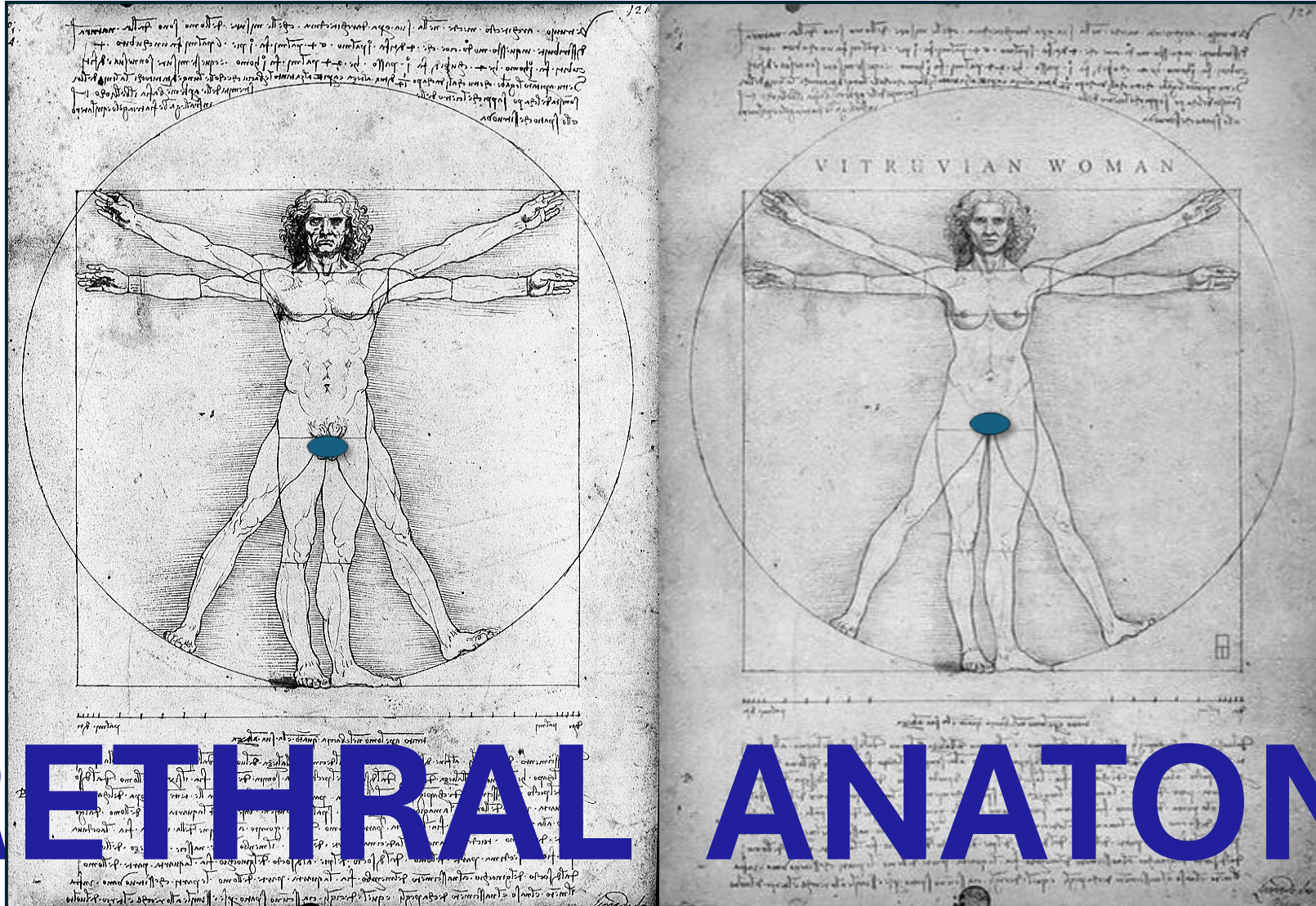


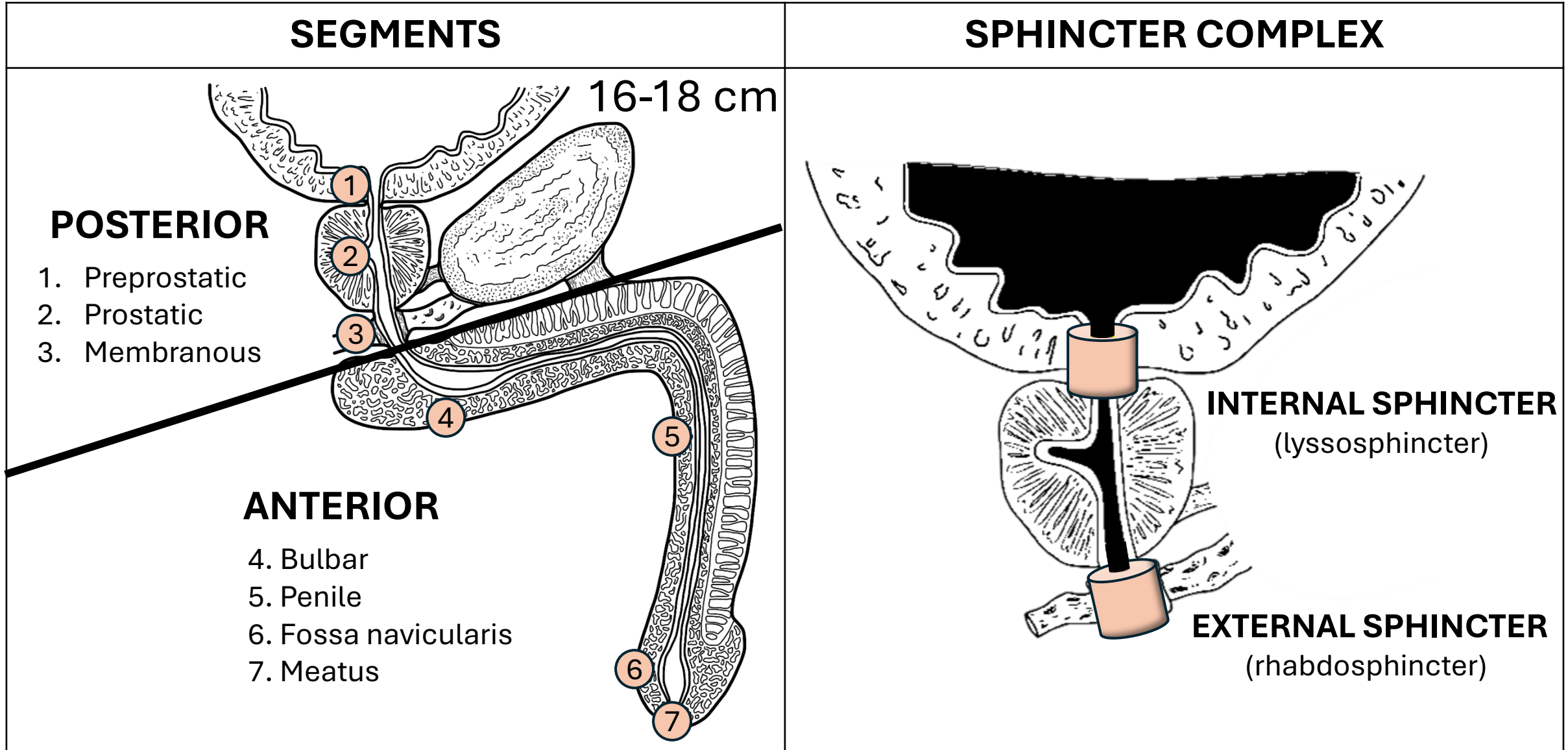
