Cells and tissues with finder’s name

Cells and tissues may have the name of the finder.
Representative examples, a total of 92, are summarized below.

A: Achilles tendon, Aschoff-Tawara’s node (AV node), Auerbach’s plexus

B: Bartholin gland, Bauhin’s valve, Bellini duct, Betz cell, Botallo’s duct, Bowman’s capsule, Bowman‘s membrane, Brodmann area, Brunner's gland

C: Cajal cell, Clara cell, Clark’s nucleus, Corti organ, Cowper’s gland

D: Descemet's membrane, Disse’s space, Douglas’ fossa

E: Ebner's gland, Edinger-Westphal nucleus

F: Fallopian tube

G: Glisson’s sheath, Golgi apparatus, Golgi cell, Graafian follicle

H: Hassall’s corpuscle, Haversian canal, Henle’s loop, Hering’s canal, His bundle, Howship lacuna, Hürthle cell

I: Ito cell

Cells and tissues may have the name of the finder.
Representative examples, a total of 92, are summarized below.

K: Keith-Flack node (SA node), Kerckring's fold, Kiesselbach’s plexus, Kulchitsky cell, Kupffer cell

L: Langerhans cell, Langerhans’ islet, Leydig cell, Lieberkühn’s crypt, Littré gland, Luschka‘s foramen

M: Magendie’s foramen, Malpighi’s layer, Meibomian gland, Meissner’s plexus, Meissner's corpuscle, Merkel cell, Moll’s gland, Monro's foramen, Morgagni’s foramen, Müllerian duct, Müller’s muscle

N: Nissle granule

O: Oddi’s sphincter, Onufrowicz’ nucleus

P: Paneth cell, Penfield’s homunculus, Peyer's patch, Purkinje cell, Purkinje fiber

R: Ranvier’s node, Rathke's pouch, Renshaw cell, Ruffini’s ending

S: Santorini’s duct, Schmidt-Lanterman incisure, Schwann cell, Segi’s cap, Sertoli cell, Skene’s gland, Sylvian fissure

T: Toker cell, Treiz’ ligament

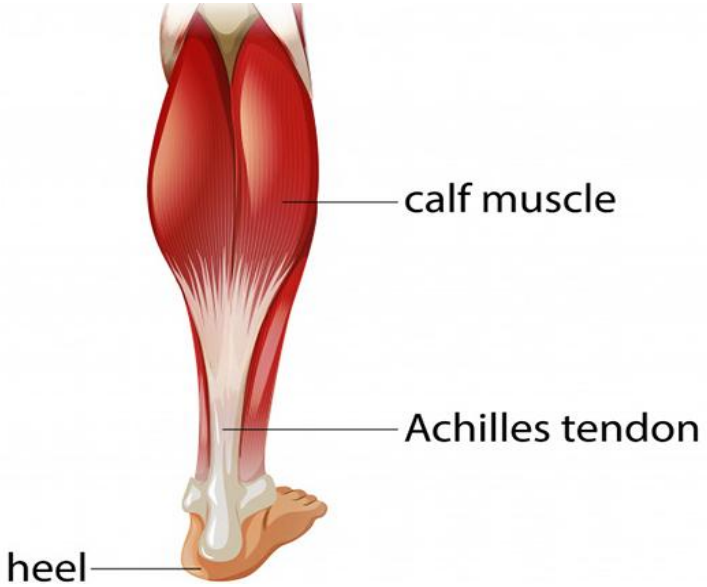
V: Valsalva sinus, Vater’s papilla, Virchow-Robin’s space, Volkmann’s canal

W: Waldeyer’s tonsillar ring, Weibel-Palade body, Wharton’s jelly, Willis’ circle, Winslow’s foramen, Wirsung’s duct, Wolffian duct

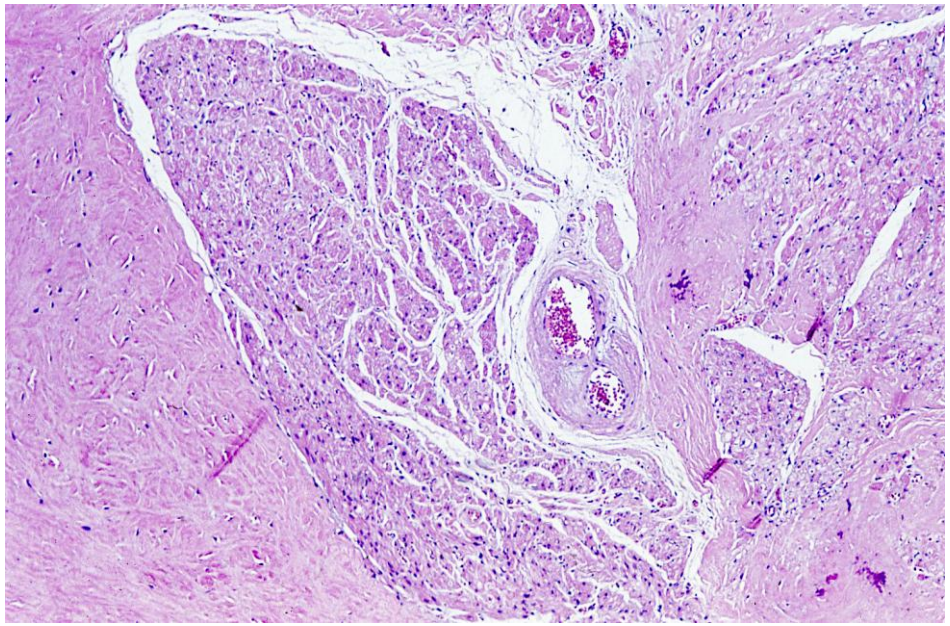
Z: Zinn’s zonula, Zuckerkandl organ

Achilles tendon (calcaneal tendon)

Achilles tendon serves to attach the plantaris, gastrocnemius (calf) and soleus muscles to the calcaneus (heel) bone.



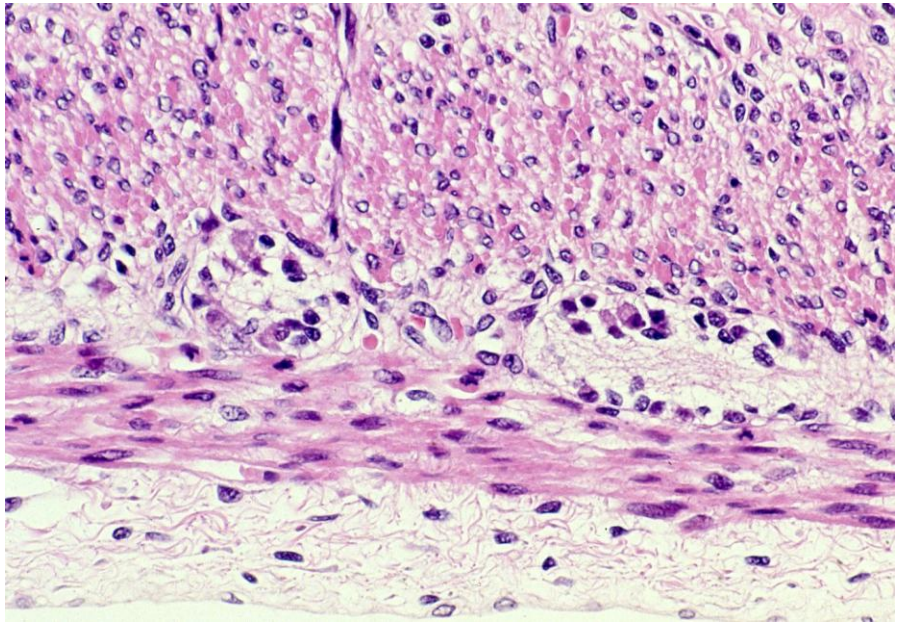
Aschoff-Tawara's node (atrioventricular node)



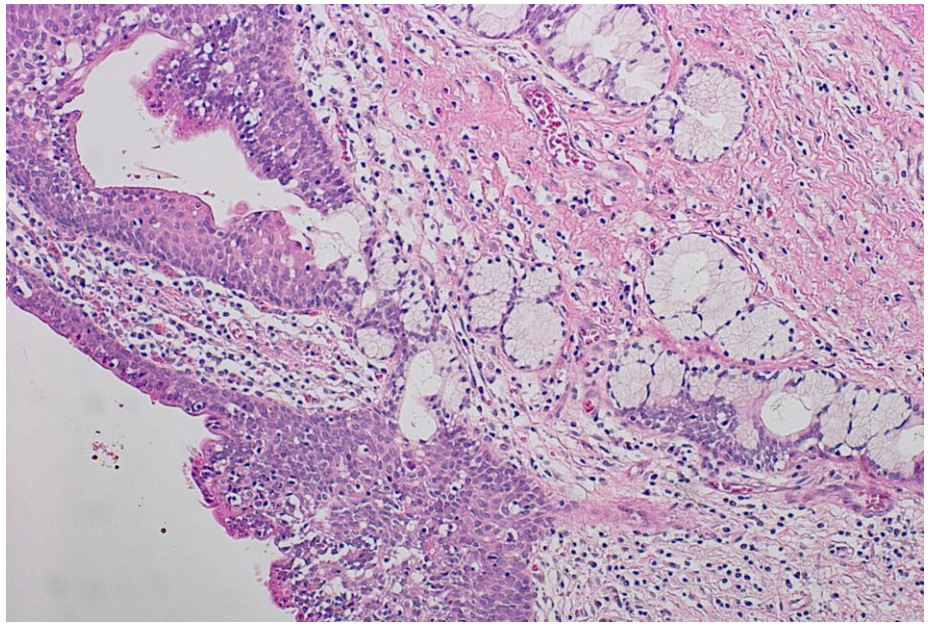
Atrioventricular (AV) node, located at the membranous portion of the AV junction, contains the AV nodal artery in the center. The cell are rich in glycogen.

Auerbach's plexus (myenteric nerve plexus)

Auerbach's plexus is located between the inner and outer proper muscle layers.



Bartholin gland (greater vestibular gland)

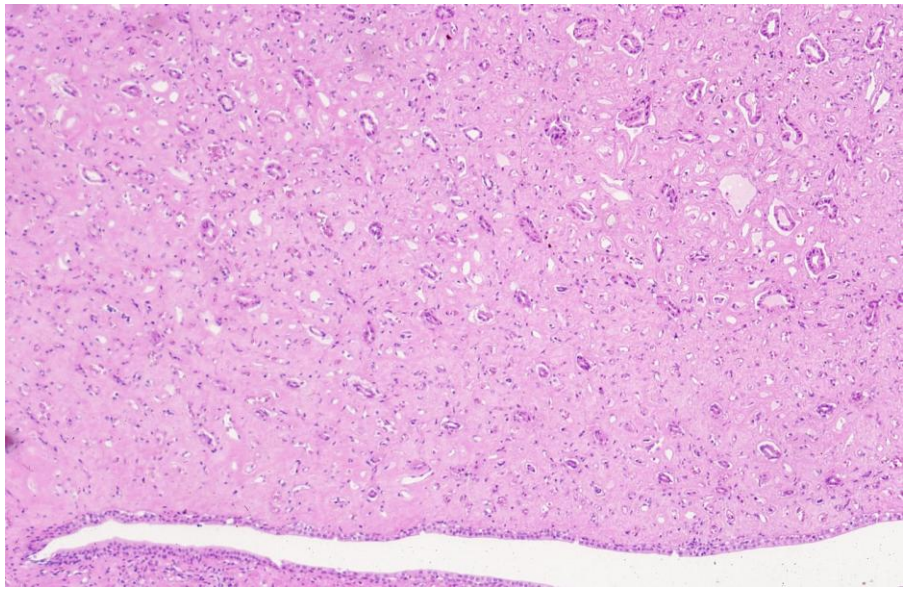


A pair of Bartholin's glands are located posteriorly near the vaginal opening and secrete mucus to lubricate the vagina, playing a crucial role in female sexual health.

Bauhin's valve (ileocecal valve)

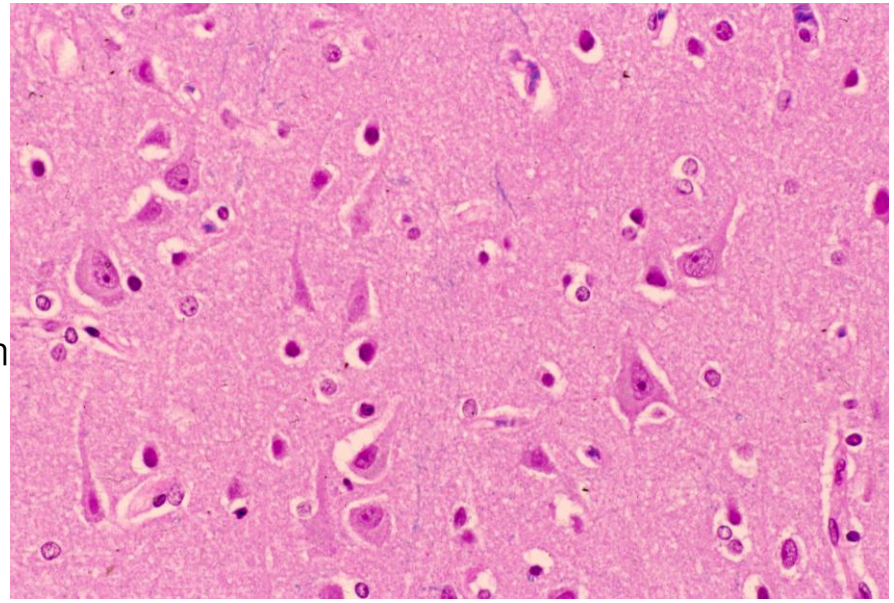
Ileocecal junctions form a valve-like structure.

Bellini duct (collecting duct in the renal medulla)



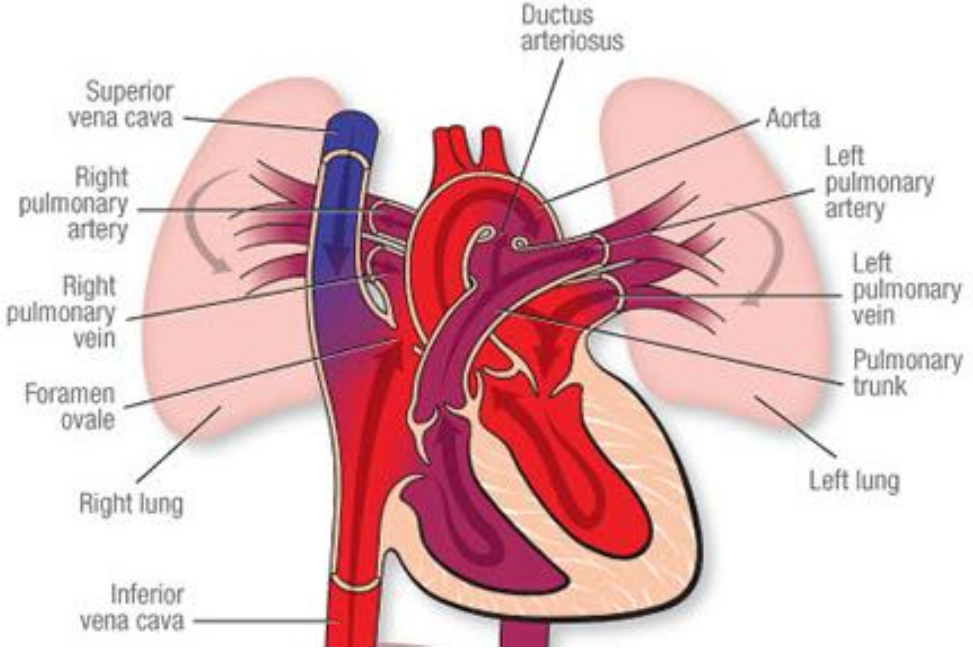
Normal renal papilla with scattered collecting ducts in the fibrotic stroma

Betz cell (giant pyramid in the primary motor cortex)



large-sized pyramidal neurons in the fifth layer of the motor cortex

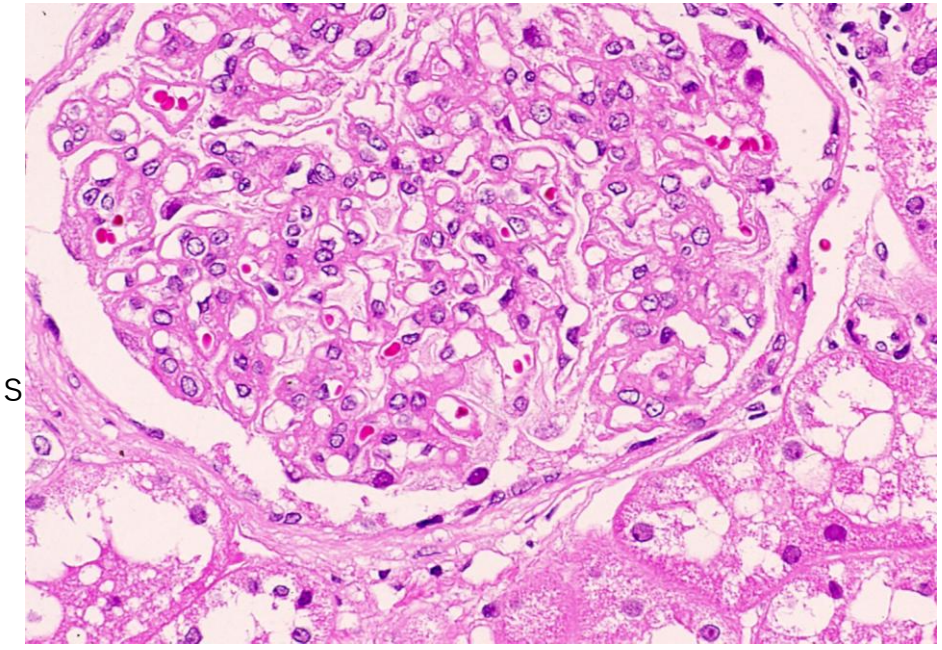
Botallo's duct (ductus arteriosus)



Fetal circulation
Oxygenated blood from the placenta reaching the right atrium flows through the **foramen ovale** to the left ventricle, then into the aorta. Most of the blood leaving the right ventricle bypasses the lungs through **ductus arteriosus**.

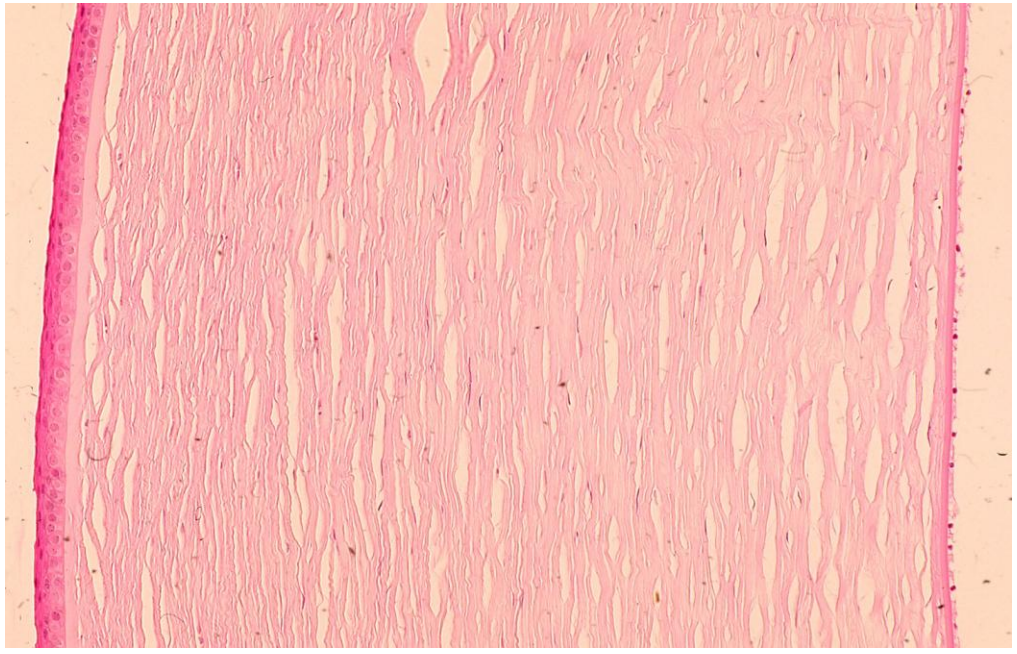
Bowman's capsule (covering the glomerulus)

Bowan's capsule, lined by cuboidal epithelia, are continuous to the proximal renal tubules.



