

Urogenital diaphragm.

• triangular muscle sheet formed by sphincter urethrae & deep transverse perineal muscles (2)

deep transverse perineal muscles (2)

Boundary.

On deeper aspect it is covered by superior fascia of UG diaphragm.

Superficial aspect

covered by → perineal membrane / inferior fascia of UGD.

It is a content of UG triangle.

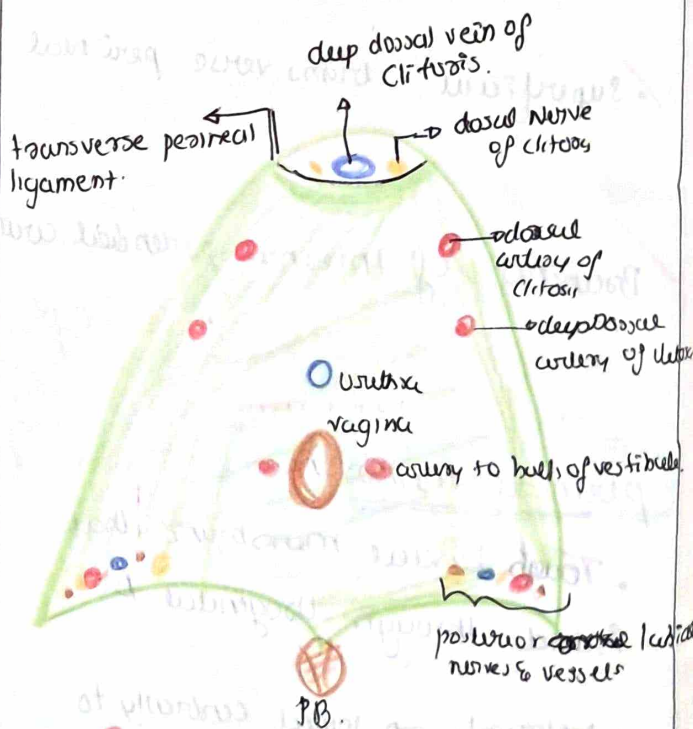
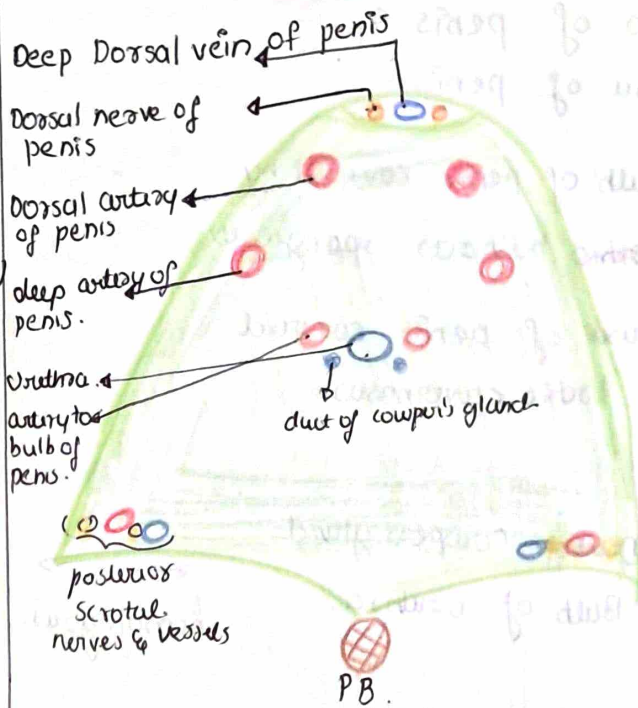
and lies behind pubic symphysis btwn. ischio pubis.

passed by urethra in Urethra & vagina F.

& M have bulbourethral glands with in it.

Structures piercing the perineal membrane.

Note the position of Artery to bulbs in males & females {urethra} (vagina)



PERINEAL BODY → wedge shaped fibromuscular mass of tissue.

Location: in the midline at junction of urogenital & anal triangle between vagina & anal orifice.

In males: situated 1.25cm in front of ^{margin} anal orifice, close to bulbospongiosus.

Females: in posterior wall of vestibule of vagina.

⇒ 10 muscles converge & interlace @ perineal body.

- ① Superficial transverse perineal muscle - 2.
- ② deep transverse perineal muscle - 2.
- ③ Bulbospongiosus (2)
- ④ Levator ani (2)
- ⑤ External anal sphincter.
- ⑥ One longitudinal muscle coat of Anal Canal.

CLINICAL CORRELATION

• damage of perineal body: perineal body is very very imp't in females to maintain integrity of pelvic diaphragm & support pelvic viscera.

in fact, the region btwn vagina & anal orifice containing perineal body is known as gynaecological perineum.

⇒ PB can be damaged during difficult child birth / cut abnormally during EPISOTOMY.

→ Result in uterine, bladder, rectal prolapse.

EPISOTOMY: incision in perineum to enlarge vaginal orifice during childbirth.

2 types → median episotomy ↓ → damage PB.
mediolateral episotomy ↘ → won't damage PB.

Anal triangle.

bounded inferiorly by horizontal line
joining anterior ends of two ischial tuberosity.

laterally → ischial tuberosity

inferolaterally → Sacrotuberous ligament.

posteriorly → coccyx.

It has anal Canal and Ischioanal fossa
on either side.

Anal Canal.

→ last 4cm of GI tract.

@ centre of anal Δ.

btwn ischioanal fossae which
helps in expansion during

faeces passage

Ischioanal fossa (ischioanal fossa)

• wedge shaped → fat filled space.

on either side of anal canal.

~~below the pelvic diaphragm.~~

• help in dilation of anal canal
during defecation.