# Club de la **URETRA**



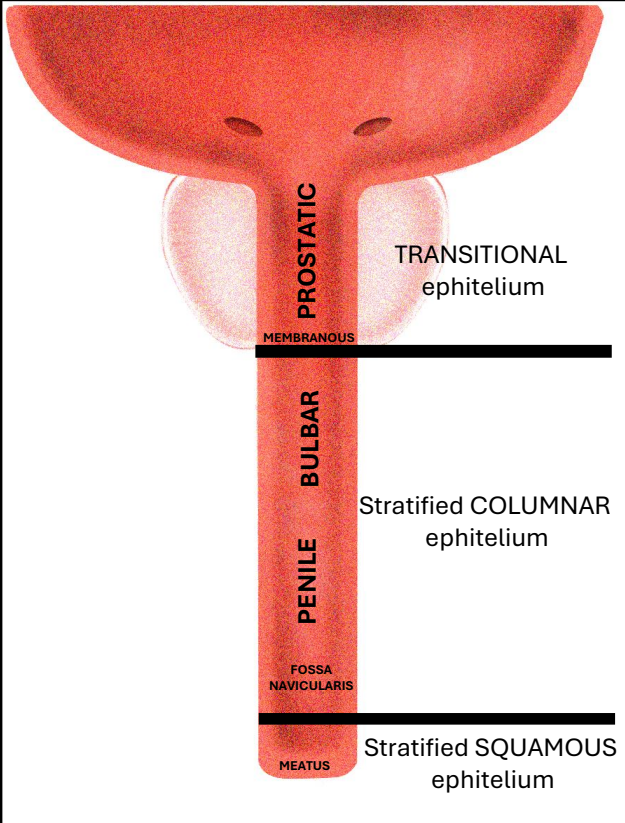