Bowman's membrane (basement membrane of corneal epithelial cells)

Descemet membrane lies beneath the endothelial layer.

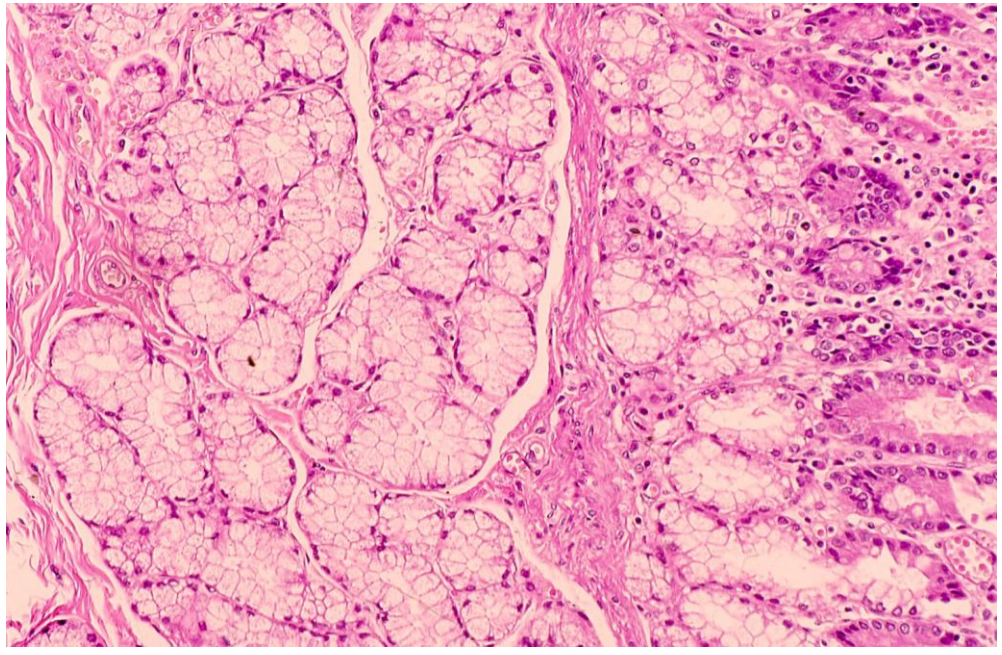


Brodmann's area

52 distinct regions of the cerebral cortex defined by the cyto-architecture

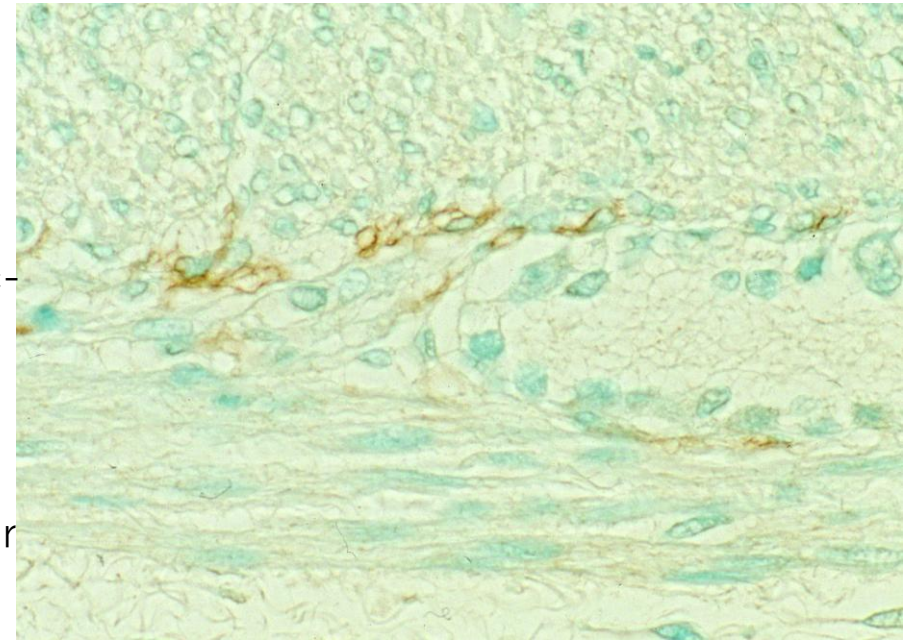
Brunner's gland (large mucous gland in the submucosal layer of the duodenum)

Brunner's gland secrete neutral mucin indistinguishable from the pyloric gland mucin.

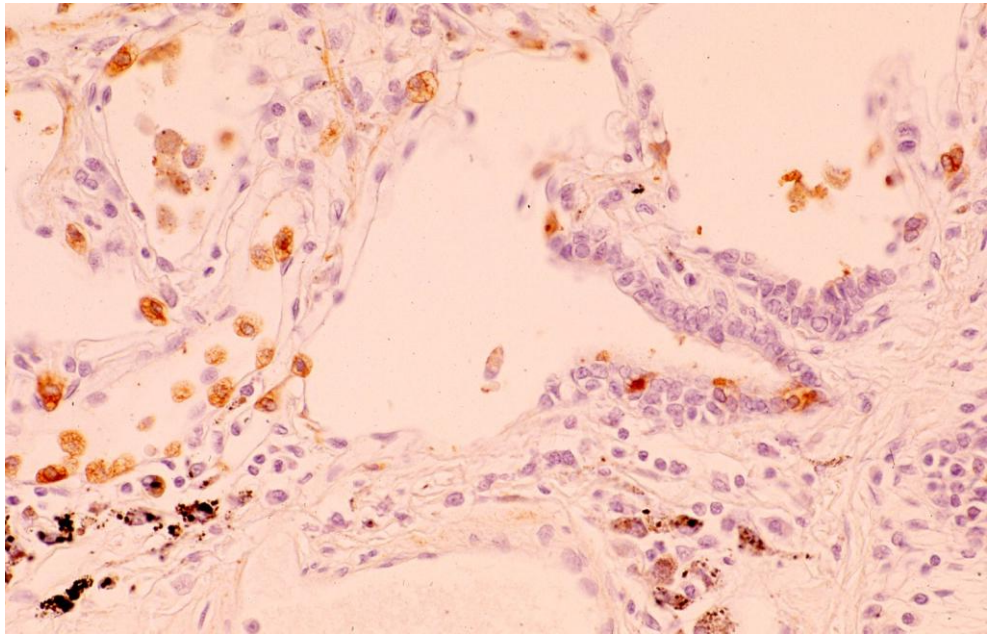


Cajal cell (interstitial cells of Cajal)

Auerbach plexus of the small bowel contains c-kit (CD117)-positive Cajal pacemaker cells



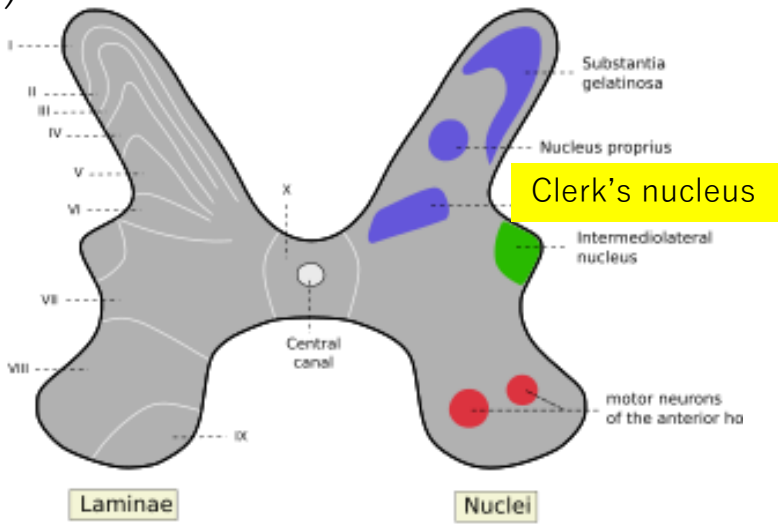
Clara cell (non-ciliated cell in the terminal bronchiole)



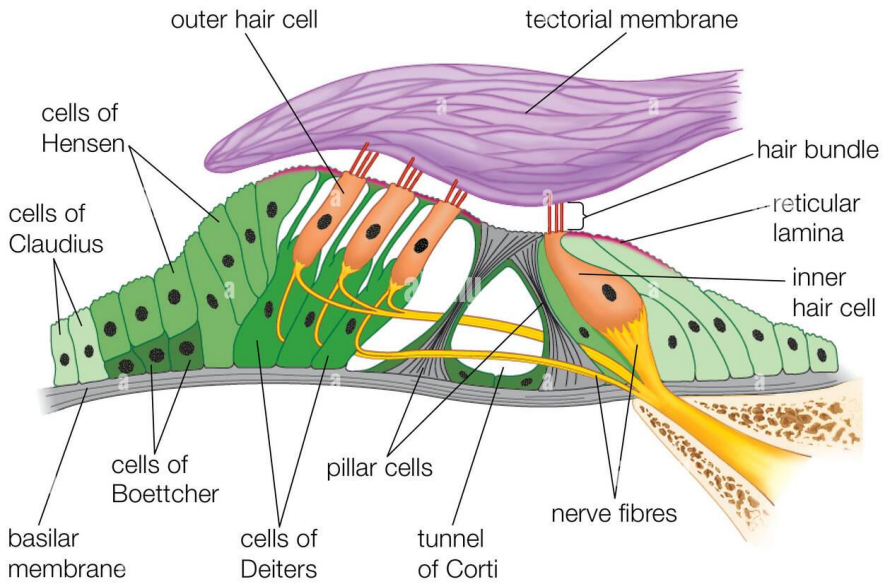
Surfactant apoprotein-positive Clara cell among ciliated epithelial cells in the terminal bronchiole. Type II pneumocytes are also s-apo-P immunoreactive.

Clark's nucleus (posterior thoracic nucleus or dorsal nucleus)

Clerk's nucleus is located in the cervical segment C8 to lumbar segment L3 of the spinal cord, and plays a role for proprioception of the lower limb,



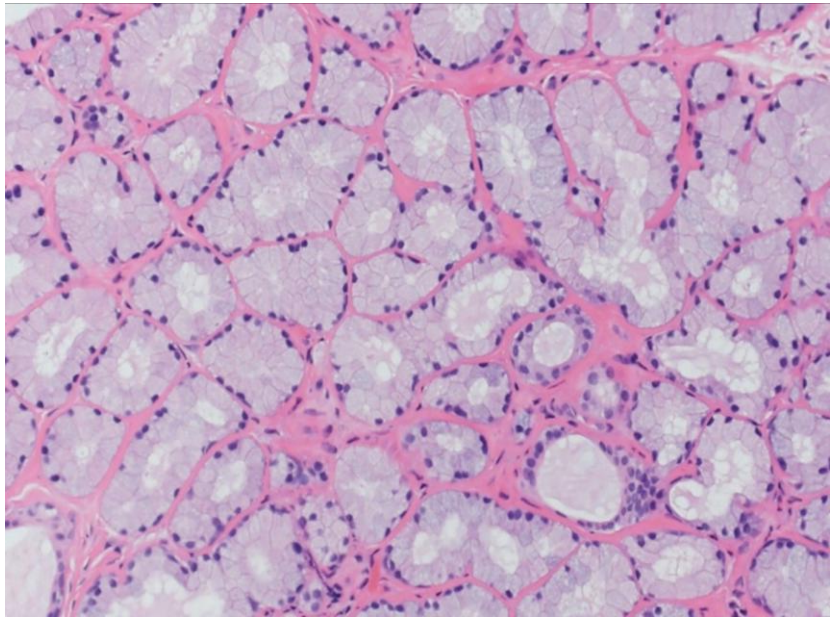
Corti organ (with hair cells for hearing)



The organ of Corti is the receptor organ for hearing in the mammalian cochlea. The hair cells with stereocilia convert sound waves into electrical signals.

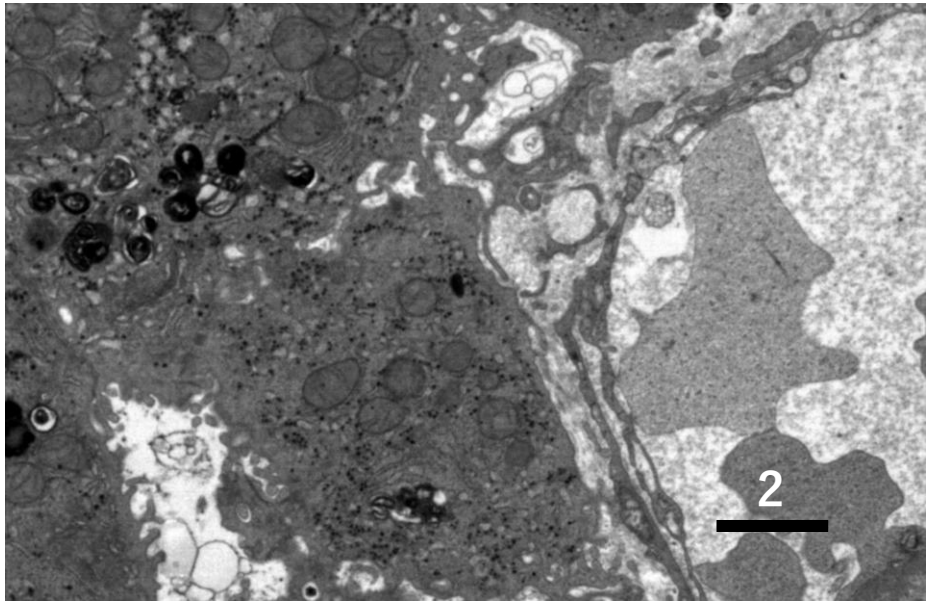
Cowper's gland (bulbourethral gland, a paired mucous gland along the urethra at the penile base)

Cowper's gland, the counterpart of Bartholin's gland in females, secretes a pre-ejaculate mucous fluid during sexual arousal.

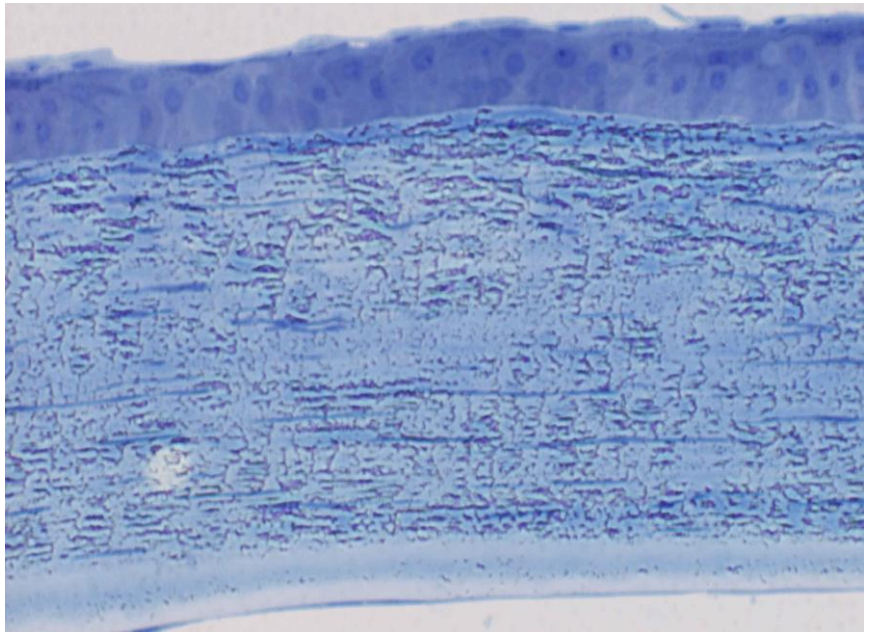


Disse's space (perisinusoidal space)

ultrastructure: a blood plasma-containing space between the hepatocyte and sinusoid

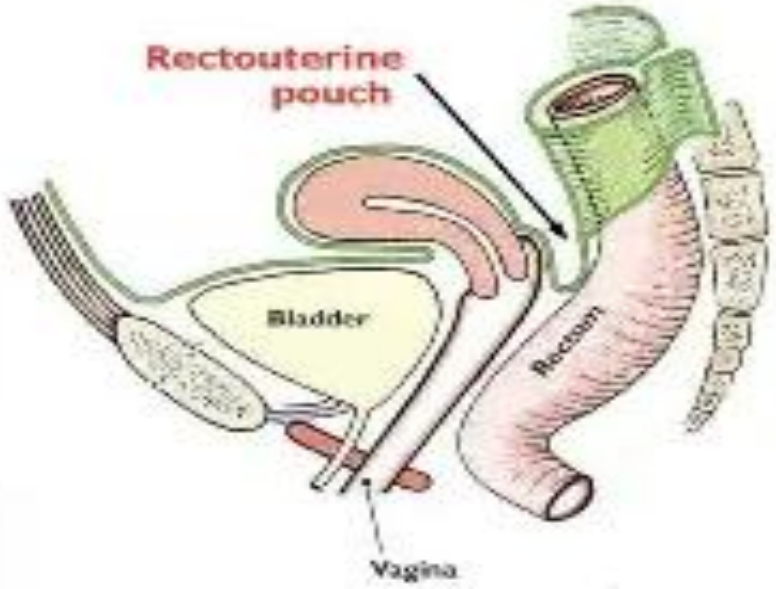


Descemet's membrane (the basement membrane beneath the corneal endothelial cells)



Descemet's membrane is the thick basement membrane beneath the corneal endothelial layer, consisting of type IV and VIII collagen fibers. The basement membrane beneath the corneal squamous epithelia is called Bowman's membrane (toluidine blue in thick section).

