuberous ligament, anococcygeal body, horseshoe connection
- Contains: Fat, Alcock's (pudendal) canal, internal pudendal artery, pudendal nerve, inferior rectal artery/nerve, perineal branch of S4, perforating cutaneous nerve



## FEMALE PERINEUM VESSELS AND POUCHES



**Coronal section through urogenital diaphragm at level of vagina**

**Deep perineal pouch** (between perineal membrane below & superior fascia of urogenital diaphragm above)

- Vagina
- Urethra
- Sphincter
- Deep transverse perinei
- Dorsal nerve of clitoris
- Dorsal/deep clitoral arteries

**Superficial perineal pouch**

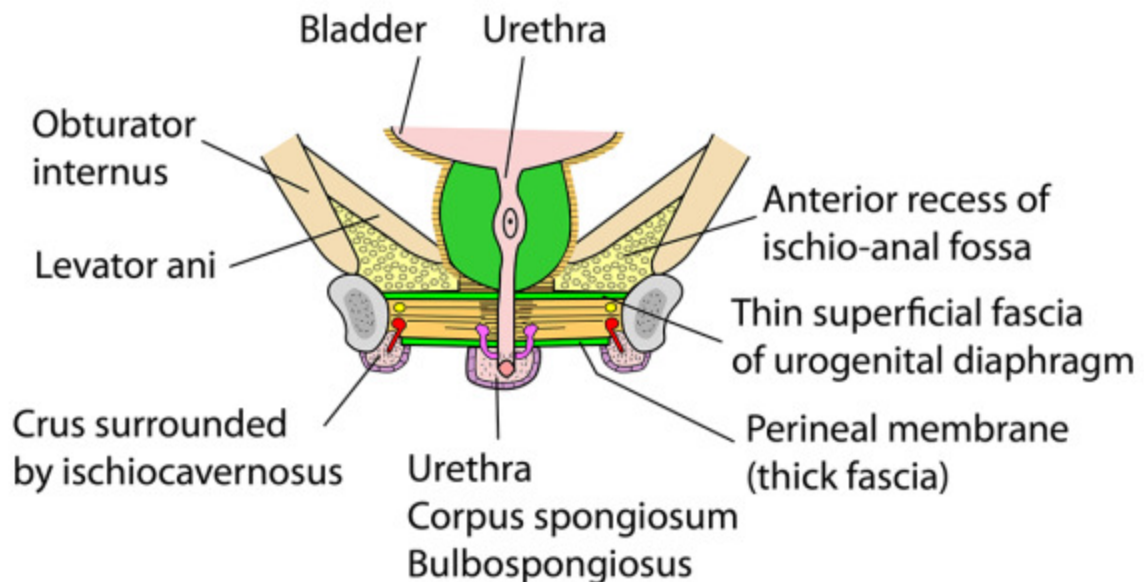
(everything below perineal membrane)

- 2 crura & ischiocavernosus
- Bulb & bulbospongiosus
- Superficial transverse perinei
- Perineal body
- Perineal artery/nerve/branches
- Vestibular glands

## MALE PERINEUM - DEEP PERINEAL POUCH

**Deep perineal pouch** (between perineal membrane below & superior fascia of urogenital diaphragm above). Contains:

- Membranous urethra
- Deep transverse perinei
- Sphincter urethrae (external sphincter)
- Bulbourethral glands (Cowper's). They drain into urethra below the perineal membrane
- Internal pudendal vessels
- Dorsal nerve of penis
- Note that the external sphincter has striated muscle extensions around lower prostatic urethra, above the urogenital diaphragm that are called the **intrinsic urethral mechanism**

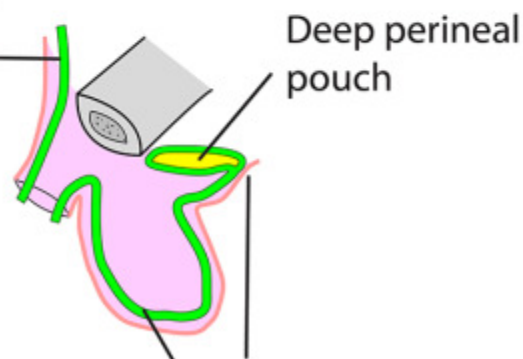


**Coronal section through urogenital diaphragm at level of the prostate**

## MALE PERINEUM SUPERFICIAL PERINEAL POUCH

- All perineal structures below the perineal membrane are in the superficial perineal pouch
- 2 crura & 2 ischiocavernosus muscles over them
- Urethra; bulb & corpus spongiosum around it
- Bulbospongiosus muscle
- Superficial transverse perinei muscles
- Perineal body
- Perineal branches of internal pudendal artery
- Pudendal nerve & branches
- Colles fascia
- Ducts of Cowper's glands
- Deep & superficial external pudendal arteries
- Spermatic cords, testes, penis
- Dartos muscle (panniculus carnosus)
- Branches of ilio-inguinal and genitofemoral nerves
- Scrotal blood supply: Deep/superficial external pudendal, branches of internal pudendal.  
Veins to external pudendal
- Nerves to scrotum: Anterior 1/3 - ilio-inguinal, posterior 2/3 - posterior scrotal branches of perineal & perineal branches of posterior femoral cutaneous nerve
- Lymph: superficial inguinal glands