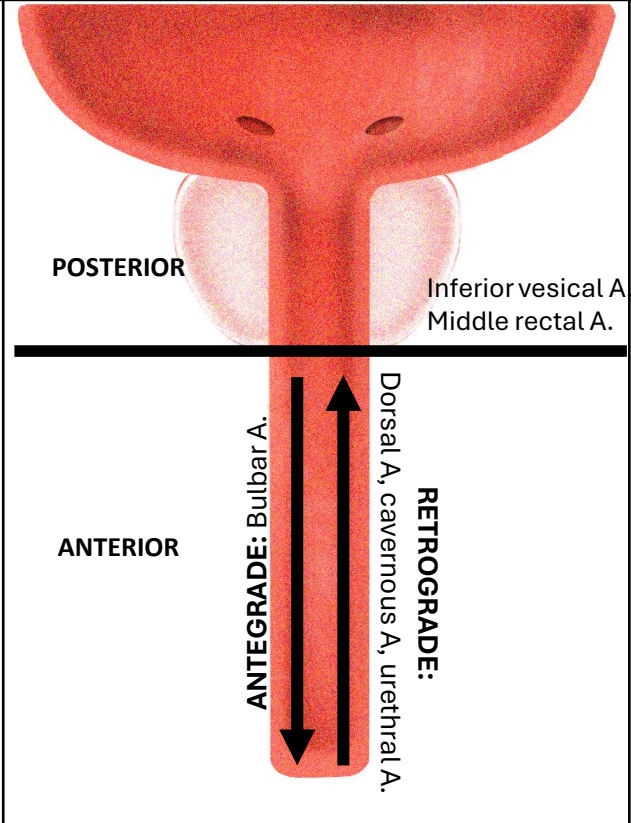
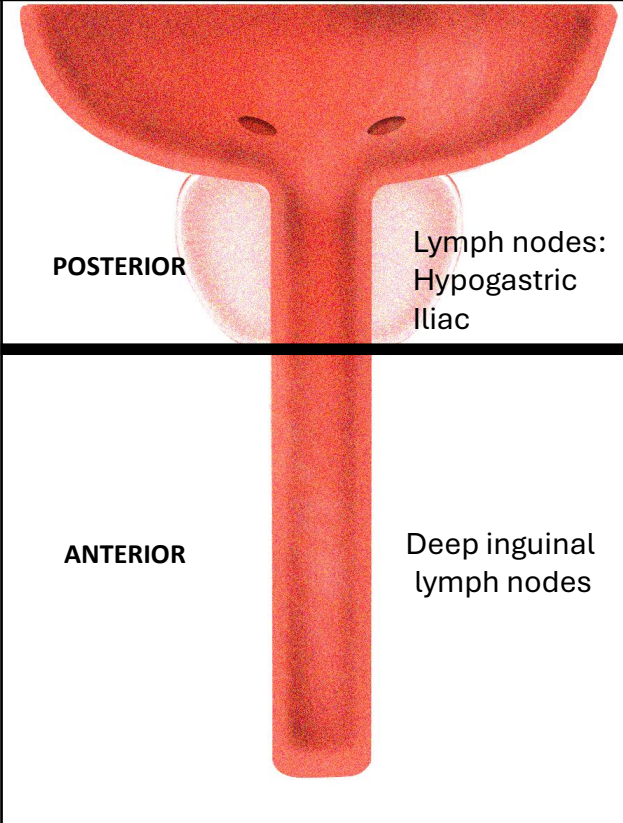
**URETHRAL**