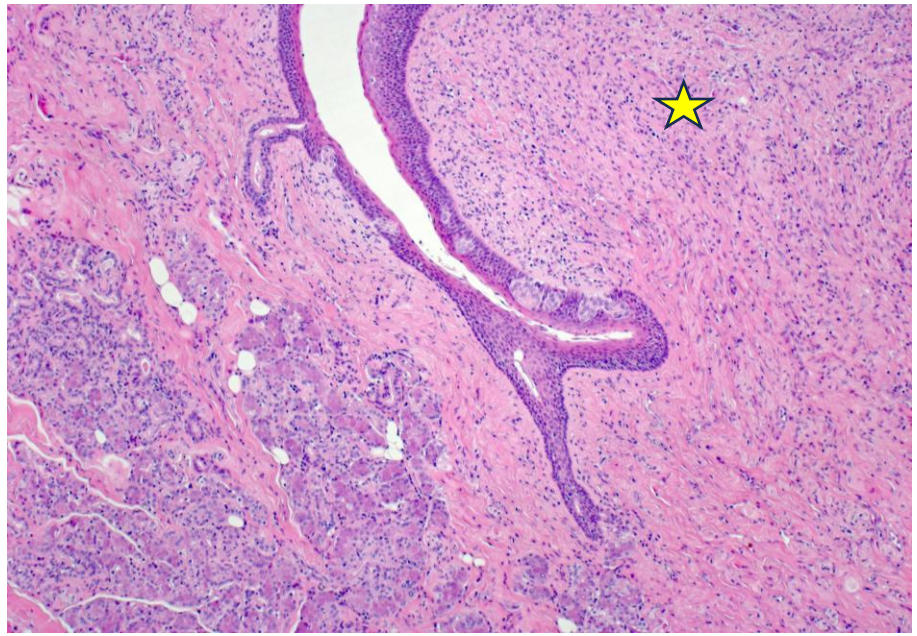
Douglas' pouch (rectouterine pouch/cul-de-sac)



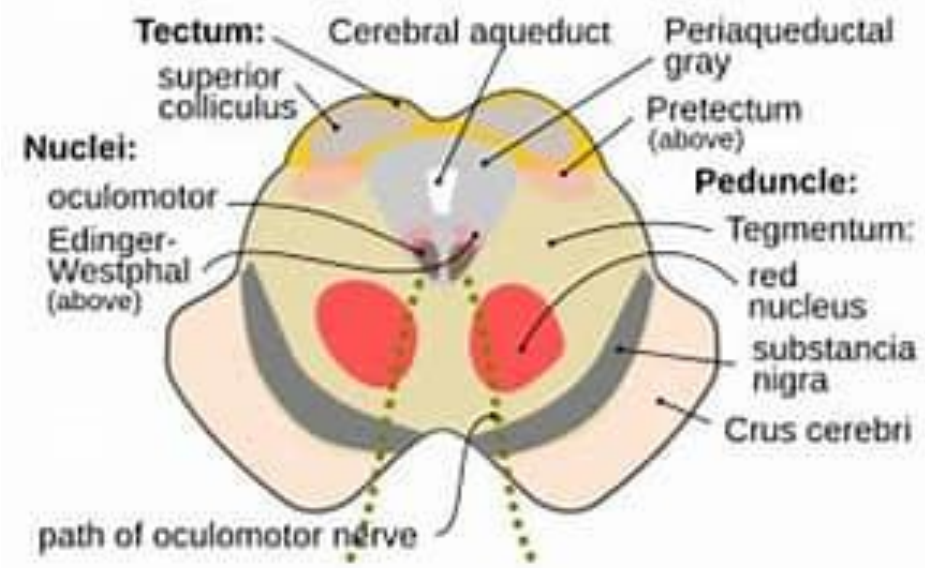
In women, the Douglas pouch is the deepest point of the peritoneal cavity (posterior to the uterus and anterior to the rectum).

Ebner's gland (serous gland beneath the vallate papilla)

Ebner's gland rinses the surface of the taste bud with its serous secretion. Note the presence of taste buds in the vallate papilla (asterisk).



Edinger-Westphal nucleus (one of the two nuclei of the oculomotor nerve located in the midbrain)

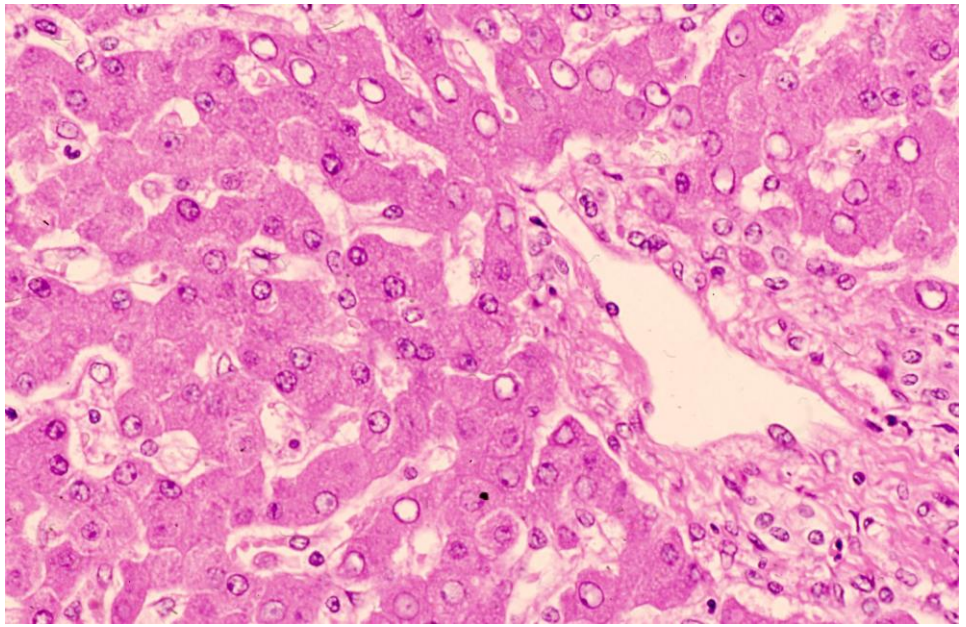


E-W nucleus contains an autonomic, parasympathetic component. The parasympathetic pre-ganglionic neurons synapse with the ciliary ganglion.

Fallopian tube (with fimbriae, finger-like projections)

The enlarged oviduct with unruptured tubal pregnancy seen in a 34 y-o female patient.

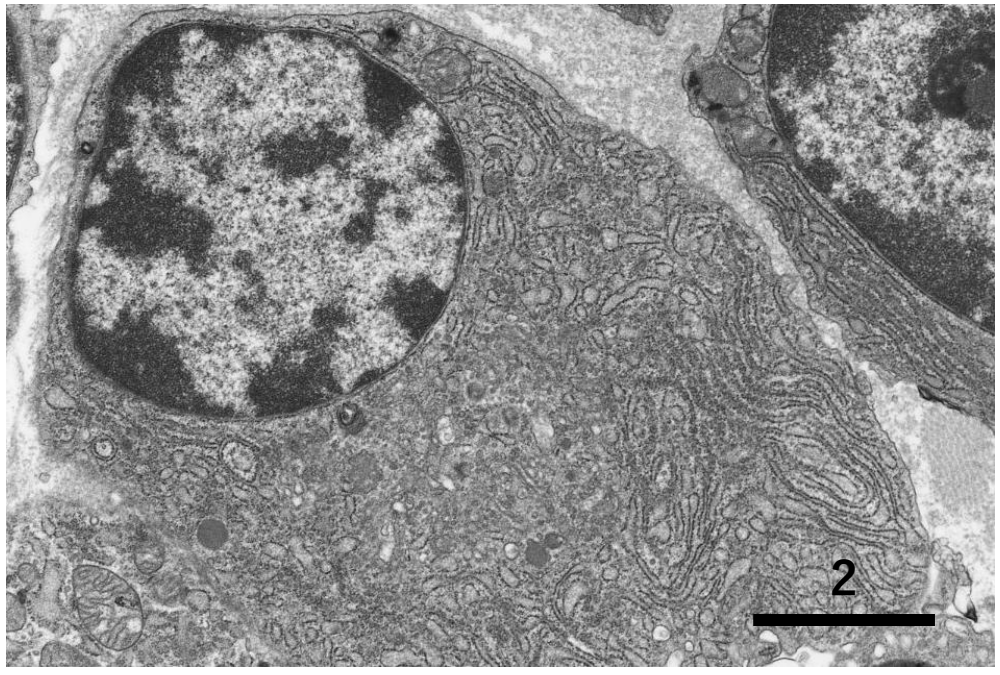
Glisson's sheath (Glisson's triad/portal triad)



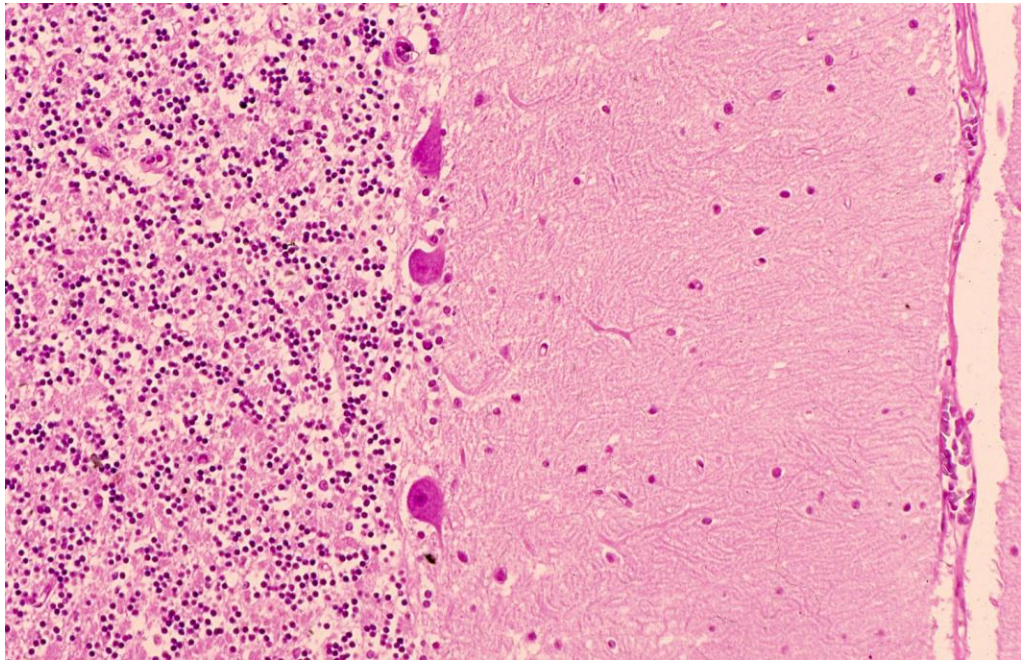
Glisson's sheath contains branches of the bile duct, hepatic artery and portal vein.

Golgi apparatus (cytoplasmic endomembrane system)

Golgi A. is an organelle packaging secretory proteins into vesicles: example in plasma cell is shown.



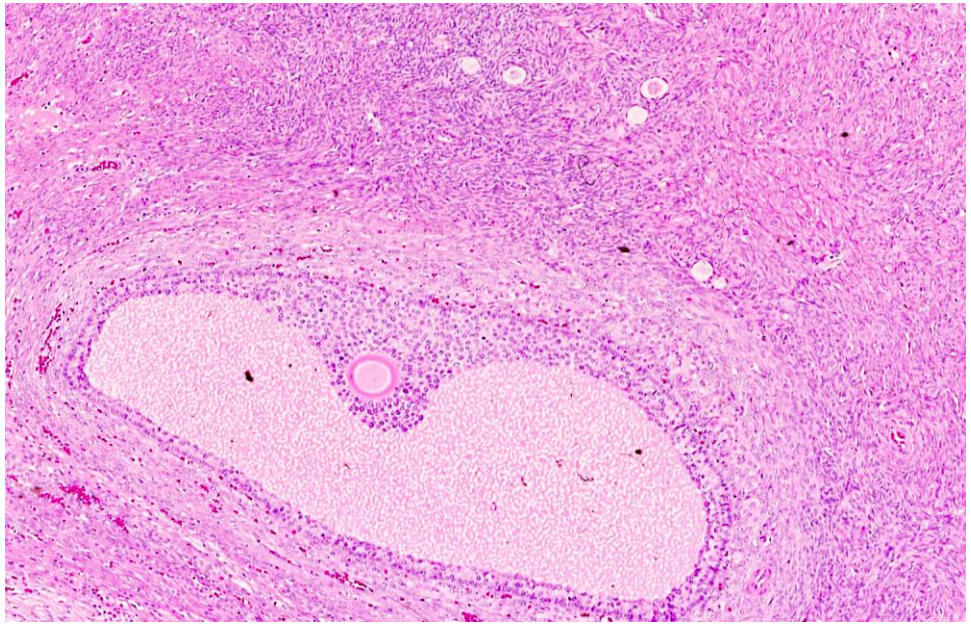
Golgi cell (interneuron in the cerebellar granular layer)



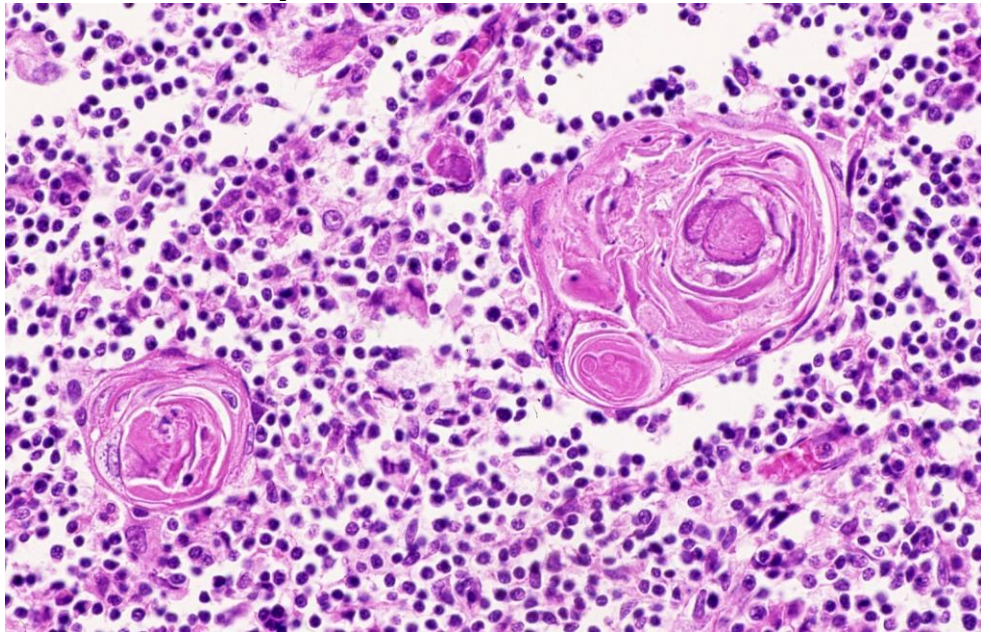
Golgi cells are the most abundant inhibitory interneurons found within the granular layer of the cerebellum.

Graafian follicle (mature, fluid-filled ovarian follicle)

Graafian follicle is a mature, fluid-filled ovarian follicle containing an egg cell ready for ovulation.



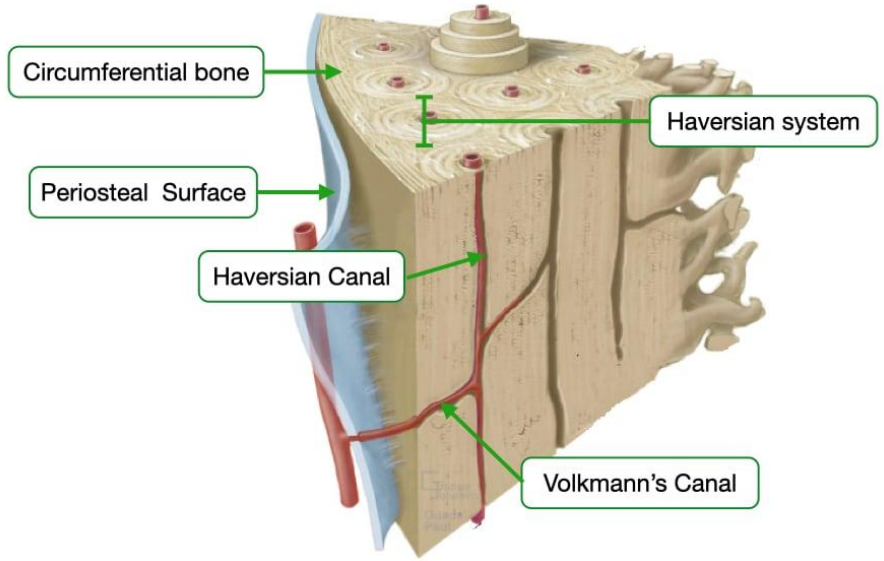
Hassall's corpuscle (squamoid body in the thymic medulla)



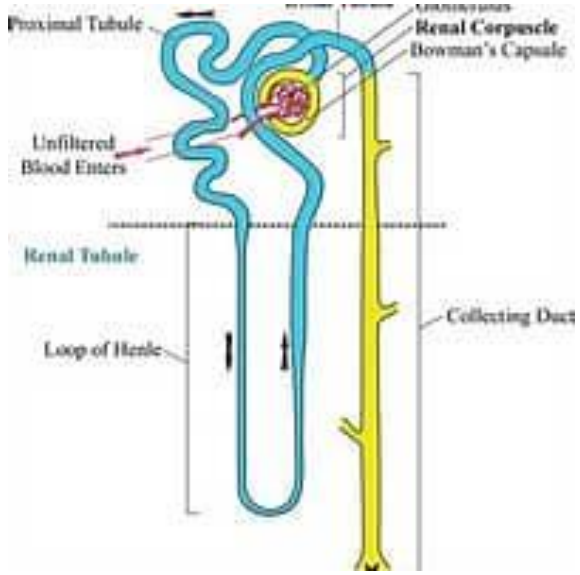
Hassall's corpuscles, concentric corpuscles with keratohyaline granules, are seen in the medulla of the thymus.

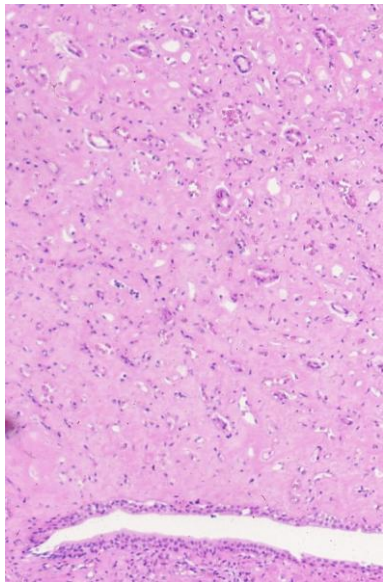
Haversian canal (part of the Haversian system)

Haversian canal, 50 μm in diameter, runs longitudinally through the cortical bone, and contains vessels and nerves.



Henle's loop (thin renal tubules in the renal medulla)

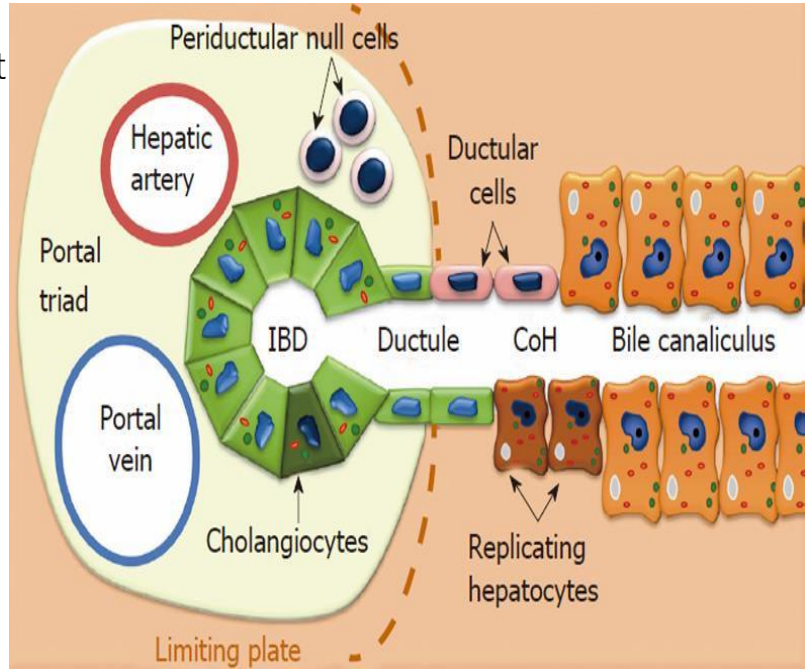




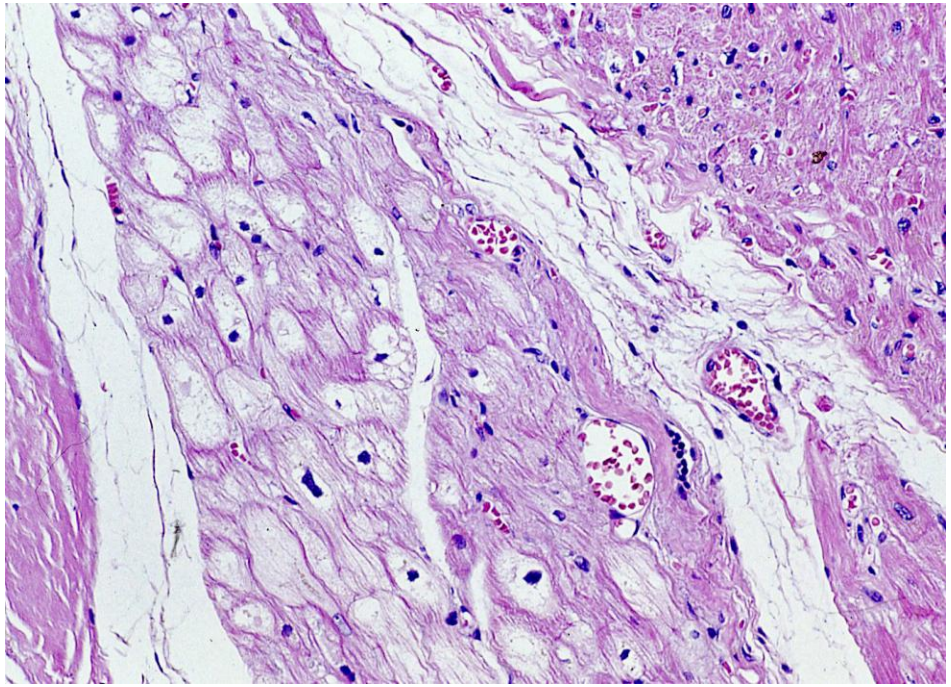
The loop of Henle is a U-shaped portion of the nephron, playing a crucial role in concent-rating urine and reabsorbing water and salts. In the renal medulla, Henle's loop and collecting ducts are seen (right).

