



## \* Urethra :-

• मुत्र पुमकोनाम भूत्रयनेन वक्ति भुष्य आयुषेण क्शोतस  
आक्षरति ॥

(DeLham on sy. phi)  
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Ayurvedic Name :- मुत्र पुमको

Modern Name :- Urethra.

→ Urethra is a tubular passage that connects the urinary bladder to the external urethral orifice.

→ carries urine in female and  
urine + seminal fluid in men.

• Length :- In male :- 20 cm

(about 8 in) In female :- 4 cm

→ Diameter 6 to 7 mm

### • Male Urethra Features

→ Urethra divided into 4 parts -

(1 cm) is Pre-prostatic part :- extends from the neck of urinary bladder to the superior part of the prostate.

→ Length :- 1 cm

→ Non-striated muscle fibers surround the urethra to form internal urethral sphincter.

→ It contracts at the ejaculation to prevent flow of the semen into the bladder.

(2.5 cm) ii) Prostatic Part :- It is Middle part of the urethra and widest part.

- Length - 2.5 cm
- The posterior wall of the prostatic urethra is projected forwards to form urethral crest. → with a groove on each side called prostatic sinus
  - ↳ several small ducts of prostate glands open into sinuses.

- urethral crest → extend upwards towards the uvula of bladder
- seminal colliculus → highest part of urethral crest.
- Prostatic utricle open. (blind pouch)

(1.5 cm) iii) Membranous Part

- It runs antero - inferiorly through the urogenital diaphragm.
- Length - 1.5 cm.
- Inside the diaphragm the urethra surrounded by
  - 1) External urethral sphincter
  - 2) bulbo - urethral glands
  - 3) deep cystery of penis.

- (15 cm) iv) Spongy Part :-
- It passes through the bulb and glands of corpus spongiosum.
  - Length - 15 cm.
  - diameter - 6 - 7 mm.
  - The ducts of bulbourethral glands open in the proximal part of the spongy urethra.
  - External urethral orifice - It is narrowest and least (कठोरता का अभाव) dilatable part of the whole urethra. (इलायत का अभाव)

• Female urethral features

- extends - ~~antero~~ Antero - Inferiorly from the internal urethral orifice in bladder to, open at external urethral orifice.
- external urethral orifice is present b/w
  - labia minora
  - Infero - posterior to the, clitoris
- urethral crest - longitudinal fold of mucous membrane on the posterior wall of urethra.
- proximal part of urethra present ring of sphincter around it.

• Internal features

Male	Female
<p>i) Mucous membrane.</p> <p>- It is lined by stratified columnar and stratified squamous &amp; fossy etc -</p> <p>✓ <u>Neovascularis</u></p>	<p>i) Mucous membrane</p> <p>- stratified columnar and stratified squamous.</p> <p>etc -</p>
<p>ii) Muscular layer</p> <p>- Longitudinal &amp; <u>circular</u> smooth muscle fibers are present in prostatic &amp; membranous parts.</p>	<p>ii) Muscular layer</p> <p>- Longitudinal &amp; <u>oblique</u> smooth muscle fibers.</p>

• SUPPLY & drainage

Male	Female.
<p>• Arteris :- Internal pudendal &amp; dorsal artery of penis</p>	<p>• Arteris :- Superior vesical &amp; vaginal artery.</p>
<p>• Veins :- Internal pudendal &amp; Internal iliac vein</p>	<p>• Veins :- Internal pudendal vein.</p>

• Lymphatics :- Internal iliac & Deep Inguinal lymph nodes

• Lymphatics :- Internal & external iliac Nodes.

• Nerves :- Prostatic plexus.

• Nerves :-

- Symp. :- greater cavernous nerves

- Symp. :- Nerves from plexus around the Urogenital arteries

- Para Symp. :- S<sub>2</sub>, S<sub>3</sub>, S<sub>4</sub> Segment

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• Clinical Anatomy

i) urethral stricture :- Narrowing of the urethra.

- Inflammation of urethra, Injury, trauma, previous surgery etc - common cause of urethral stricture.

ii) Hypospadias :- It is congenital condition - opening of the urethra is on the underside of the penis instead of at the tip.

iii) Epispadias :- It is congenital condition. - opening of the urethra is on the dorsum of the penis rather at the tip.