**ANATOMY**

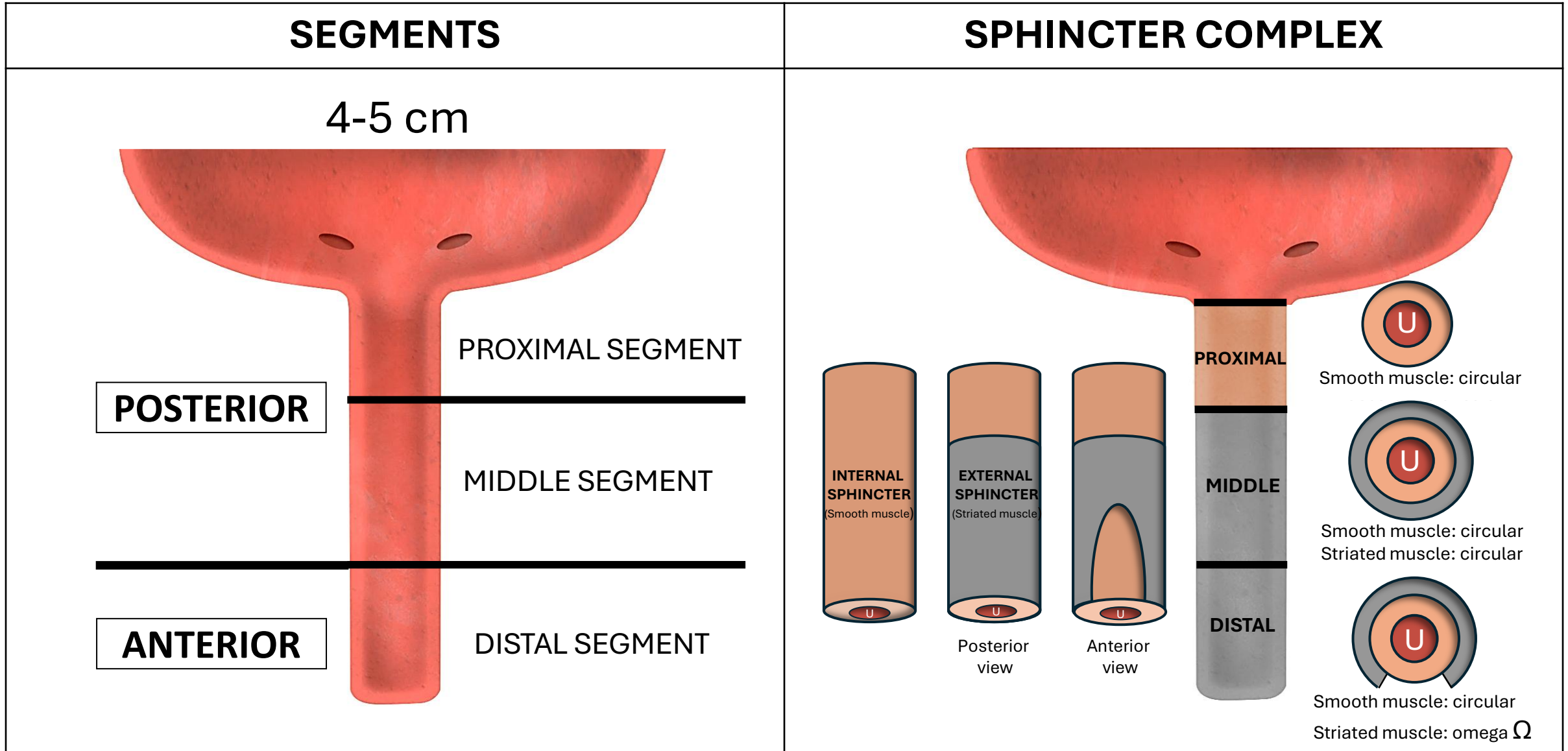
# MALE URETHRA



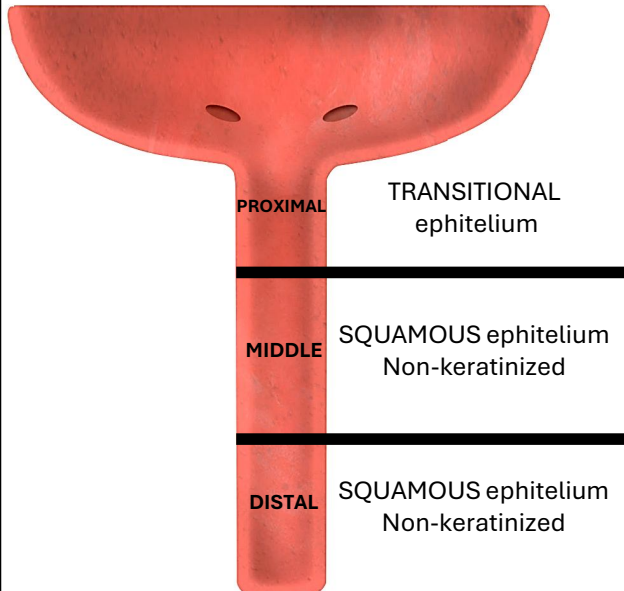