Hering's canal (intrahepatic bile ductule)

Hering's canal, part of the outflow system of bile, are lined by cuboidal epithelia with features of both cholangiocytes and hepatocytes, and can be visualized by immunostaining for CK7 and CK19. Liver stem cells may inhabit the canals.



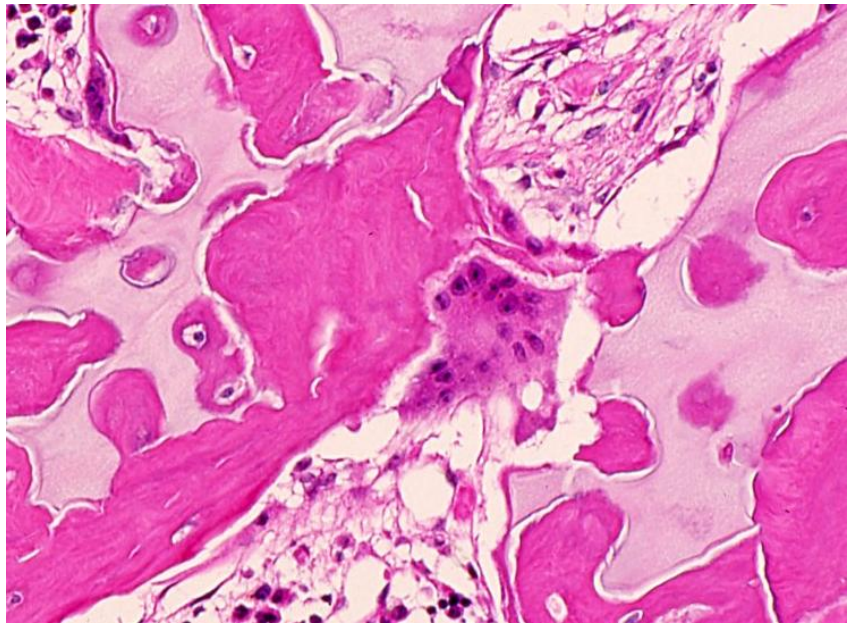
His bundle (crucial part of the heart's electrical conduction system)



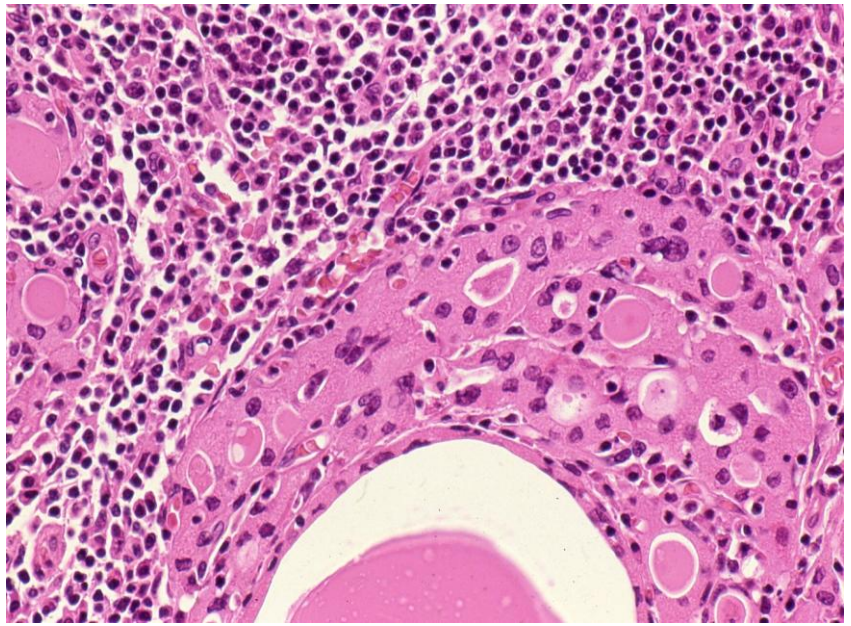
His bundle, rich in glycogen in the cytoplasm, originates from the AV node, passes through the interventricular septum and divides into the left and right bundle branches. The branches further divide into Purkinje fibers.

Howship lacuna (representing an osteoclast activity)

Howship lacuna represents an eroded pit on the surface of the bone trabecula caused by acid phosphatase of osteoclasts.



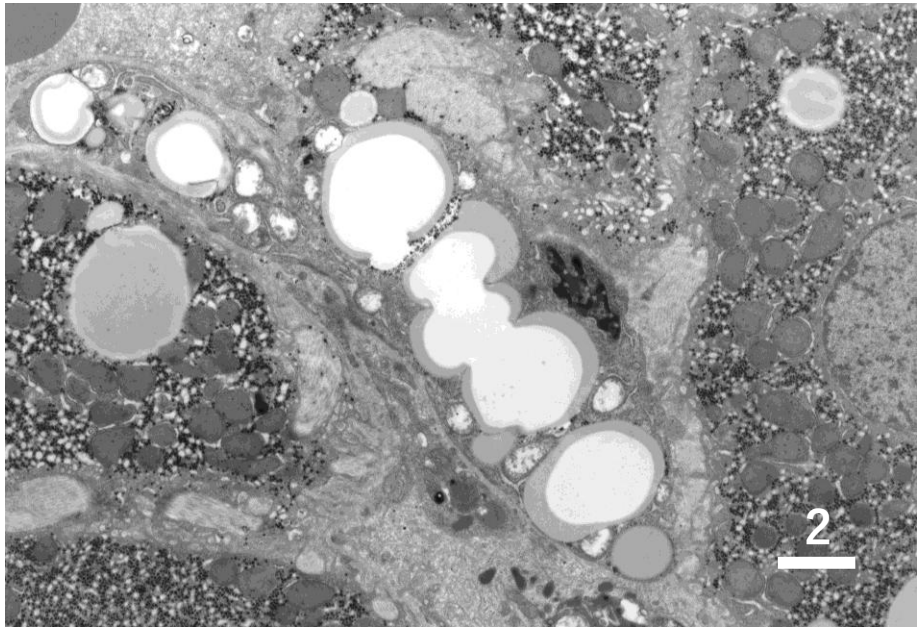
Hürthle cell (mitochondria-rich oncocyte)



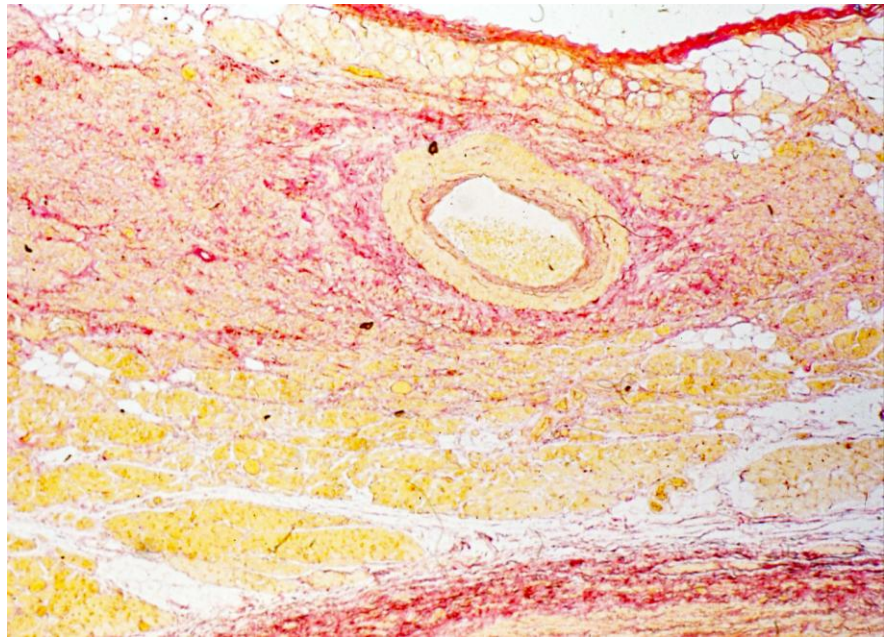
Hürthle cells, metaplastic follicular cells with plump eosinophilic cytoplasm filled with mitochondria, often seen in Hashimoto thyroiditis.

Ito cell (hepatic stellate cell or fat-storing cell)

Ito cell, found in the space of Disse, stores and concentrates vitamin A, and functions as the major cell type involved in liver fibrosis.



Keith-Flack node (sinoatrial node)

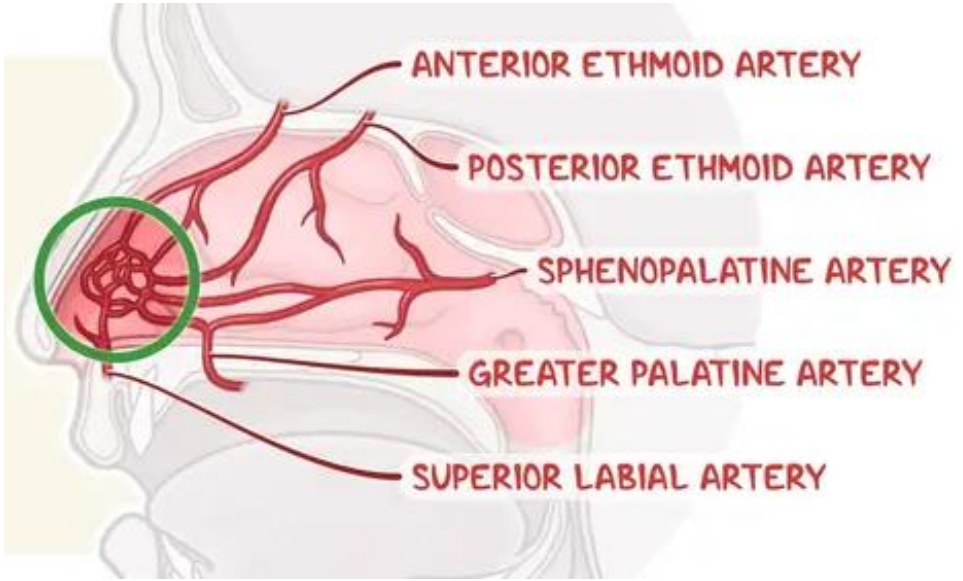


SA nodal artery, the first branch of right coronary artery, is seen in the center of the SA node relatively rich in elastic lamina (EVG).

Kerckring's fold (well-developed circumferential folds particularly in the jejunum)

Kerckring's fold is accentuated in the surgical specimen of jejunal adenocarcinoma (after formalin fixation)

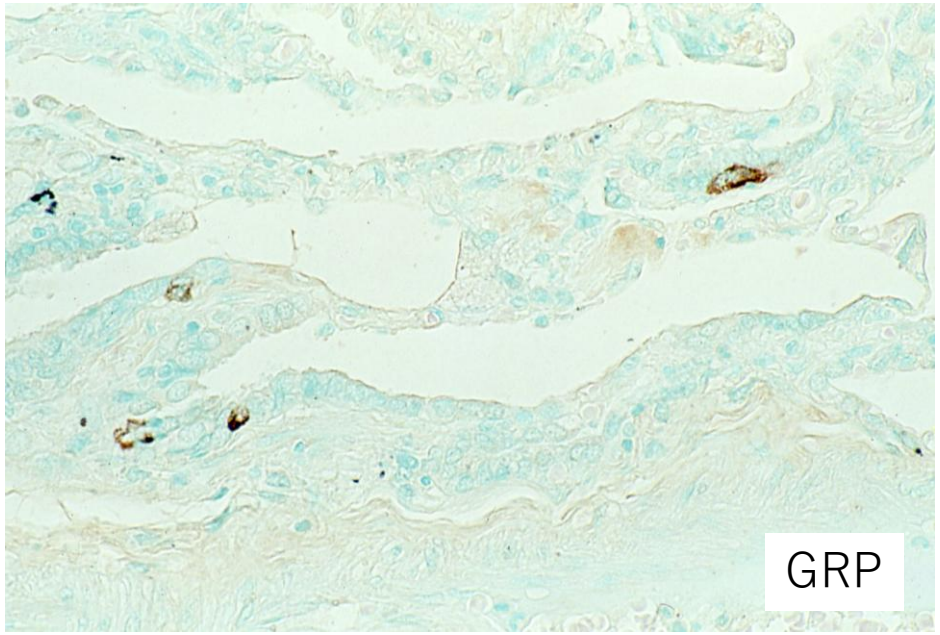
Kiesselbach's plexus (the site of anterior epistaxis)



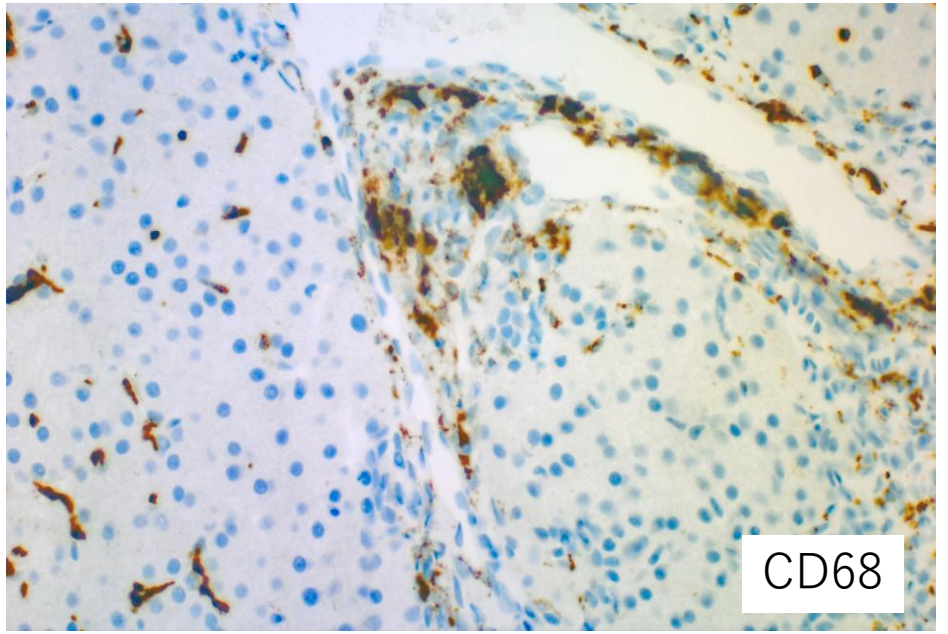
Kiesselbach's plexus is an anastomotic plexus of five arteries in the nose supplying the nasal septum. It lies in the anteroinferior part of the nasal septum.

Kulchitsky cell (K cells in the lung)

gastrin-releasing peptide (GRP)-positive K cells in normal adult bronchial mucosa



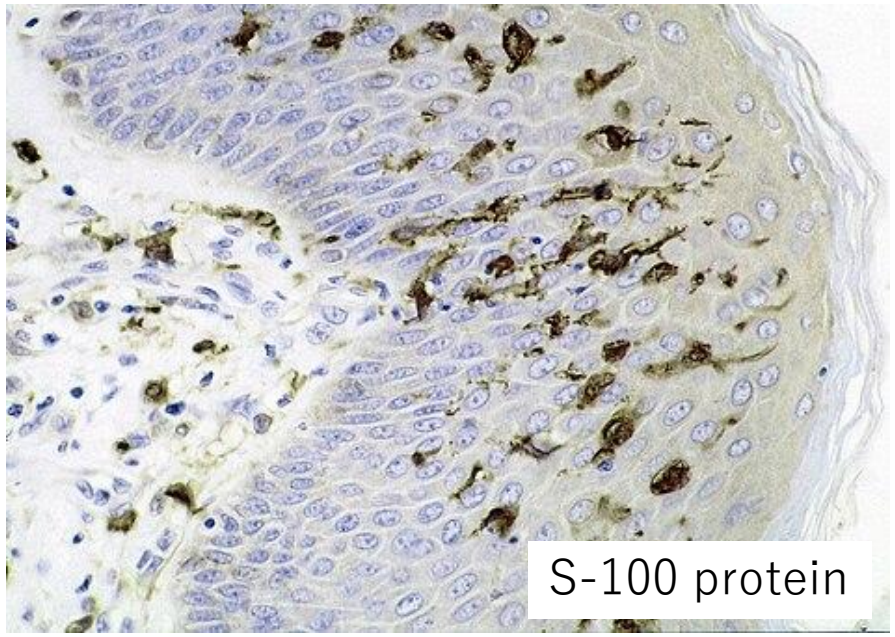
Kupffer cell (a resident macrophage in the liver)



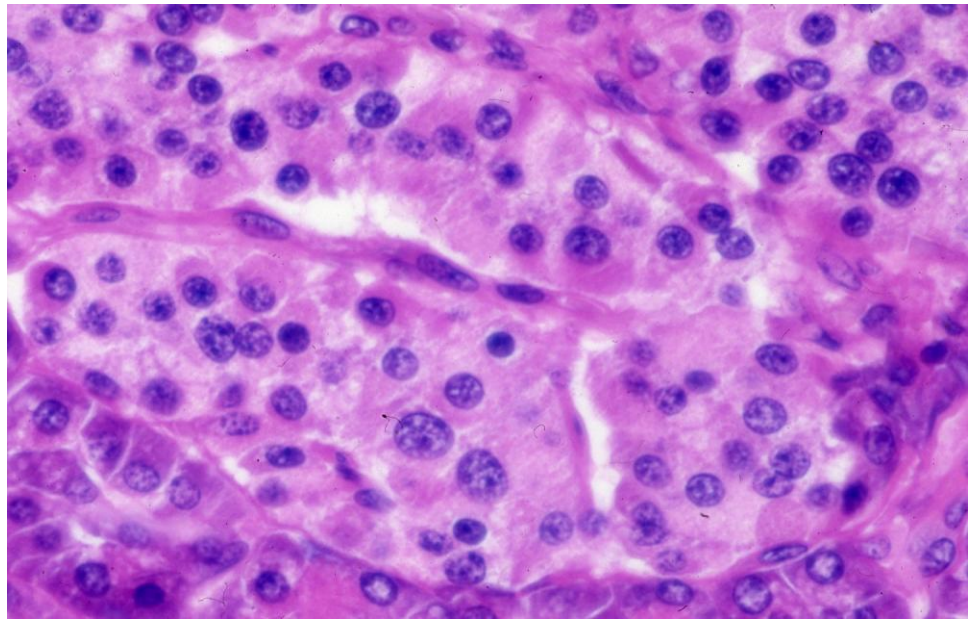
Kupffer cells represent CD68-positive macrophages along the liver sinusoid. CD68+ macrophages are also distributed in the portal triad.

