

UROLOGY

YU - Medicine

Passion Academic Team

The Urogenital System

Sheet# 1 - Anatomy (Dr. Gamal)

Lec. Title : Overview (Slide 84 - 115)

Written By : Yousef Alfaris

If you come by any mistake , please kindly report it to shaghafbatch@gmail.com

Urethra:

is a canal extending from the neck of the bladder to exterior at the external urethral orifice.

urethral distance (from the neck of the bladder):

male: 20 cm

Female: 3-4 cm

وبين فرق الطول بين الذكر والأنثى يتكون الأنثى أكثر عرضة للإصابات
مثل التهاب الكلى البولي ← ascending bacteria from stool dirty

Female urethra:

internal urethral sphincter ⇒ smooth muscle
under involuntary control

external urethral sphincter ⇒ skeletal muscle
under voluntary control

external urethral orifice ⇒ between vaginal orifice
and clitoris. بين فتحة المثانة والفتحة العذرية (مابين فتحة)

male urethra:

internal urethral sphincter

external urethral sphincter

and: male urethra is divided into 3 regions:

1. prostatic urethra ⇒ inside prostate gland.

2. membranous urethra ⇒ passes through perineum.

3. penile urethra.

Arrangement of pelvic viscera:

male \Rightarrow 2 major organs

- anterior: urinary bladder

- posterior: rectum

Female \Rightarrow 3 major organs

anterior: uterus and vagina

posterior: rectum

Micturition:

عملية التبول :

- control by the center of brain: pons

- parasympathetic \Rightarrow stimulate micturition

- sympathetic \Rightarrow inhibit micturition

Function of urinary system:

1- excretory function through forming urine

2- regulatory function water balance, and blood pressure

3- endocrine function erythropoietin

عملية إفراز خلايا الدم الحمراء

4- activation of vitamin D

عملية تنشيط فيتامين D
عن طريق إفراز مادة 1,25(OH)₂D₃

1 alpha

عملية إفراز فيتامين D