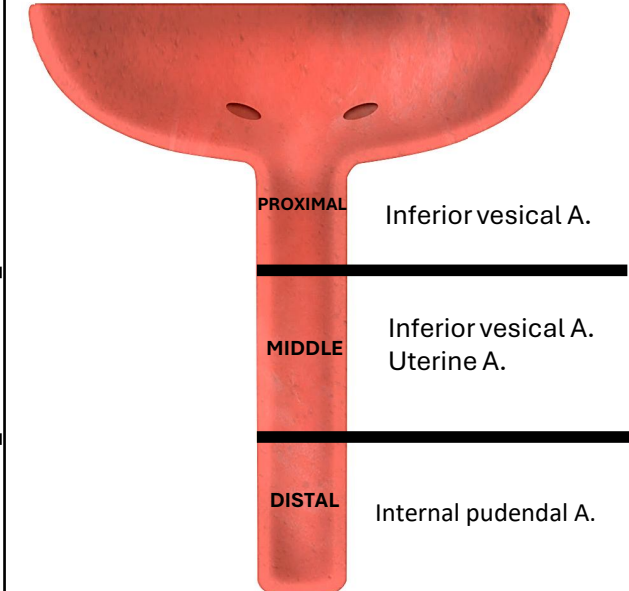
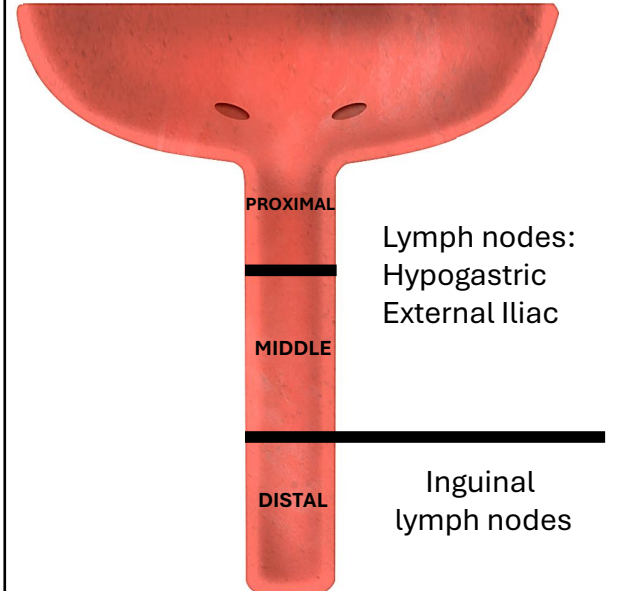
# MALE URETHRA