Langerhans cell (epidermal dendritic cell)

Langerhans cells capture and process pathogens/ allergens, and migrate to lymph nodes to present the antigens to T cells. The markers include S-100 protein, CD1a and langerin.



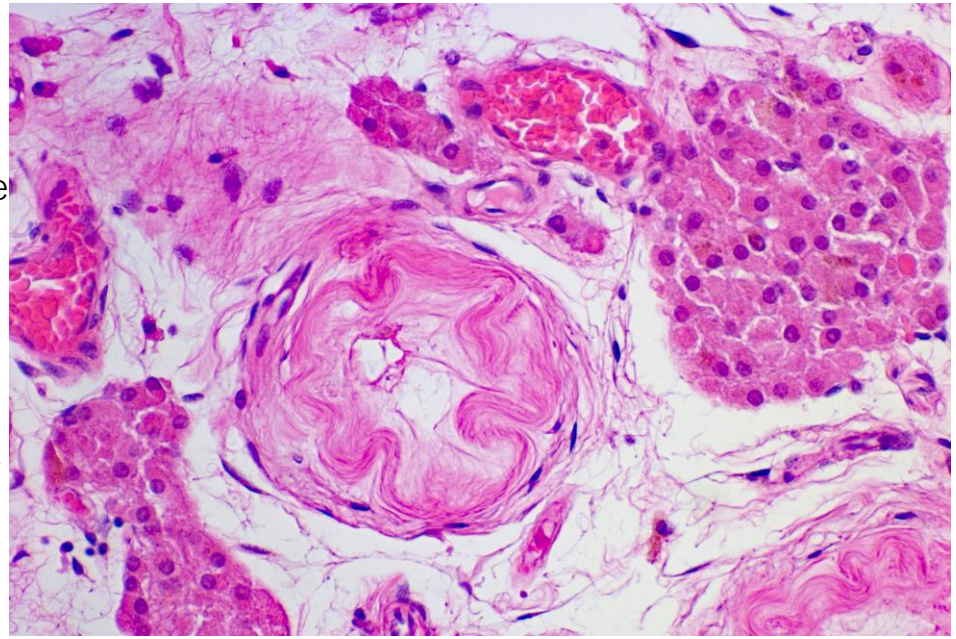
Langerhans' islet (endocrine pancreas)



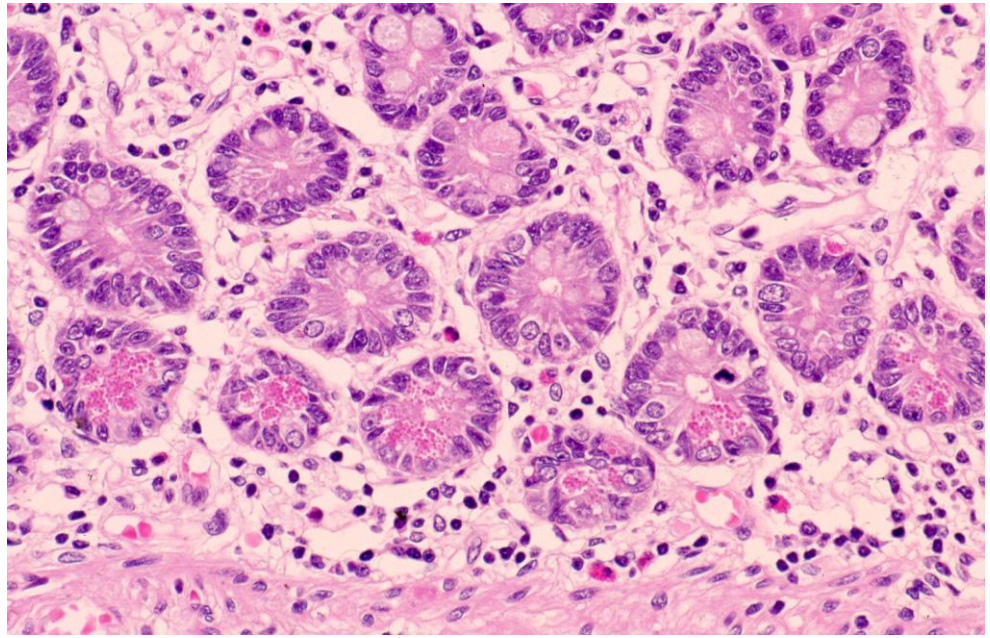
The islets, measuring around 200 μm, mainly consist of clear B (insulin) cells and acidophilic A (glucagon) cells. The islets in the pancreatic head are rich in pancreatic polypeptide (PP).

Leydig cell (interstitial cells of Leydig)

Leidig cell produces testosterone in response to LH. In atrophic testis, they become hyperplastic often with Reinke's crystals.



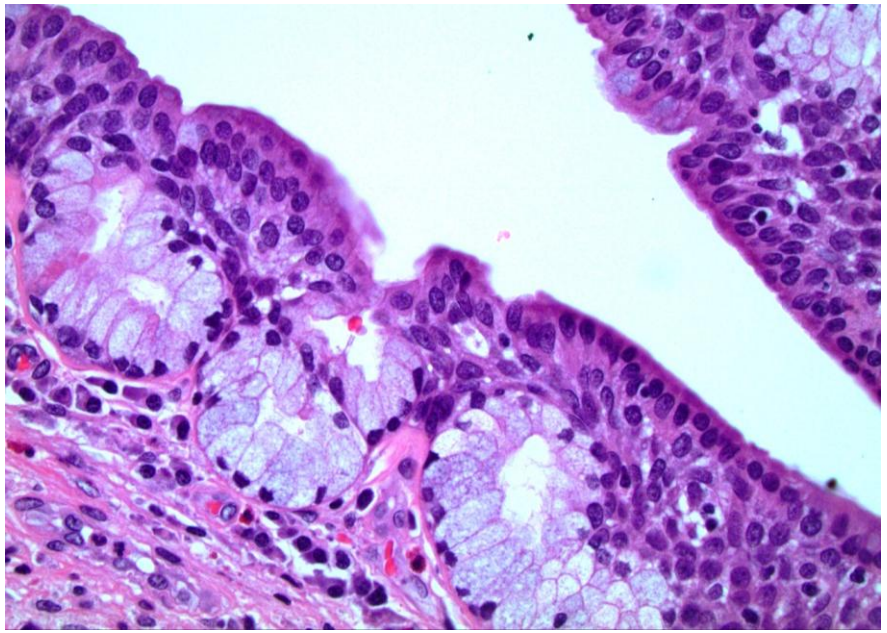
Lieberkühn's crypt (intestinal gland)



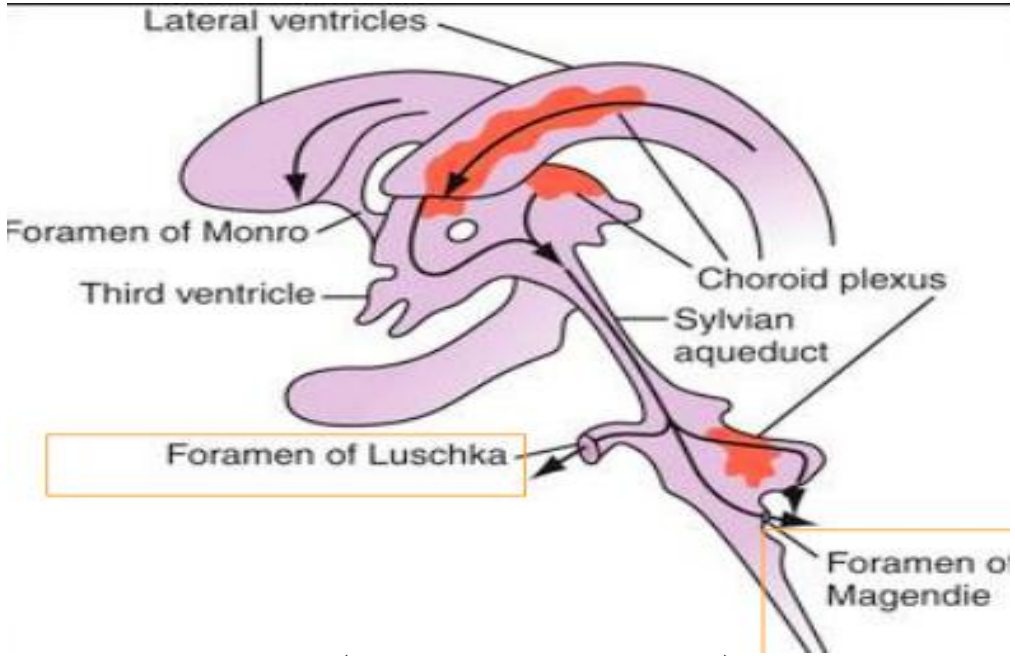
the crypts of the normal ileal mucosa with Paneth cells

Littré gland (intramural glands of the urethra)

Littré glands, male uretha-associated, mucin-secreting tubuloalveolar glands, are also found deep in the lamina propria of the anterior male urethra.



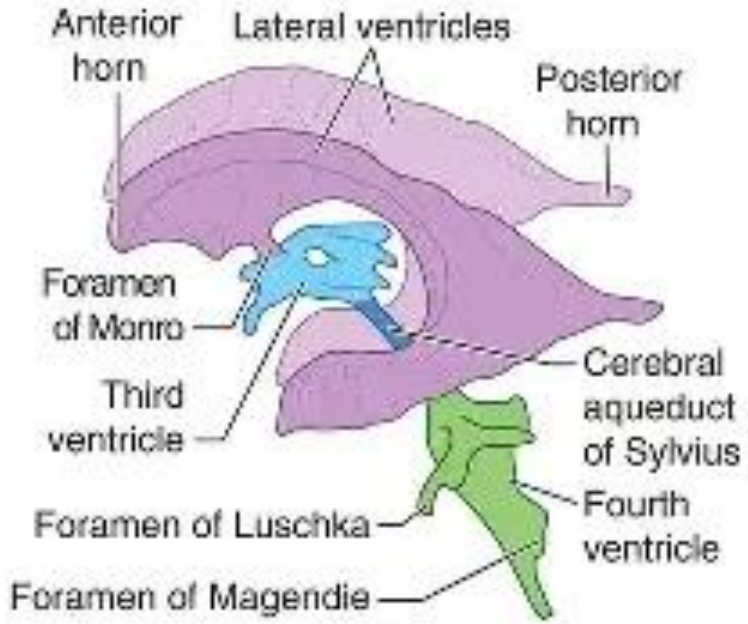
Luschka‘s foramen (lateral apertures of Luschka)



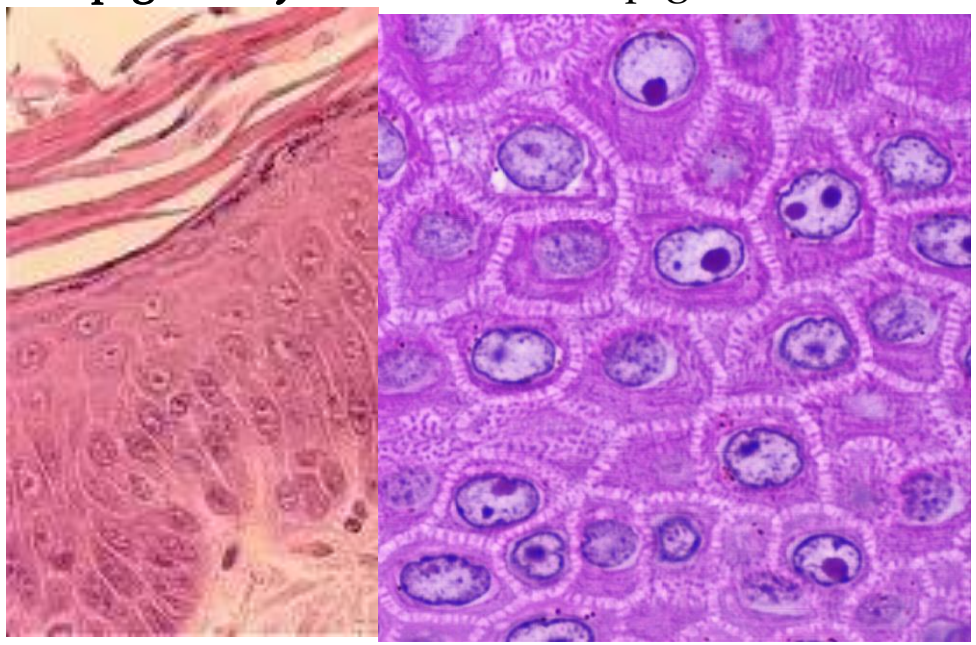
Luschka‘s foramen links the fourth ventricle to the cerebello-pontine cistern.

Magendie’s foramen (median aperture)

Magendie’s foramen allows cerebrospinal fluid to flow from the fourth ventricle into the cisterna magna, a large subarachnoid space at the base of the brain,



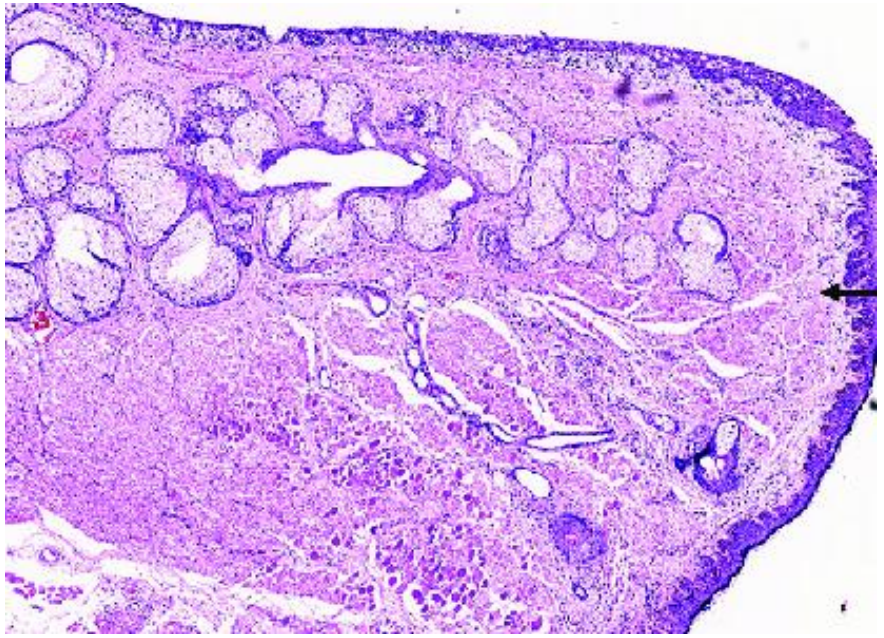
Malpighi’s layer (stratum malpighii)



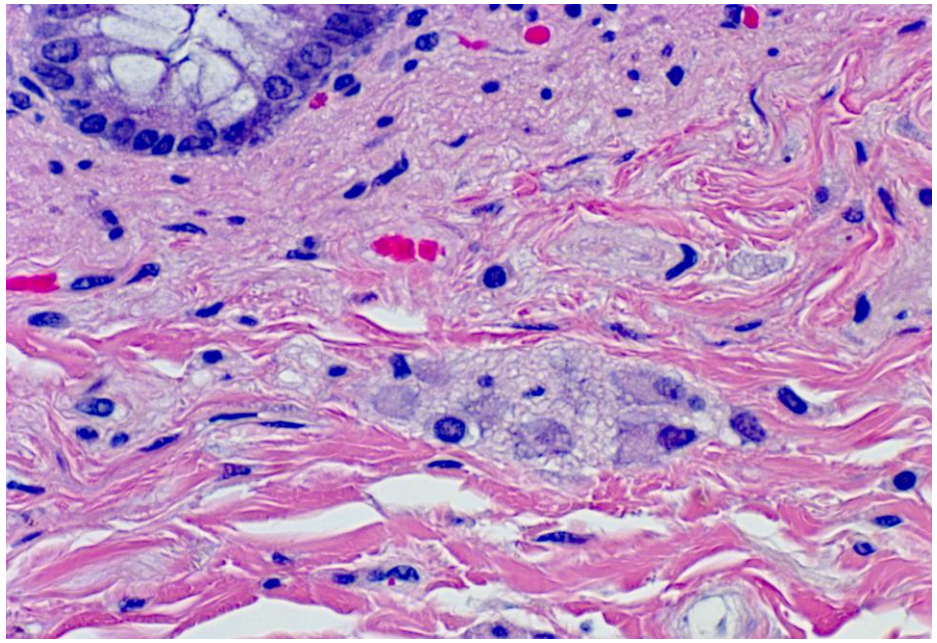
The Malpighian of the epidermis is defined as both the basal layer and the thicker stratum spinosum (prickle cell layer). Intercellular bridges are evident.

Meibomian gland (sebaceous gland of the eyelid)

Meibomian glands, specialized sebaceous glands producing meibum, are located along the edge of the eyelid. The lipid layer is essential for preventing the evaporation of tears, thus maintaining eye moisture and comfort.



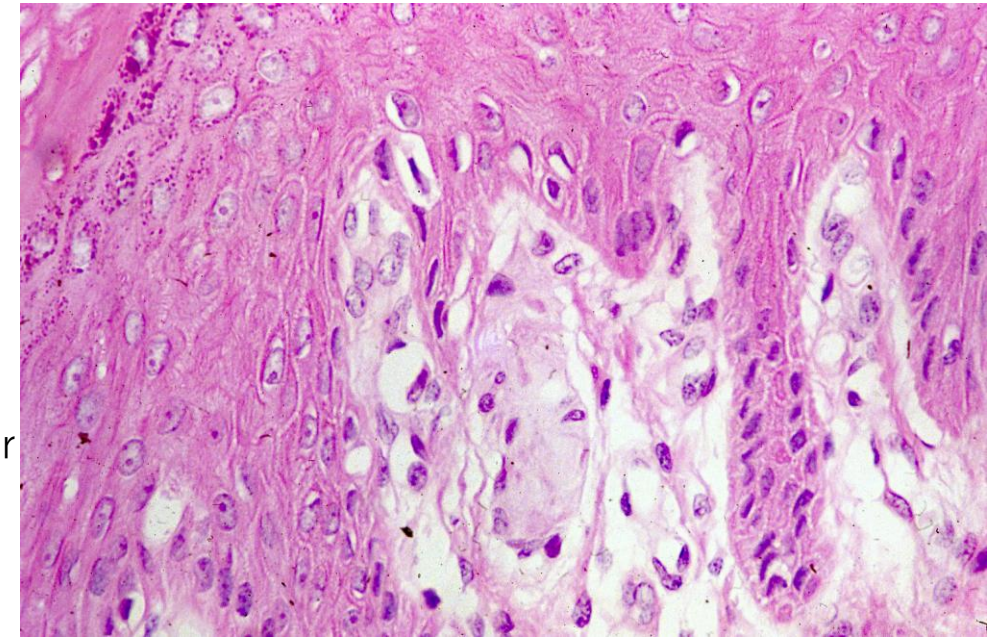
Meissner's plexus (submucosal nerve plexus)



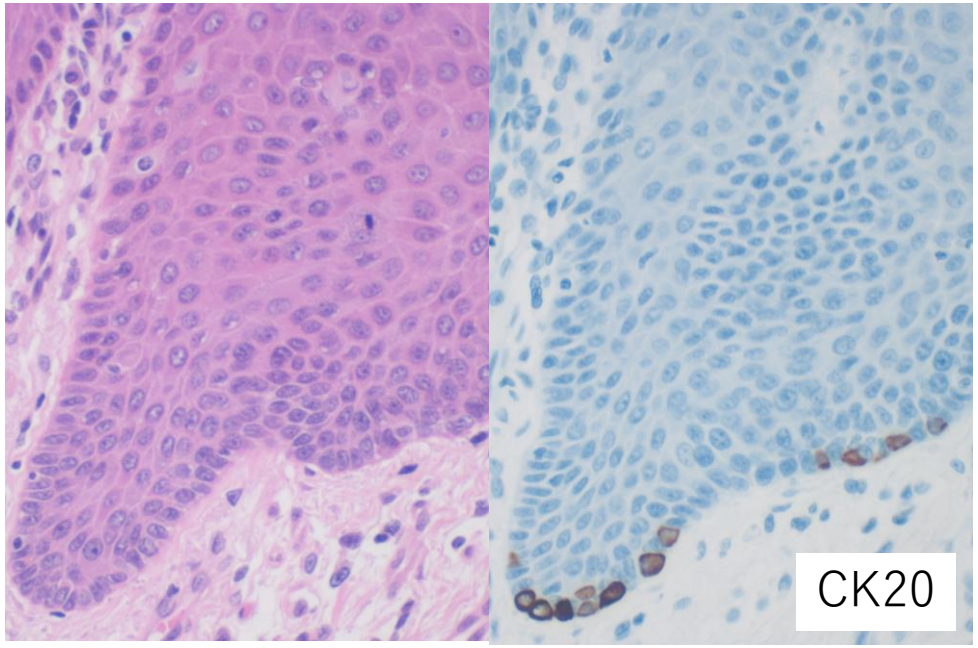
Meissner's plexus in the intestinal submucosa consists of enteric neurons and glias, and innervates the mucosa and muscularis mucosae.

