

## Female genital system

	Blood supply	Venous drainage	Nerve supply	Lymphatic drainage
Uterus	<p><u>By uterine artery:</u></p> <ul style="list-style-type: none"> <li>- It ends by anastomosing with ovarian A.</li> <li>- It gives branches to the pelvic part of ureter, vagina (azygos arteries), cervix and of uterus, and medial part of the uterine tube.</li> <li>- 2 cm from the supravaginal cervix the uterine arteries cross the ureter</li> </ul>	<p>Begins by the <u>uterine venous plexuses:</u></p> <ul style="list-style-type: none"> <li>- The lower part of the plexus is drained by uterine veins which open into the internal iliac vein.</li> <li>- The plexus communicates with the ovarian and vaginal venous plexuses.</li> </ul>	<p>By the <u>uterovaginal nerve plexus:</u></p> <ul style="list-style-type: none"> <li>- Derived from the inferior hypogastric plexus.</li> </ul>	<ul style="list-style-type: none"> <li>- Fundus: Lateral aortic LN.</li> <li>- Uterotubal junction along the round ligament of the uterus: Superficial inguinal LN.</li> <li>- Body, lymphatics pass through the broad ligament: External iliac LN.</li> <li>- Cervix: External, internal and sacral LN.</li> </ul>
Uterine Tubes	<ul style="list-style-type: none"> <li>- Medial 2/3 by <u>uterine vessels.</u></li> <li>- Lateral 1/3 by <u>ovarian vessels.</u></li> </ul>		<ul style="list-style-type: none"> <li>- Medial 2/3 by <u>uterine nerve plexus.</u></li> <li>- Lateral 1/3 by <u>ovarian nerve plexus.</u></li> <li>* Sympathetic and parasympathetic nerves from the inferior hypogastric plexuses</li> </ul>	
Ovaries	<p><u>By the ovarian artery:</u></p> <ul style="list-style-type: none"> <li>- arises from the abdominal part of the aorta at the level L2.</li> <li>- it supplies the ovary and lateral part of uterine tube.</li> <li>- anastomoses with the uterine artery within the broad ligament.</li> </ul>	<p>The veins emerge at the hilum of the ovary as a <u>pampiniform plexus</u> which gives rise to the <u>ovarian vein:</u></p> <ul style="list-style-type: none"> <li>- The right ovarian vein → IVC.</li> <li>- The left ovarian vein → left renal vein.</li> </ul>	<p>By autonomic nerves along the ovarian artery. They are derived from <u>coeliac and aortic nerve plexuses.</u></p> <ul style="list-style-type: none"> <li>- They are sensory and vasomotor.</li> </ul>	<p>Lateral aortic lymph nodes</p>
Vagina	<p><u>By uterine and vaginal arteries:</u></p> <ul style="list-style-type: none"> <li>- The vaginal A. supplies the base of the bladder and gives vaginal branches which anastomose with vaginal branches from uterine A.</li> <li>- These anastomoses form 2 median longitudinal vessels called azygos arteries which descend anterior and posterior to the vagina supplying it.</li> </ul>	<p><u>By vaginal venous plexus</u> on the side of vagina:</p> <ul style="list-style-type: none"> <li>- It is drained by the vaginal vein into internal iliac vein.</li> </ul>	<ul style="list-style-type: none"> <li>- Autonomic fibres from the uterovaginal plexus derived from the inferior hypogastric plexus.</li> <li>- The lower inch of vagina is supplied by the pudendal nerve.</li> </ul>	<ul style="list-style-type: none"> <li>- Above the hymen → external, internal iliac LN.</li> <li>- Below the hymen → superficial inguinal LN.</li> </ul>

## Perineum

### Muscles of Superficial Perineal Pouch

	Site	Action	Nerve supply
<b>Ischiocavernosus</b>	Each covers the crus penis	It compresses crus penis to maintain erection of penis.	Perineal branch of pudendal nerve
<b>Bulbospongiosus</b>	- Covers bulb of penis in males - Cover bulbs of vestibule in females.	- In Male, assist in erection of penis and eject last drops of urine during micturition - In Female: act as sphincter vagina and help in erection of clitoris.	Perineal branch of pudendal nerve
<b>Superficial transverse perineal</b>	on posterior edge of perineal membrane in front of anus	fixation the perineal body	Perineal branch of pudendal nerve

### Muscles of the Deep perineal Pouch

	Site	Action	Nerve supply
<b>Sphincter urethrae</b>	it surrounds membranous urethra	It represents the voluntary control of urethra	Perineal branch of pudendal nerve
<b>Deep transverse perineal</b>	on deep surface of posterior border of the perineal membrane	Fixation of perineal body	Perineal branch of pudendal nerve

## Breast

	Blood supply	Venous drainage	Nerve supply	Lymphatic drainage
Breast	<p>1) The medial part:</p> <ul style="list-style-type: none"> <li>- Perforating branches of the internal mammary artery</li> <li>- Anterior intercostal arteries from 2-6</li> </ul> <p>2) The upper lateral part:</p> <ul style="list-style-type: none"> <li>- Pectoral branch of the thoraco acromial artery</li> </ul> <p>3) The lower lateral part:</p> <ul style="list-style-type: none"> <li>- Lateral thoracic artery</li> </ul>	<p>1) The subcutaneous tissues → venous circle at the base.</p> <p>2) The gland and stroma → small veins that accompany the arteries → internal mammary and axillary veins.</p>		<ul style="list-style-type: none"> <li>- Central and lateral parts: Pectoral (anterior) group of axillary lymph nodes.</li> <li>- Upper part: Apical group of axillary lymph nodes.</li> <li>- Medial part: Internal mammary (parasternal) lymph nodes. Cross to opposite breast</li> <li>- Inferomedial part: Lymphatics of the rectus sheath, linea alba and subdiaphragmatic lymphatics</li> </ul>

**Good luck**