HISTOLOGY	PERFUSION	INNERVATION	LYMPHATIC DRAINAGE
 <p><b>PROSTATIC</b> TRANSITIONAL epithelium</p> <p><b>MEMBRANOUS</b></p> <p><b>BULBAR</b> Stratified COLUMNAR epithelium</p> <p><b>PENILE</b> Stratified SQUAMOUS epithelium</p> <p><b>FOSSA NAVICULARIS</b></p> <p><b>MEATUS</b></p>	 <p><b>POSTERIOR</b> Inferior vesical A. Middle rectal A.</p> <p><b>ANTERIOR</b> Dorsal A, cavernous A, urethral A.</p> <p><b>RETROGRADE:</b> Bulbar A.</p>	<p><b>AUTONOMIC NERVOUS SYSTEM</b> Inferior hypogastric plexus</p> <p>↓</p> <p><b>Prostatic plexus</b> Sympatic: lumbar splanchnic nerves Parasympatic: pelvic splanchnic nerves Visceral afferent fibers</p> <p><b>SOMATIC NERVOUS SYSTEM</b> S2, S3, S4</p> <p>↓</p> <p>Pudendal N.</p> <p>↓</p> <p>Dorsal N.</p>	 <p><b>POSTERIOR</b> Lymph nodes: Hypogastric Iliac</p> <p><b>ANTERIOR</b> Deep inguinal lymph nodes</p>

# FEMALE URETHRA

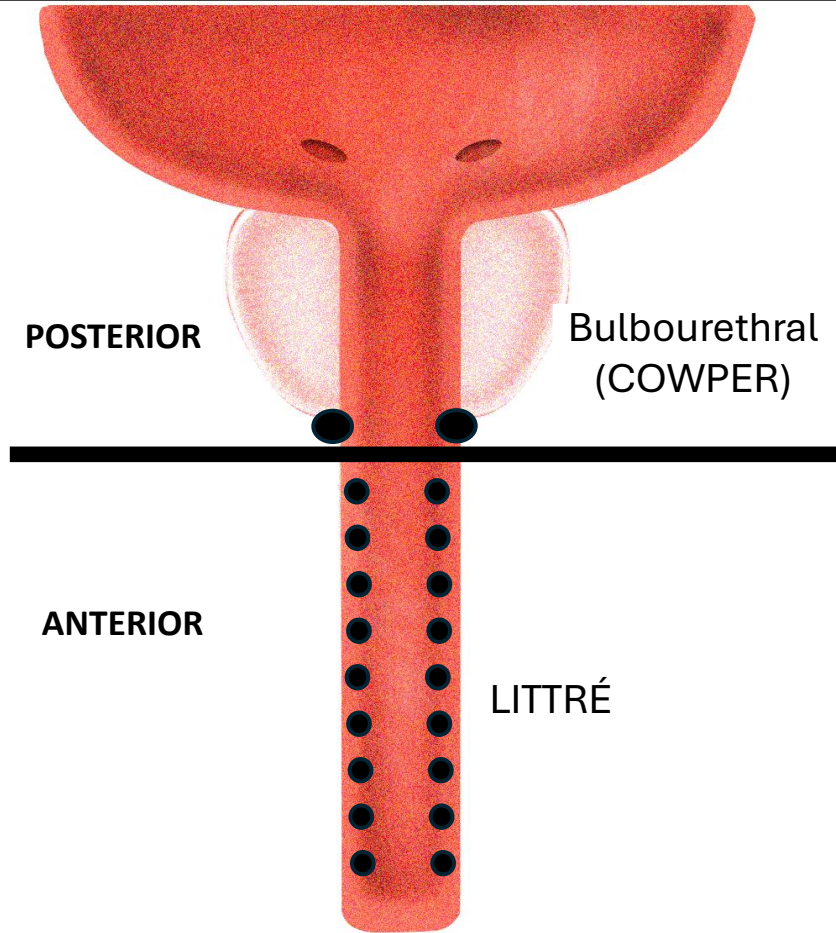


# FEMALE URETHRA

HISTOLOGY	PERFUSION	INNERVATION	LYMPHATIC DRAINAGE
 <p><b>PROXIMAL</b> TRANSITIONAL epithelium</p> <p><b>MIDDLE</b> SQUAMOUS epithelium Non-keratinized</p> <p><b>DISTAL</b> SQUAMOUS epithelium Non-keratinized</p>	<p>Branches of internal iliac artery</p>  <p><b>PROXIMAL</b> Inferior vesical A.</p> <p><b>MIDDLE</b> Inferior vesical A. Uterine A.</p> <p><b>DISTAL</b> Internal pudendal A.</p>	<p><b>AUTONOMIC NERVOUS SYSTEM</b></p> <p>Inferior hypogastric plexus</p> <p>↓</p> <p><b>Vesical plexus</b></p> <p>Parasympatic: pelvic splanchnic nerves Visceral afferent fibers</p> <p><b>SOMATIC NERVOUS SYSTEM</b></p> <p>S2, S3, S4</p> <p>↓</p> <p><b>Pudendal N.</b></p>	 <p><b>PROXIMAL</b> Lymph nodes: Hypogastric External Iliac</p> <p><b>MIDDLE</b> Lymph nodes: Hypogastric External Iliac</p> <p><b>DISTAL</b> Inguinal lymph nodes</p>