Meissner's corpuscle (tactile corpuscle)

Meissner's corpuscle, especially rich in finger pads, is a type of nerve ending in the skin, responsible for sensitivity to pressure and vibrations.



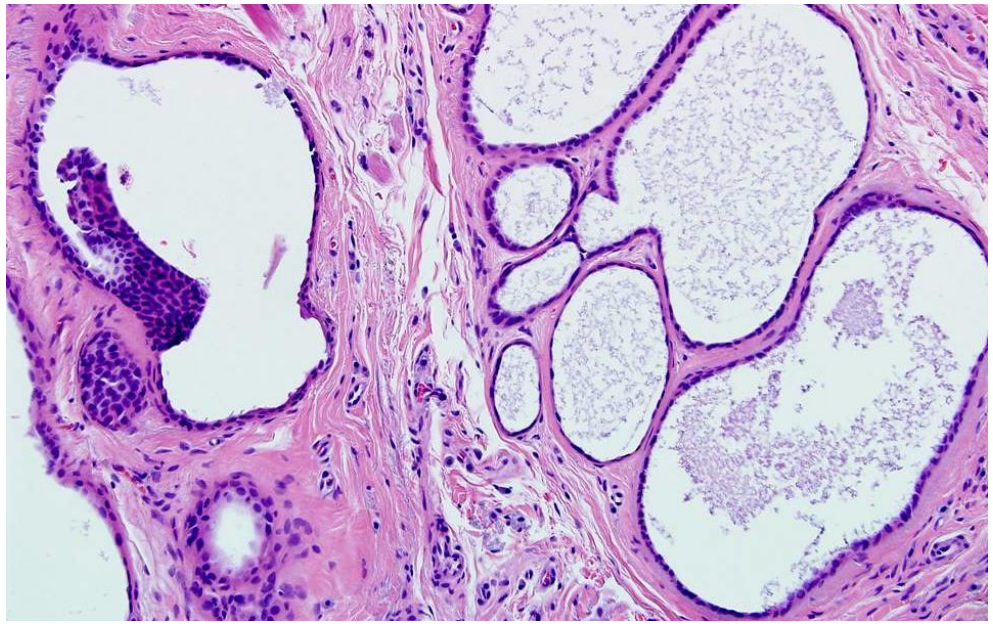
Merkel cell (tactile epithelial cell, CK20+)



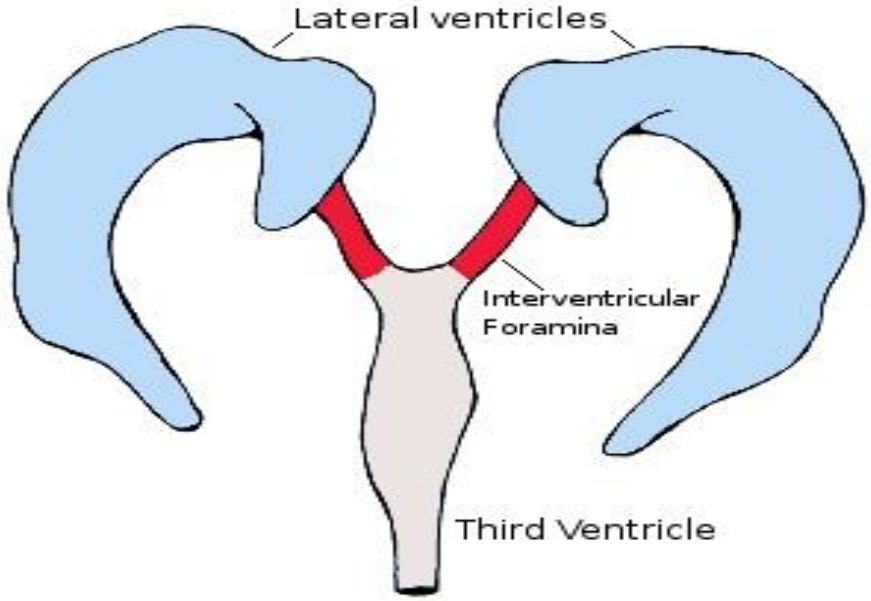
oval-shaped mechano-receptor cell essential for light touch sensation, found in the skin and squamous mucosa (tongue mucosa shown).

Moll's gland (ciliary gland, apocrine gland of the eyelid)

Moll's gland is a modified apocrine gland seen on the margin of the eyelid (next to the base of the eyelashes and anterior to the meibomian gland)



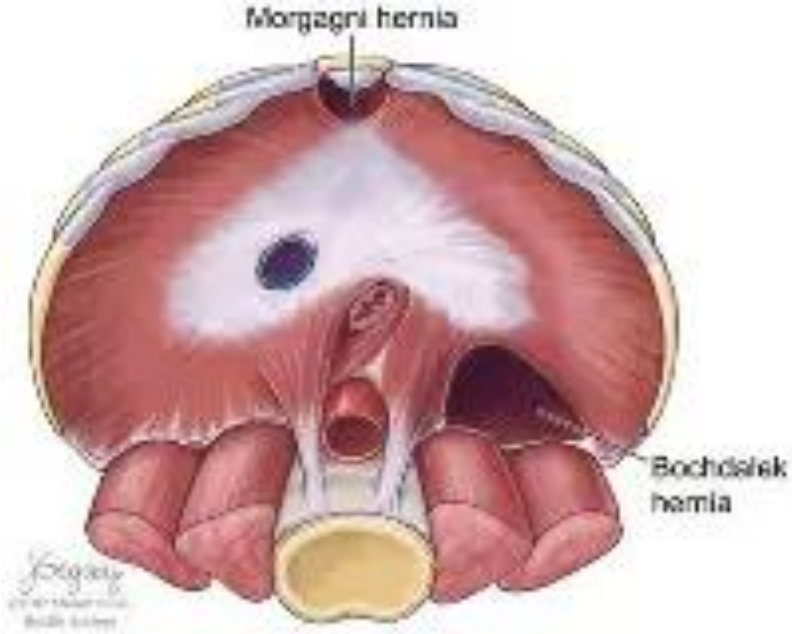
Monro's foramen (interventricular foramen)



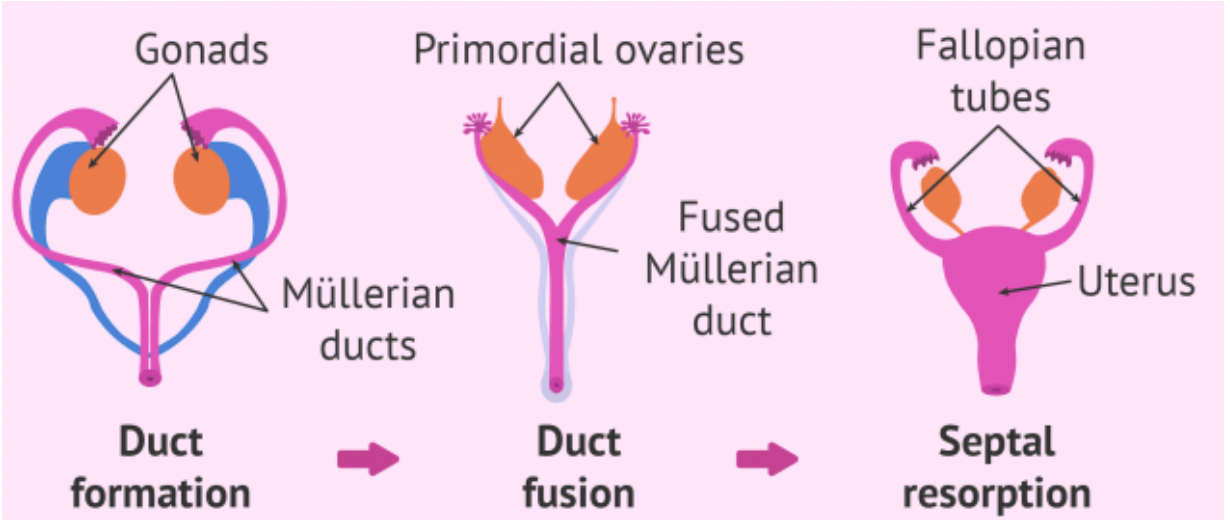
a channel connecting the paired lateral ventricles with the third ventricle at the midline of the brain

Morgagni's foramen (sternocostal triangle)

a physiological gap in the diaphragm located between the chest and abdomen, specifically near the sternum. Morgagni hernia is a type of congenital diaphragmatic hernia, common in women and adults over 50.



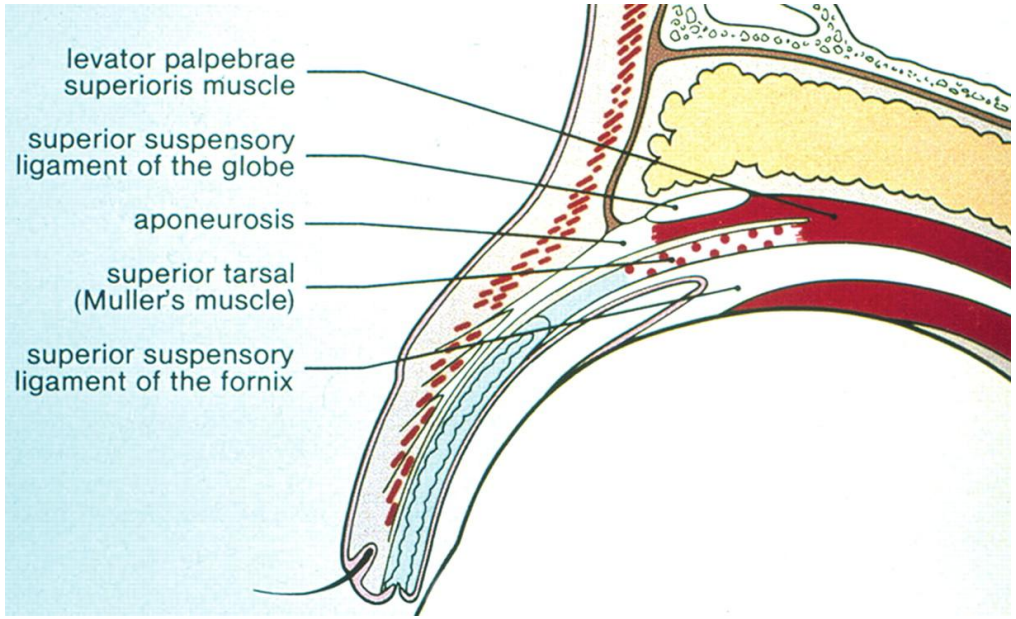
Müllerian duct (paramesonephric duct)



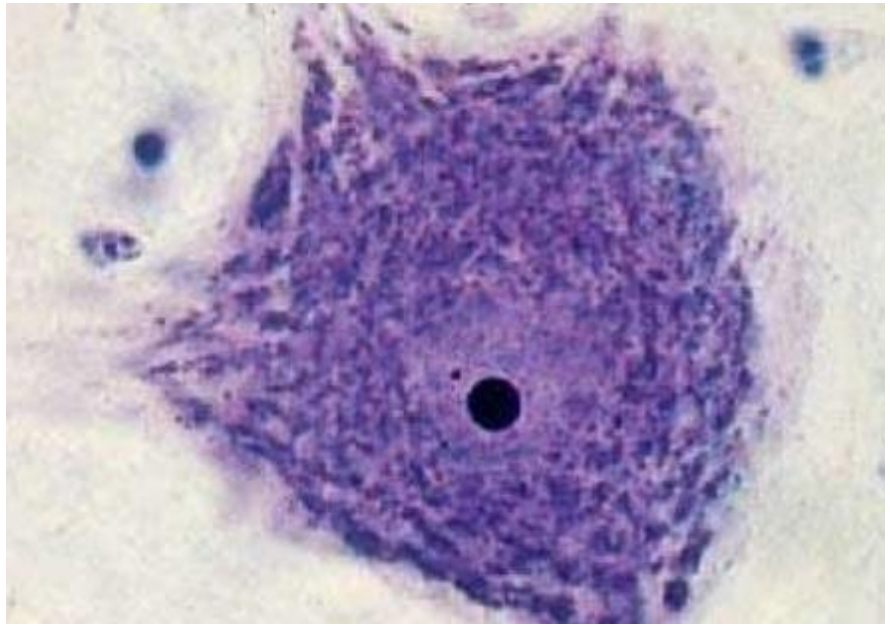
Paramesonephric duct develops into the female reproductive tract, including the fallopian tube, uterus and the upper part of the vagina

Müller's muscle (superior tarsal muscle)

Müller's muscle is a smooth muscle adjoining the levator palpebrae superioris muscle and inserting onto the superior tarsal plate of the eyelid



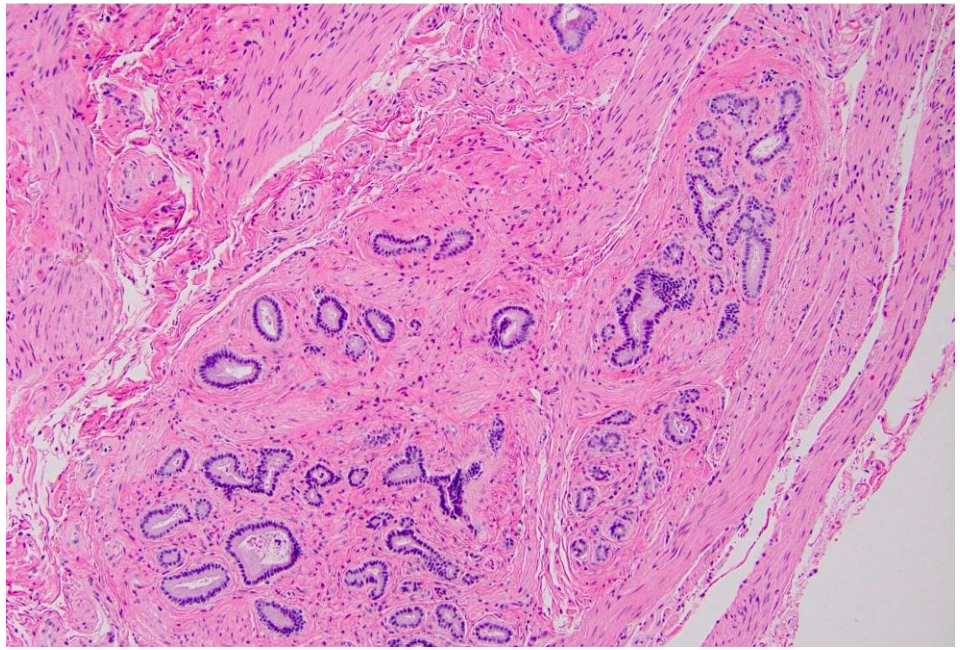
Nissle granule (Nissl body/tigroid substance)



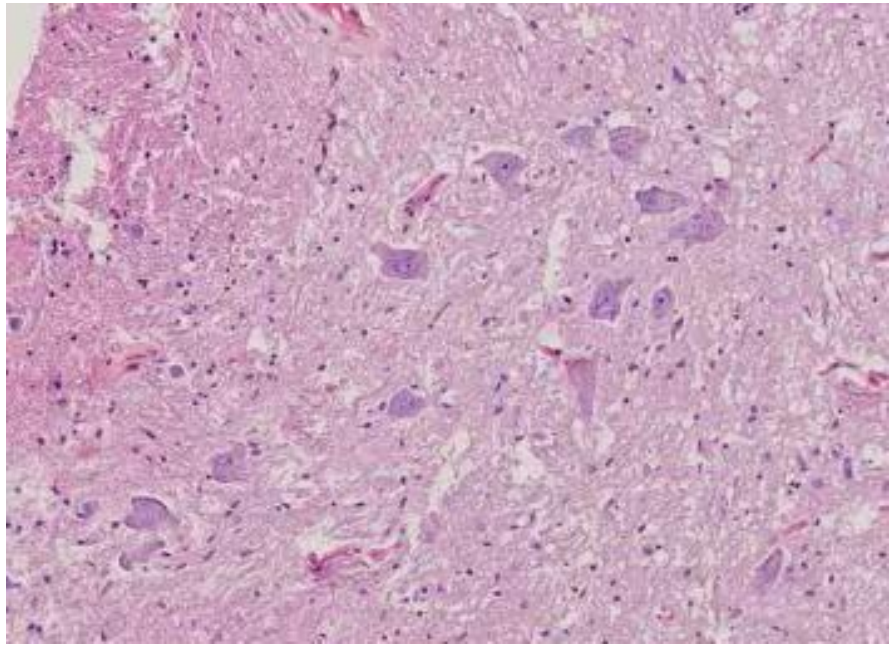
discrete granular structures in neurons, consisting of rough endoplasmic reticulum

Oddi's sphincter (hepatopancreatic sphincter)

The sphincter of Oddi is a muscular valve controlling the flow of bile and pancreatic juice at the ampulla of Vater.



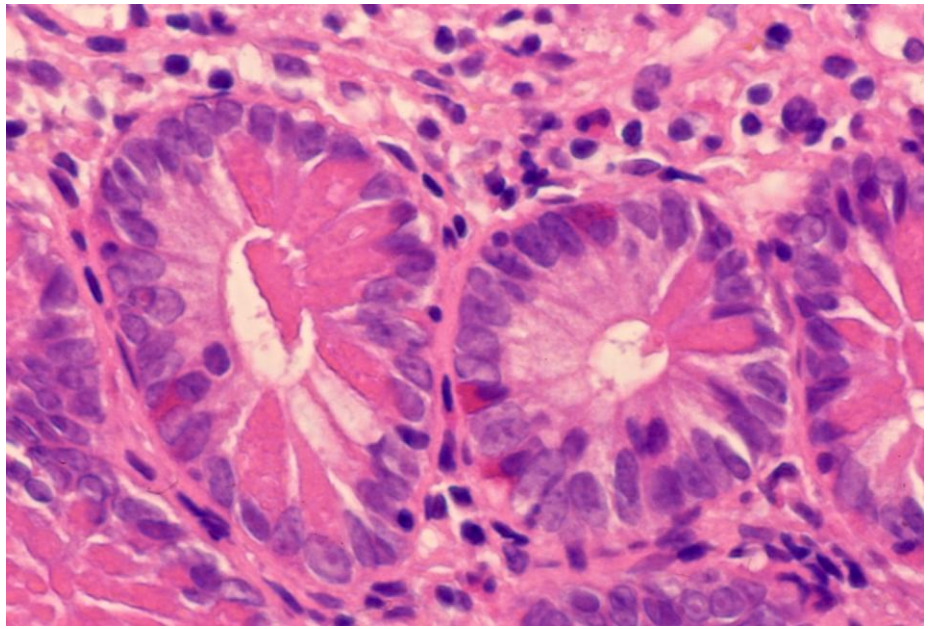
Onufrowicz' nucleus (Onuf's nucleus)



Onuf's nucleus, located in the anterior horn of the sacral region of the spinal cord, gives the origin of the pudendal nerve, to maintain micturition and defecatory continence, and muscular contraction during orgasm.

