Structure	Arterial supply	Venous drainage	Nerve supply	Lymph drainage
Kidney	 The renal arteries arise from the side of abdominal aorta, opposite the upperborder of L2 vertebra. The right renal artery is longer than the left and passes posterior to IVC The renal artery gives inferior suprarenal artery, It divides into 5 segmental arteries which are end arteries. Collectively, the cortex receives over10 times more blood than the medulla 	 * Both right and left renal veins open directly into IVC • Left renal vein is longer than the right and passes anterior to the aorta below origin of the superior mesenteric artery. • The-left vein receives the left suprarenal and left gonadal vein. 	By renal plexus derived from the coeliac plexus and supplemented by the lowest splanchnic nerve. It is mainly vasomotor in function.	To lateral aortic lymph nodes.
Ureters	Abdominal part receives branches from renal artery, abdominal aorta, gonadal and common iliac arteries Pelvic part receives branches from vesical, middle rectal and uterine arteries		The ureter receives sympathetic fibers from T11 – L2 segments of spinal cord. Sensory fibers from the ureter enter the spinal cord through the same segments. (Ureteric colic begins in the loin and is referred to groin, anterior aspect of the thigh through genitofemoral nerve (L1,L2) and scrotum or labium majora)	To lateral aortic, common iliac lymph nodes.
Bladder	 -In the male: superior and inferior vesical arteries -In the female: superior vesical and vaginal arteries. Sup=gives branches to the bladder, ureter and vas deference (In male) . Inf/vaginal=supplies base of the urinary bladder, seminal vesicle, prostate and gives artery of the vas 	Begins by the vesical venous plexus, embedded in the visceral fascia on theinferolateral surfaces of the bladder Inferiorly: In male: it communicates with the prostatic venous plexus. And receives the Deep dorsal vein of the penis In female: it communicates with the vaginal venous plexus and receives the deep dorsal vein of the clitoris. Posteriorly: the plexus is drained by numerous vesical veins which run in the posterior ligaments of the bladder to end in the internal lifac veins	By vesical nerve plexus, derived from the inferior hypogastric plexus, it contains following fibers: -Parasympathetic efferents (pelvic splanchnic nerves) (S2, S3, S4): motor to the detrusor muscle, inhibitory to sphincter vesicae (they produce micturition). - Sympathetic efferents: (L1,L2) are inhibitory to detrusor and stimulant to sphincter vesicae . - Sensory afferents: Reach central nervous system through pelvic splanchnic nerves or Sympathetic fibers record bladder distension and pain sensation.	To internal and external iliac lymph nodes. From the bladder neck, lymphatics drain directly to the sacral lymph nodes.
Urethra	From those of prostate and penis.	those of prostate and penis.	From those of prostate and penis.	-From the prostatic and membranous parts > internal and external iliac. lymph nodes -From the spongy part > deep and superficial inguinal lymph nodes.
Internal urethral sphincter			Autonomic fibers from the inferior hypogastric plexus	
External urethral sphincter			Sumatic : from the perineal branch of pudendal nerve of the sacral plexus	
Cremasteric muscle			genitofemoral Genital of genitofemoral	

Scrotum	- Cremastric branch of the inferior epigastric artery -Superficial and deep external pudendal branches of femoral artery -Scrotal branches of internal pudendal artery.		-Anterior 1/3: Ilioinguinal genitofemoral N. nerve (L1 dermatome) + genital branch of -Posterior 2/3: Scrotal branches of pudendal nerve and posterior cutaneous nerve of the thigh (S3 dermatome).	Superficial inguinal lymph nodes.
Testis and Epididymis	- By testicular artery, a branch of abdominal aorta at L2 vertebra.	Pampiniform plexus -In the inguinal canal, it gives rise to a single testicular vein. -The right vein ends in the inferior vena cava and the left one ends in left renal vein.	-Superior spermatic nerves from the renal and intermesenteric plexus follow the testicular artery to the testis. "kick in the stomach" feeling accompanying testicular injury. -Middle spermatic nerves from the superior hypogastric plexus, to the mid- ureter and travel alongside the vas deferens to join the spermatic cord. "pain radiation to the scrotum of an obstructing ureteral stone". -Inferior spermatic nerves from inferior hypogastric plexus, join the middle spermatic nerves at the prostate-vesical junction. Some afferent and efferent fibers decussate to the contralateral pelvic plexus	Lateral aortic lymph nodes.
Vas Deferens	Artery of the vas is derived from inferior vesical artery.	Vesical venous plexus	Prostatic nerve plexus which comes from the inferior hypogastric plexus. Sympathetic for ejaculation.	
Seminal vesicles	Inferior vesical and middle rectal arteries.	Vesical venous plexus	Prostatic nerve plexus (mainly sympathetic).	
Bulbourethral glands	Artery of the bulb of the penis.		Prostatic nerve plexus	
Prostate	Inferior vesical and middle rectal arteries.	Prostatic venous plexus > internal iliac veins which in turn communicates with the internal vertebral venous plexuses by the Batson venous plexus.	Prostatic nerve plexus derived from the inferior hypogastric plexus.	Internal, external iliac lymph nodes.
The penis	All are branches of internal pudendal artery and all are paired (right and left). • Dorsal artery of the penis supplies the skin, fascia, and glans . • Deep artery of the penis supplies the corpus cavernous with convoluted helicine arteries • Artery of the bulb supplies the corpus spongiosum and glans penis	 By 2 dorsal veins which are superficial and deep; 1. Superficial dorsal vein (superficial to the fascia penis); divides into right and left .Each ends in the corresponding superficial external pudendal vein. 2. Deep dorsal vein of the penis (deep to fascia penis), passes below symphysis pubis to terminate in prostatic venous plexus. 	 Dorsal nerve of the penis (sensory), is a branch of pudendal nerve, runs lateral to the dorsal artery of the penis Cavernous nerves (autonomic) arise from the inferior hypogastric plexus ,Parasympathetic fibers (S2,3,4) produce vasodilatation & erection of penis 	-From the penis into superficial inguinal lymph nodes (with the scrotum). -From glans penis, lymphatics drain directly to gland of Cloquet in the femoralcanal.
Levator ani muscle			 On its petvic surface :fourth sacral N. (sacral plexus) On its perineal surface :perineal branch (of pudendal N.) 	
Coccygeus Muscle			A branch of the 4 th and 5 th sacral nerves	