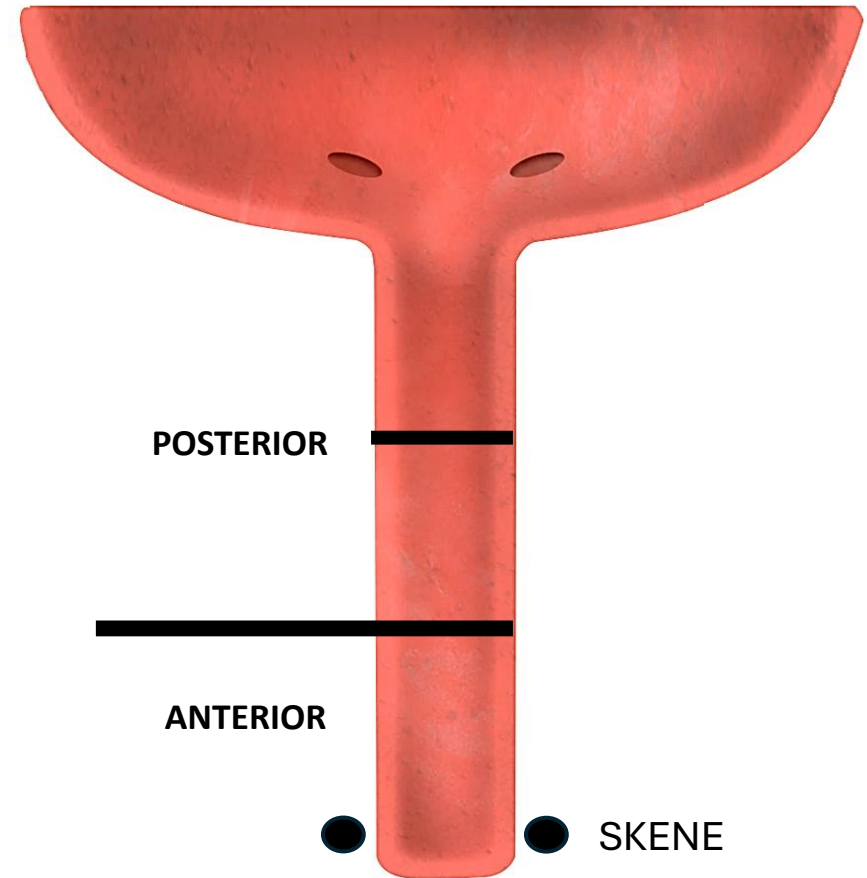
# URETHRAL GLANDS

## MALE



**COWPER:** alkaline secretion. Pre-ejaculatory urethral lubrication and semen alkalization. **LITTRÉ:** mucoid secretion. Urethral lubrication

## FEMALE



**SKENE:** paraurethral glands. Mucoid secretion. Introitus lubrication

## REFERENCES

- Jung J, Ahn HK, Huh Y (2012). **Clinical and functional anatomy of the urethral sphincter**. Int Neurourol J;16(3):102-6. doi: 10.5213/inj.2012.16.3.102.
- Karam I, Moudouni S, Droupy S, Abd-Alsamad I, Uhl JF, Delmas V (2005). **The structure and innervation of the male urethra: histological and immunohistochemical studies with three-dimensional reconstruction**;206(4):395-403. doi: 10.1111/j.1469-7580.2005.00402.x.
- Hinman F (2012) **Female genital tract and urethra**. In: MacLennan GT (ed) Hinman's atlas of urosurgical anatomy, 2nd ed. Elsevier, Philadelphia, pp 287–297.
- Gomez RG, Segura FJ, Saavedra A, Campos RA (2020). **Female urethral reconstruction: dorsal buccal mucosa graft only**. World J Urol;38(12):3047-3054. doi: 10.1007/s00345-019-02958-6.