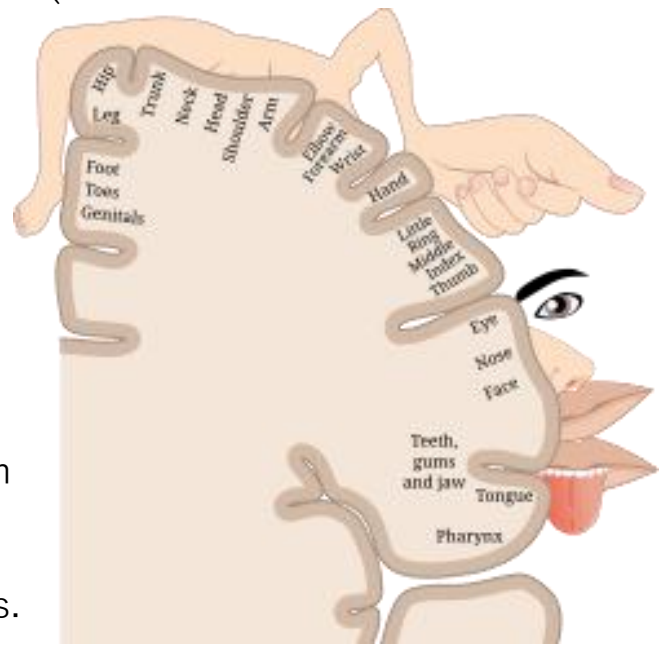
Paneth cell (antimicrobial cell in the small bowel)

Paneth cells with large eosinophilic granules seen in the crypt of the small bowel and vermiform appendix maintain the balance of the gut microbiome by secreting anti-microbial proteins (defensins and lysozyme).



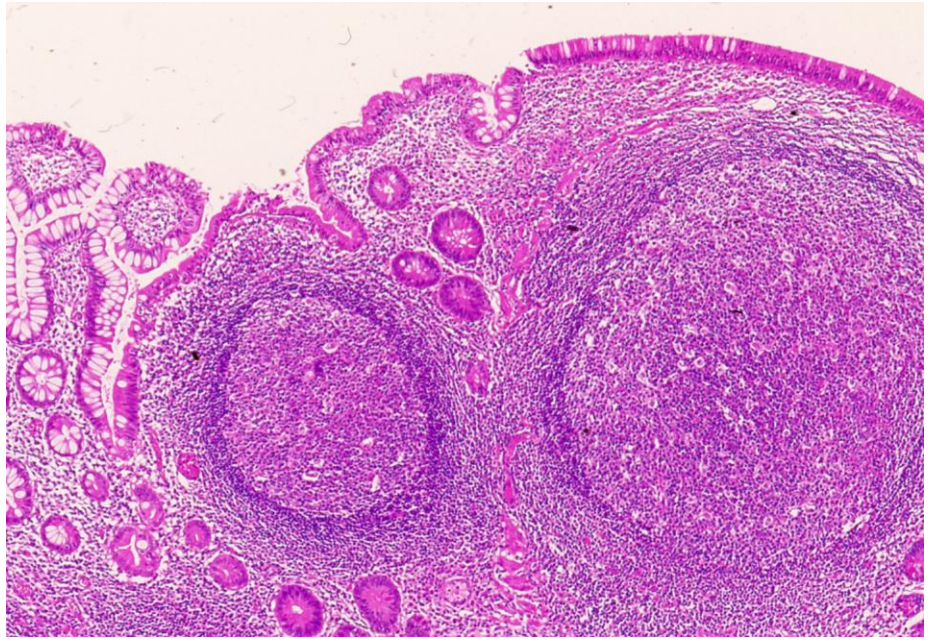
Penfield's homunculus (cortical homunculus: miniature of human)

A striking feature of the homunculus is the distorted appearance, known as cortical magnification
The motor homunculus in the primary motor cortex governs voluntary movements, while the sensory homunculus (shown here) resides in the primary somatosensory cortex, processing touch sensations.

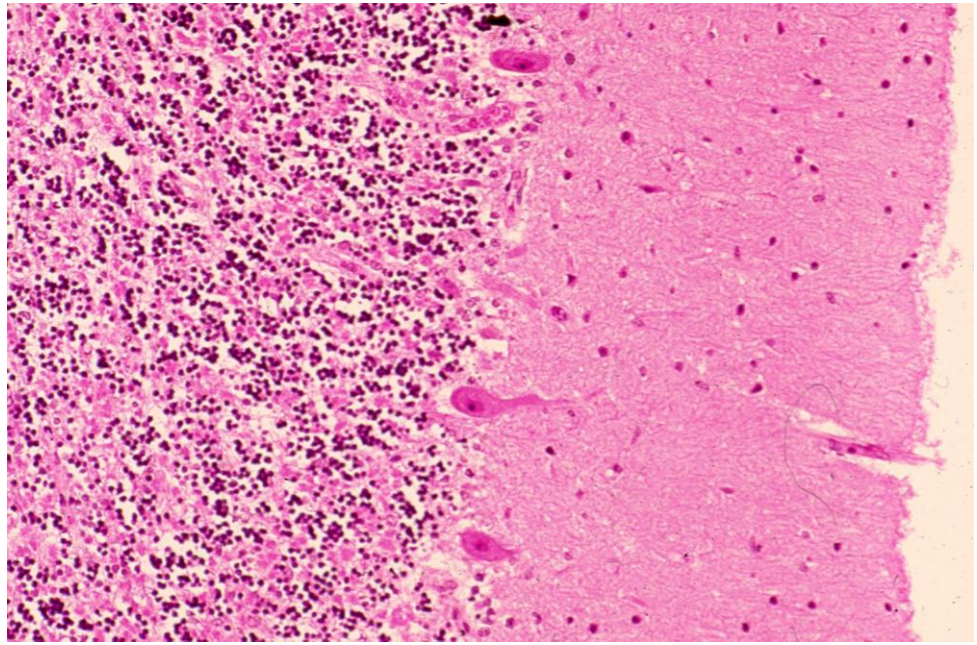


Peyer's patch (gut-associated lymphoid tissue)

Peyer's patch, elongated thickening of the intestinal mucosa measuring a few centimeters in length, consists of oval or round lymphoid follicles located in the mucosa through submucosal layer of the ileum.



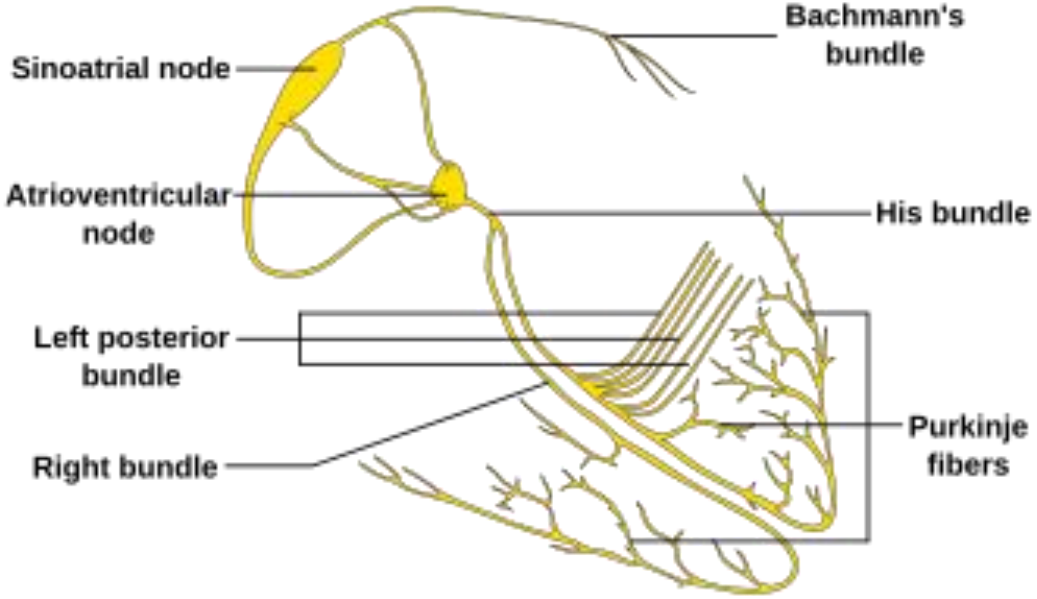
Purkinje cell (cerebellar cortical neuron)



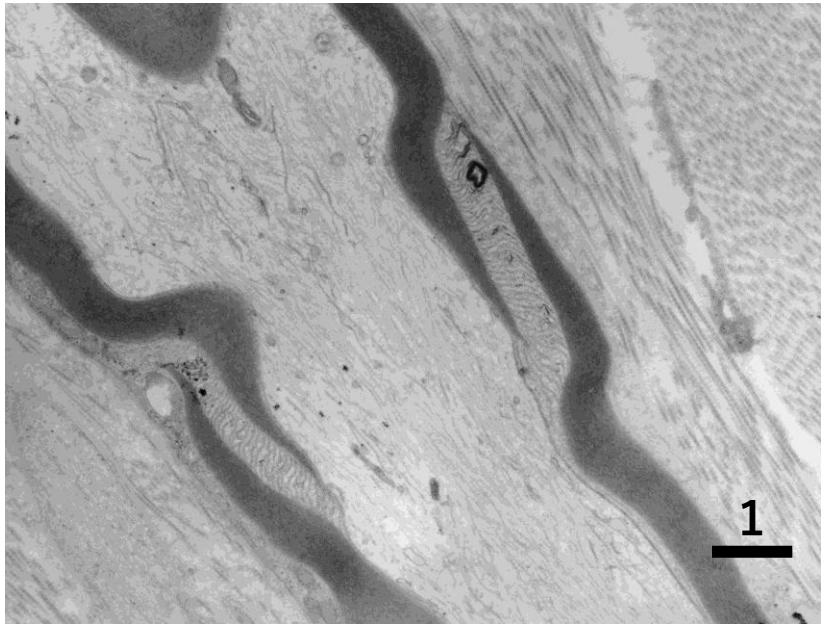
large cerebellar neurons located at the junction between molecular and granular layers

Purkinje fiber (subendocardial branch of conduction system)

Purkinje fibers are the branch of the His bundle originating from the sinoatrial (SA) node.



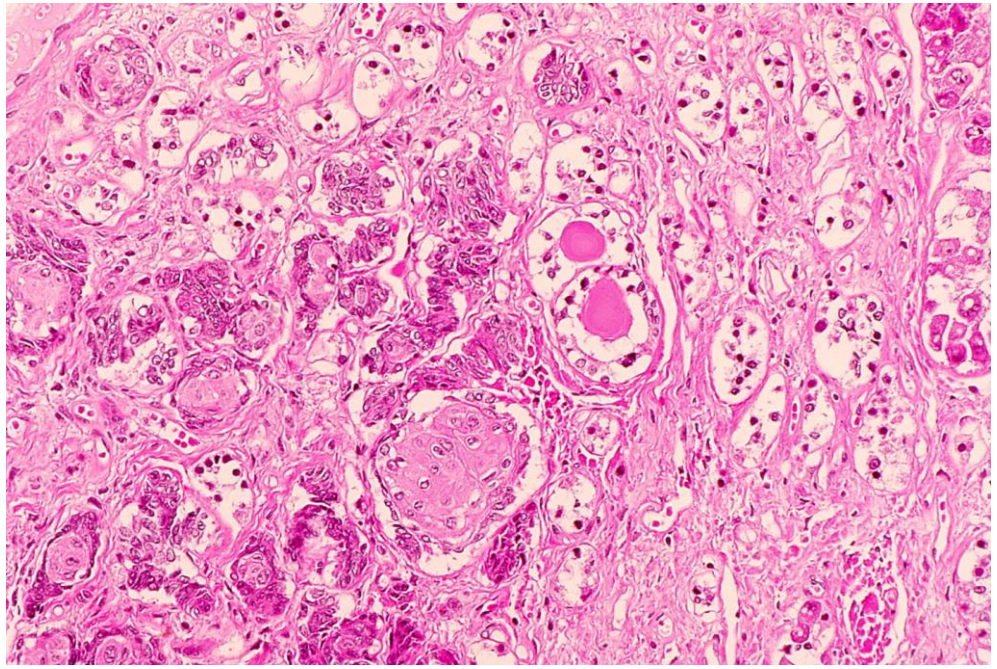
Ranvier's node (node of Ranvier)



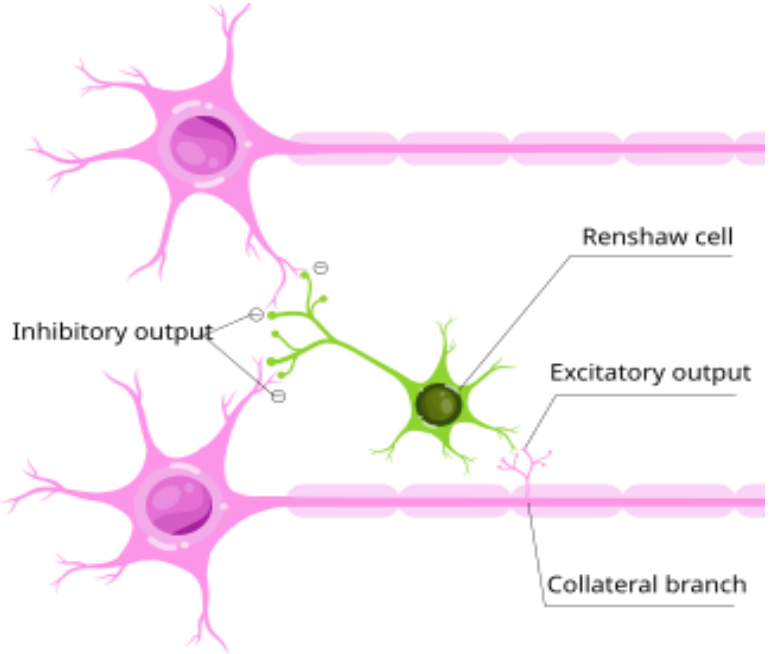
ultrastructure of the node of Ranvier with discontinuation of the myelin sheath (peripheral nerve)

Rathke's pouch (hypophyseal diverticulum)

ectodermal outpouching of the primitive oral cavity to form the adenohypophysis of the pituitary gland. It may persist at the stalk of the hypophysis.



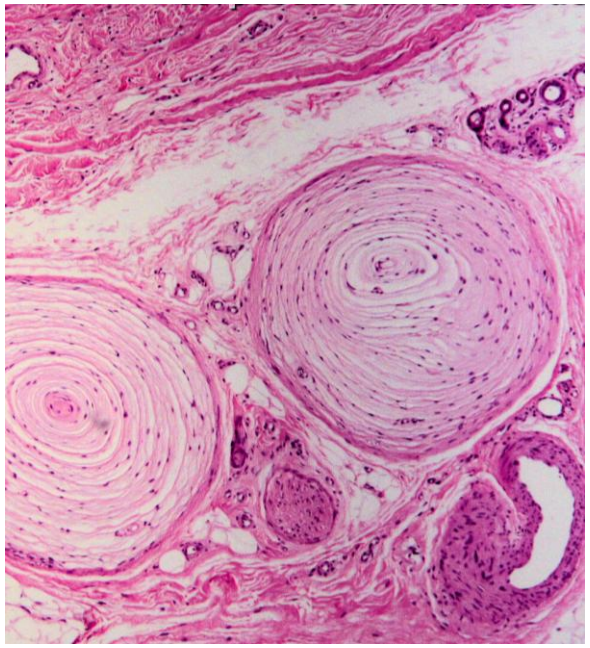
Renshaw cell (inhibitory interneuron)



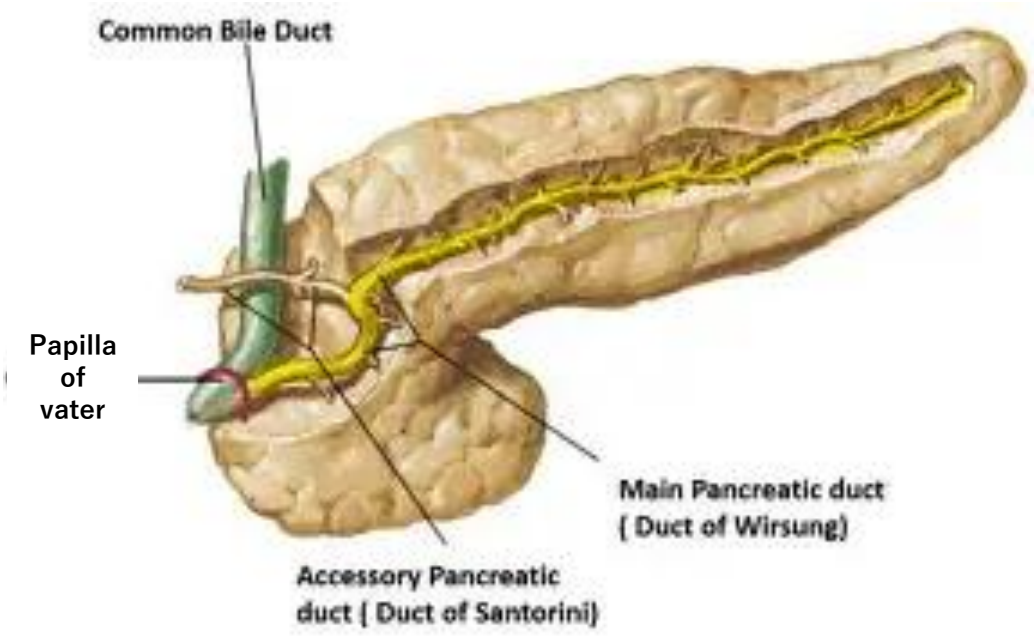
Renshaw cells, inhibitory interneurons found in the gray matter of the spinal cord, regulate the firing of the alpha motor neuron.

Ruffini's ending (bulbous corpuscle)

Ruffini ending is a slowly adapting mechanoreceptor, detecting low-frequency vibrations or pressure. It is located in the superficial dermis of both hairy and glabrous skin, and belongs to a subtype of lamellar corpuscles (Vater-Pacini or Pacinian corpuscles).