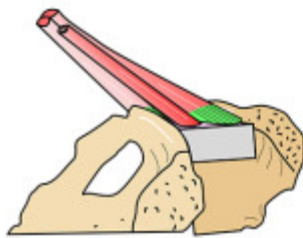
Scarpa's fascia is fused to the pubis then extends into the scrotum as Colles' fascia and around the penis as buck's fascia



Colles' fascia (superficial perineal fascia)  
Attached posteriorly to ischiopubic ramus & posterior part of perineal membrane

## MALE PERINEUM -VESSELS AND NERVES

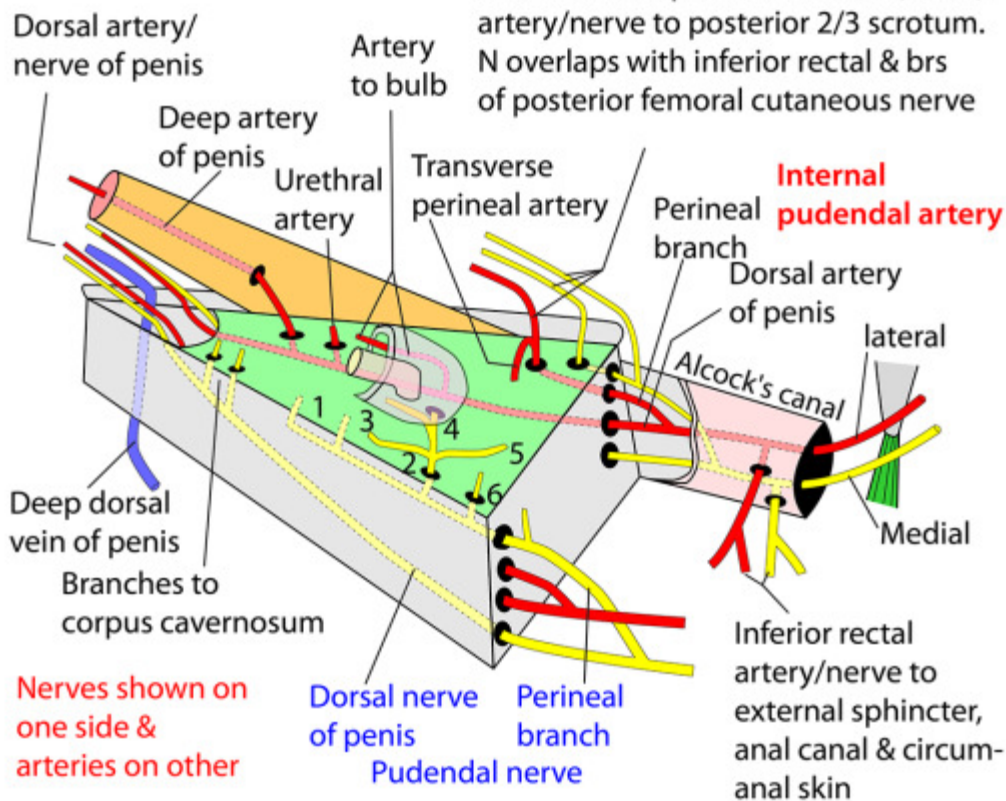
This rather complicated diagram below depicts the arrangement of vessels and nerves in the male perineum but it largely applicable to both sexes. The grey wedge represents the urogenital diaphragm seen from below and the green surface is the perineal membrane. The small diagram is the key to the larger one to show the orientation



### Branches of the perineal nerve

- 1, Deep transverse perinei & external sphincter
2. Ischiocavernosus
3. Bulbospongiosus
4. Sensory to urethra
5. Superficial transverse perinei
6. Posterior scrotal/labial

Medial/lateral posterior scrotal (labial) artery/nerve to posterior 2/3 scrotum. N overlaps with inferior rectal & brs of posterior femoral cutaneous nerve



The image above shows the attachments of the crura of the penis to the ischiopubic rami on each side and the urethra joining them to complete the structure of the penis (right).