• 5cm L
5cm W
5cm Depth

Boundaries.

• Laterally → fascia of
Obturator Internus
&
ischial tuberosity.

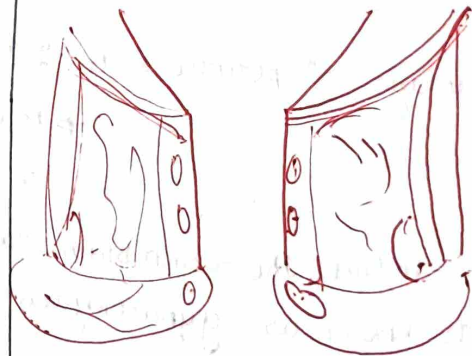
• medially → fascia of Levator
ani & External anal
sphincter.

• posterior → Sacrotuberous Lig
gluteus maximus

• Anterior → posterior border of
perineal membrane.

• Floor → perineal skin.

• Roof → inferior fascia of
pelvic diaphragm &
meeting point of fascia
covering obturator internus.



CONTENTS

- (1) Ischioanal pad of fat
- (2) Inferior rectal vessels & nerves } branch of Internal pudendal artery }
- (3) perineal branch of S₄ } Innervates External anal Sphincter }
- (4) posterior scrotal nerves and vessels } to erect urogenital triangle }

Spaces in Ischioanal fossa.

PERIANAL SPACE.

- on each side of anal orifice.
- Above: perianal fascia that extends medially from white line of Hilton to. & laterally to pudendal canal.
- below: perianal skin.

perianal space is divided into many compartments by fibrous septa and fat? tightly arranged in small loculi

- Infection in perianal space causing perianal abscess is VERY PAINFUL.

PUDENDAL CANAL

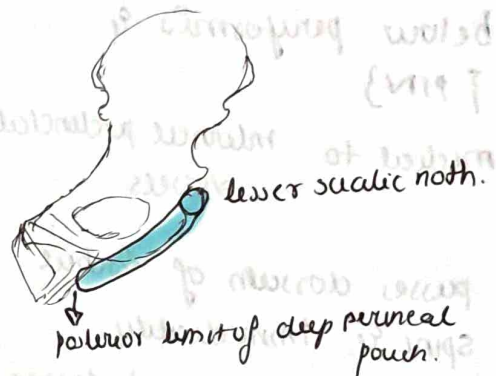
ALCOCK'S CANAL.

• It is a fascial canal located in lateral wall of ischioanal fossa.

located 2.5 cm above ischial tuberosity.

Extent

from lesser sciatic foramen to posterior limit of deep perineal pouch.



Formation

- either by splitting of obturator fascia
- or b/w obturator fascia & fascia lumbata.

CONTENTS

- pudendal nerve which divides into dorsal nerve of penis and perineal nerve within the canal.
- Internal pudendal vessel.

PUDENDAL NERVE

* Chief nerve of perineum.
as it's file as it provides
principle innervation to
perineum.

Origin:

ventral rami of S₂ S₃ S₄
nerves in pelvis.

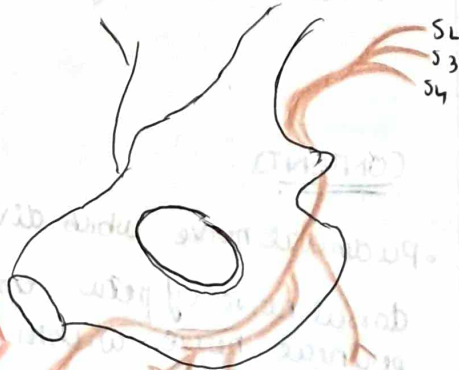
Course:

It leaves pelvis through
greater sciatic foramen.

below perforans &
{ PIN }

medial to internal pudendal
vessels.

passes dorsum of Ischial
spine & immediately
disappears through lesser
sciatic foramen to enter
almond canal.



- In the posterior part,
It gives off.

(1) Inferior rectal nerve

Innervates: External anal sphincter &
perianal skin.

2 Terminal Branches

(2) Larger perineal nerve. → immediately
2 branches.

(a) deep / muscular branch. :

→ supply muscles of UG Δ.

(1) sphincter urethrae.

(2) superficial & deep transverse
perineal.

(3) bulbospongiosus

(4) ischioanal muscle.

(b) Superficial. / ~~deep~~ root of

~~perineal~~

~~perineal~~ posterior

scrotal / Labial nerves.



post
2/3rd of rootum.

(3) smaller dorsal. nerve of penis / clitoris.

• goes through deep perineal
pouch

• anal passes through gap.

• anal supplies skin of body
and glands of penis.

Applied

(1) Ischioanal abscess:

- This fossa is prone to infections.
- may occur from boils on perianal skin, from lesions in anal canal etc. .
- fat is loosely arranged \therefore swelling without much pain.
- infection can pass from one fossa to another through horseshoe shaped recess behind anal canal.
horseshoe shaped.
 \rightarrow Abscess ~~in~~ \rightarrow
- \rightarrow Can be drained easily as fossa doesn't have imp. str.
It's just fat.
- \rightarrow but if untreated \rightarrow will burst.
forms anorectal fistula.

Rectal prolapse.

- loss of fat in ischioanal fossa.
- in weakling disease in children like diarrhoea \rightarrow cause rectal prolapse.

how

✓ Pudendal nerve block

regional anaesthesia technique to provide perineal anaesthesia during like obstetric procedures ~~and~~

\rightarrow pudendal nerve is injected with local anaesthetic where it crosses ischial spine.

\rightarrow can lead to relaxation of pelvic floor muscles & loss of sensation to vulva & vagina.