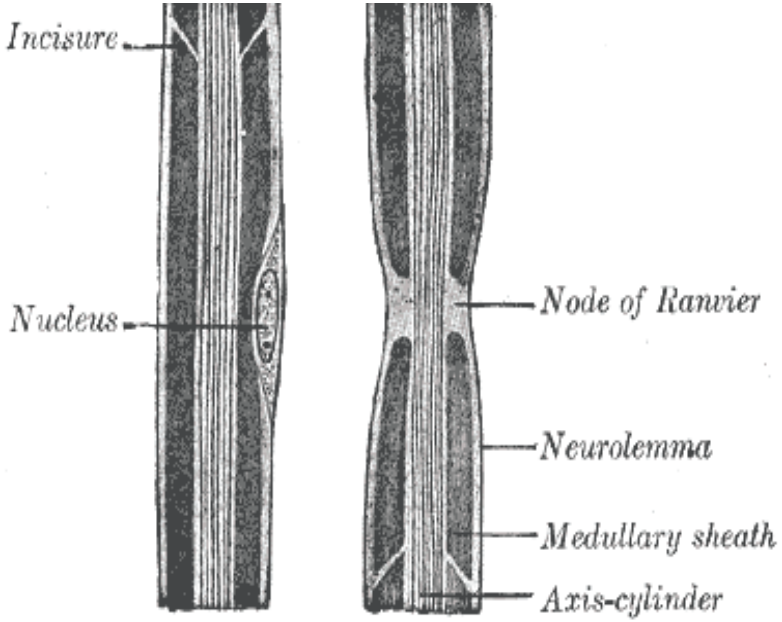
Santorini's duct (accessory pancreatic duct)



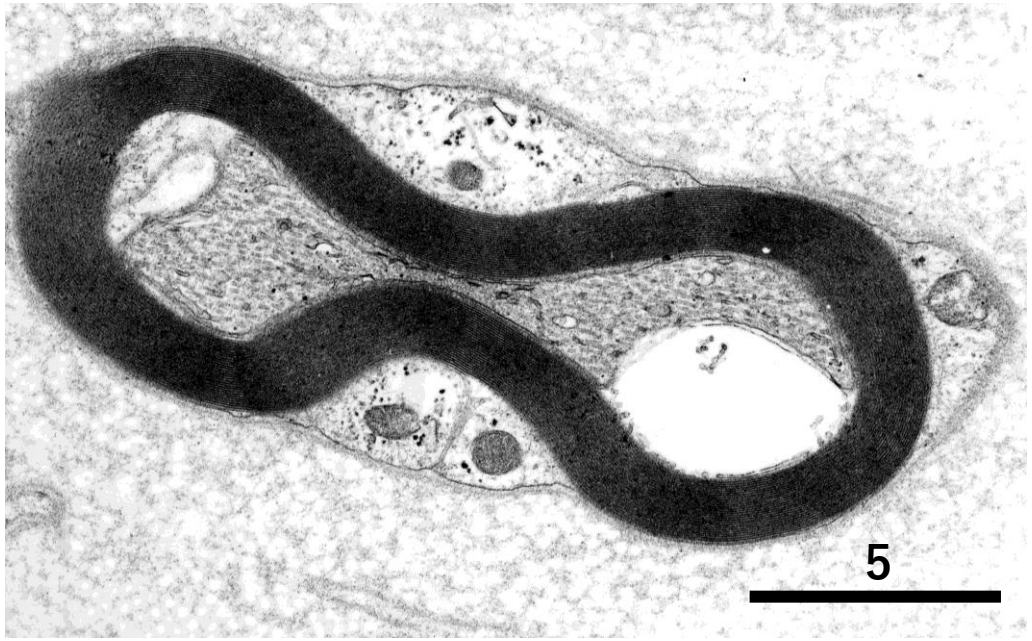
Santorini duct, deriving from the ventral anlage of the pancreas, plays a role in the drainage of pancreatic juice from the pancreatic head into the minor duodenal papilla. The presence of the Santorini duct varies among individuals, and is considered a normal anatomical variant.

Schmidt-Lanterman incisure (myelin incisure)

Schmidt-Lanterman incisure is a small pocket of the cytoplasm of Schwann cell, remaining in the inner layer of the myelin sheath. The incisure provides a communication channel between the cytoplasm of Schwann cell and the deepest layer of myelin sheath.



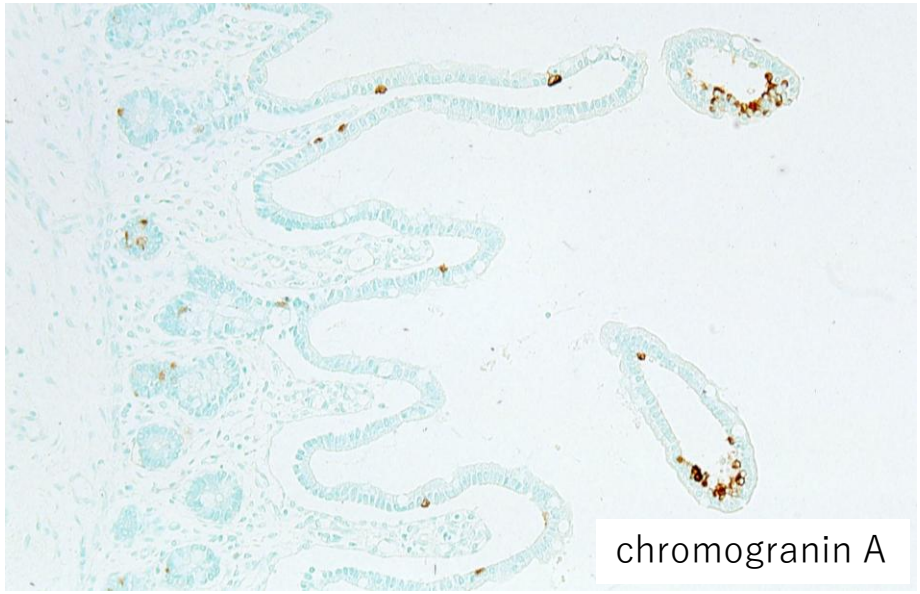
Schwann cell (neurolemmocyte)



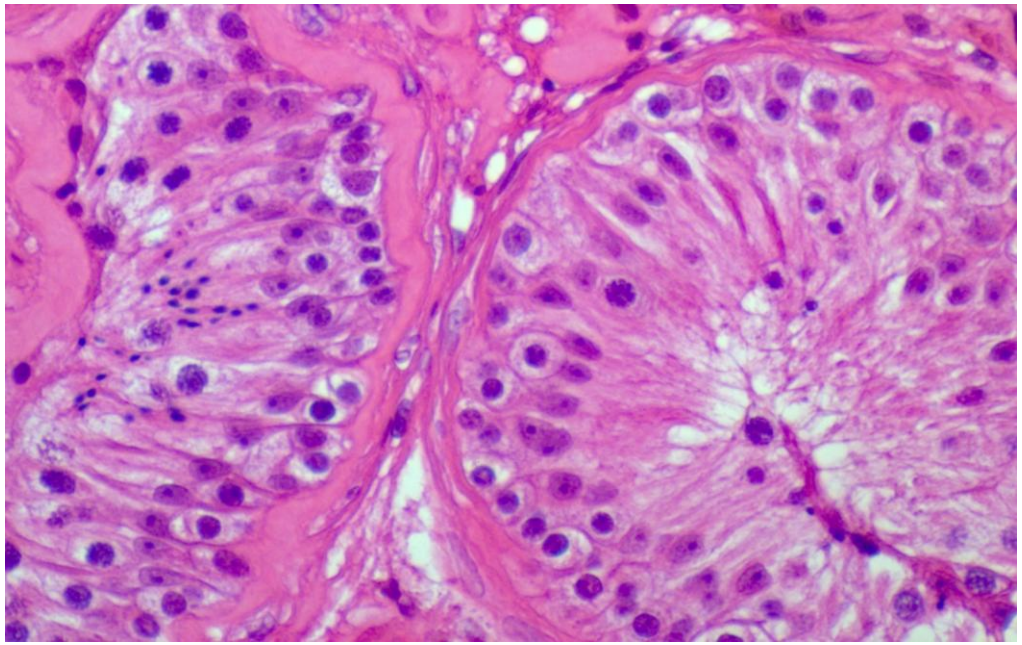
Ultrastructure of Schwann cell, the principal glia of the peripheral nervous system. There are two types: myelinating vs. non-myelinating.

Segi's cap (aggregation of basal granulated cells on the tip of fetal small bowel)

Segi's cap visualized by immuno-staining for chromo-granin A in the fetal duodenum at the 35th gestational week



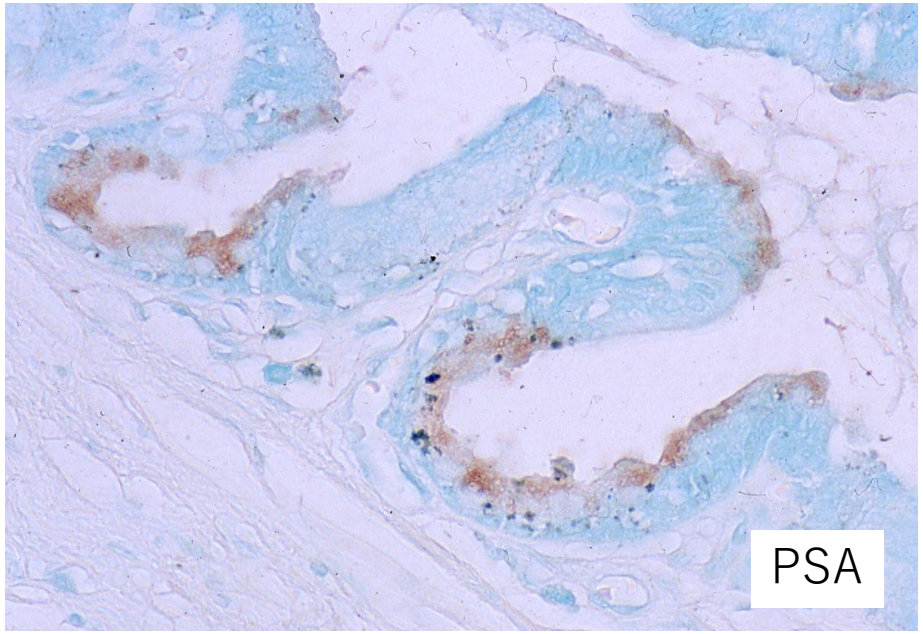
Sertoli cell (sustentacular nurse cell in the testis)



Sertoli cells contribute to spermatogenesis in the seminiferous tubules. In hypospermatogen-esis, Sertoli cells occupy the atrophic tubules, and the mature sperms attach onto the Sertoli cells.

Skene's gland (female paraurethral gland)

Skene's gland is located along the lower end of the female urethra, and is the source of female ejaculation. It represents female prostate, and the gland secretes PSA and PAcP.

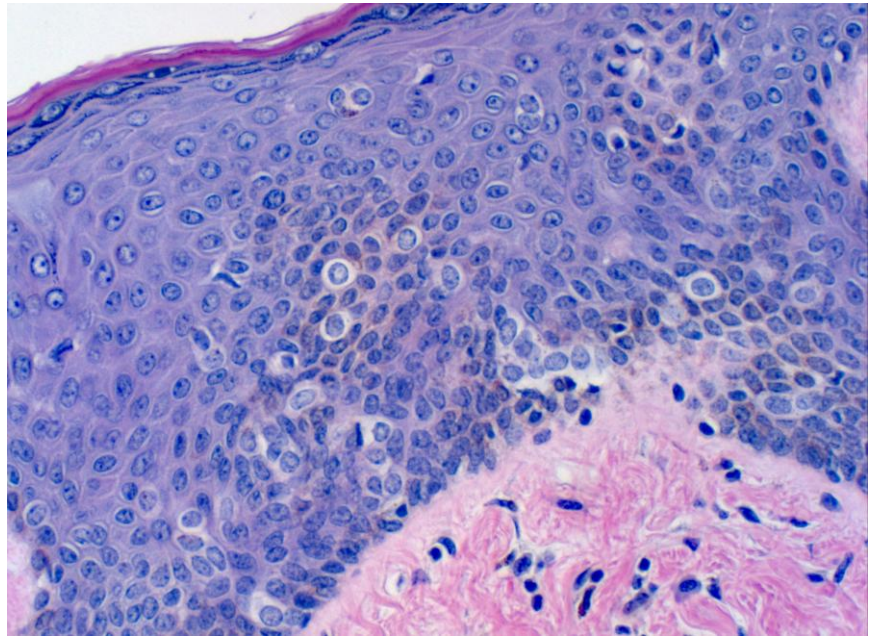


Sylvian fissure (lateral sulcus or lateral fissure)

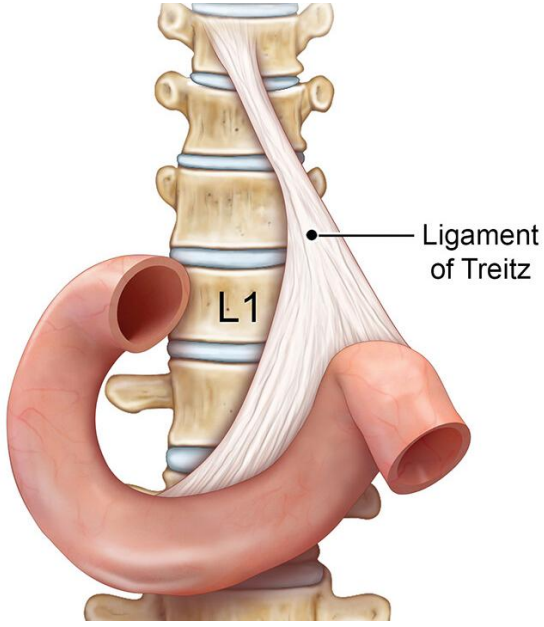
Silvian fissure separates the frontal and parietal lobes from the temporal lobe. The insular cortex lies deep within the lateral sulcus. In the present case, invasive malignant meningioma is located posterior to the fissure.

Toker cell (benign clear epithelial cell in the nipple)

Toker cell is a CK7-positive epithelial cell with clear cytoplasm in the nipple (51 y-o female patient). It may derive from the sebaceous gland. Distinction from Paget's disease is requested.



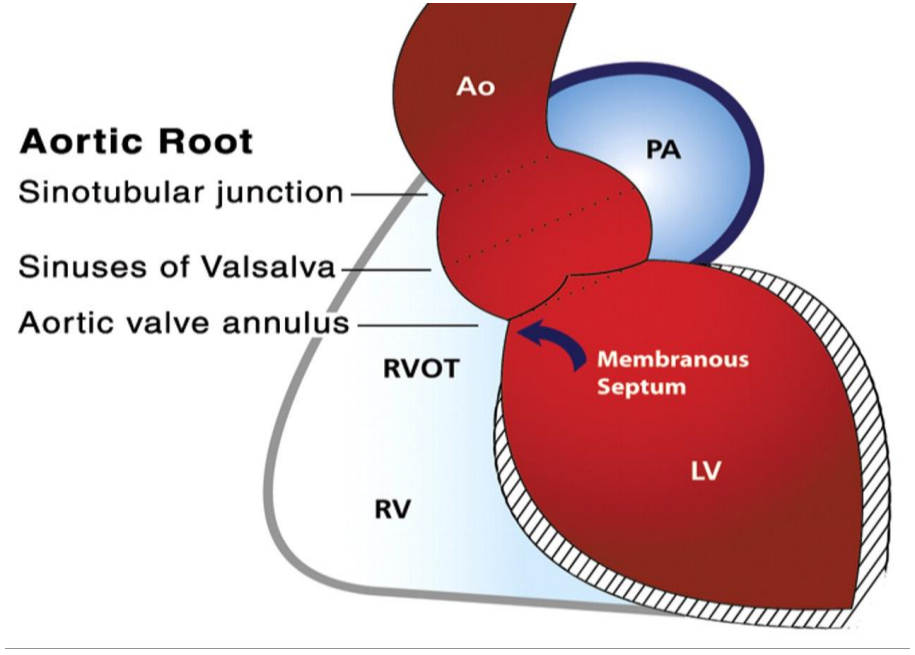
Treiz' ligament (suspensory ligament of the duodenum)



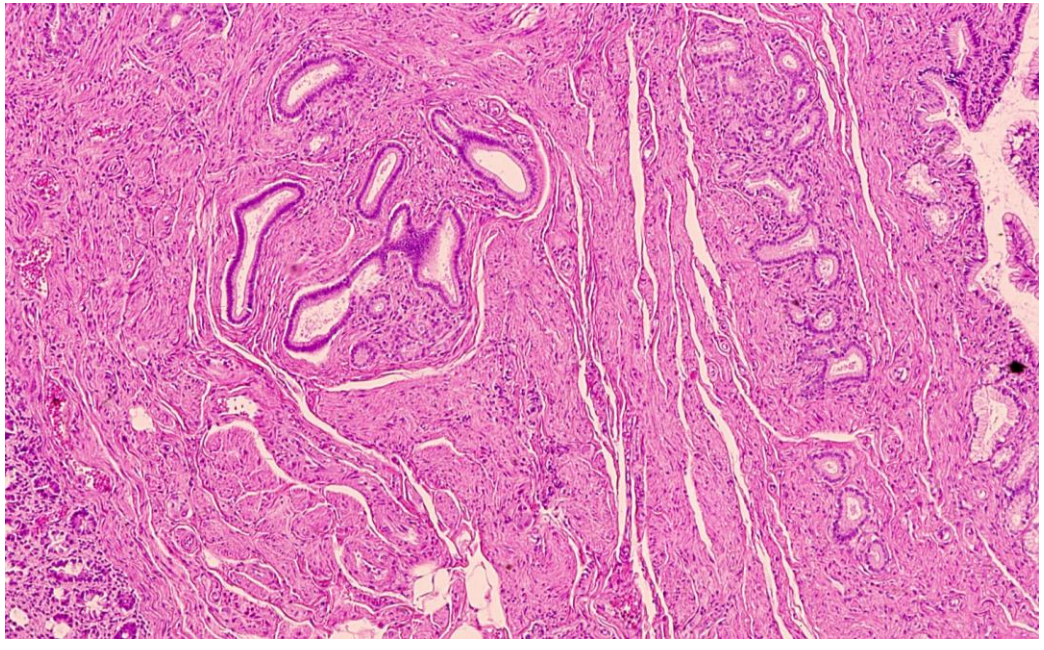
Treiz' ligament is a thin ligament connecting the junction between the duodenum and jejunum, surrounding the superior mesenteric and celiac arteries.

Valsalva sinus (aortic sinus)

one of the anatomic dilations of the ascending aorta, seen just above the aortic valve



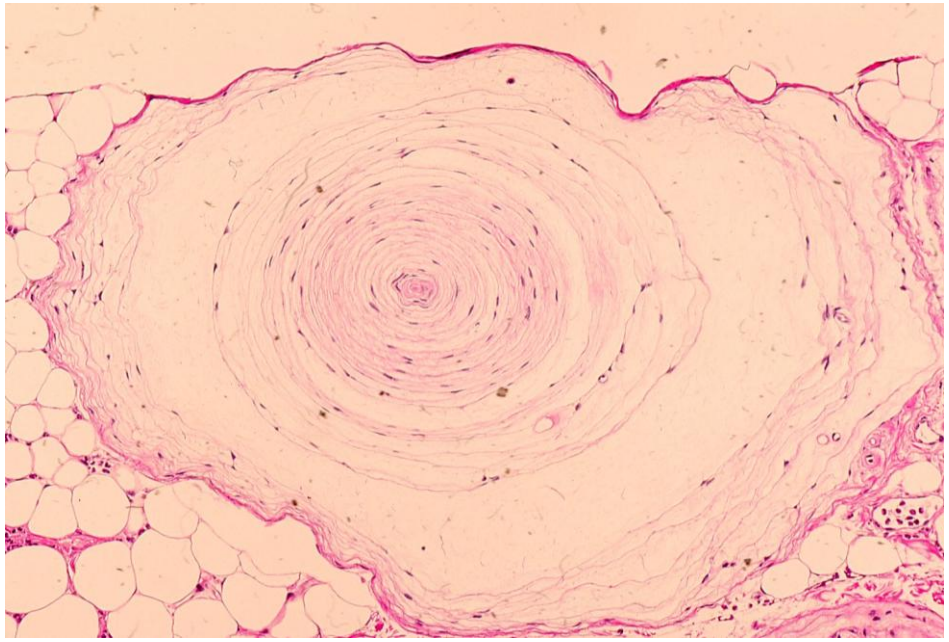
Vater's papilla (ampulla of Vater)



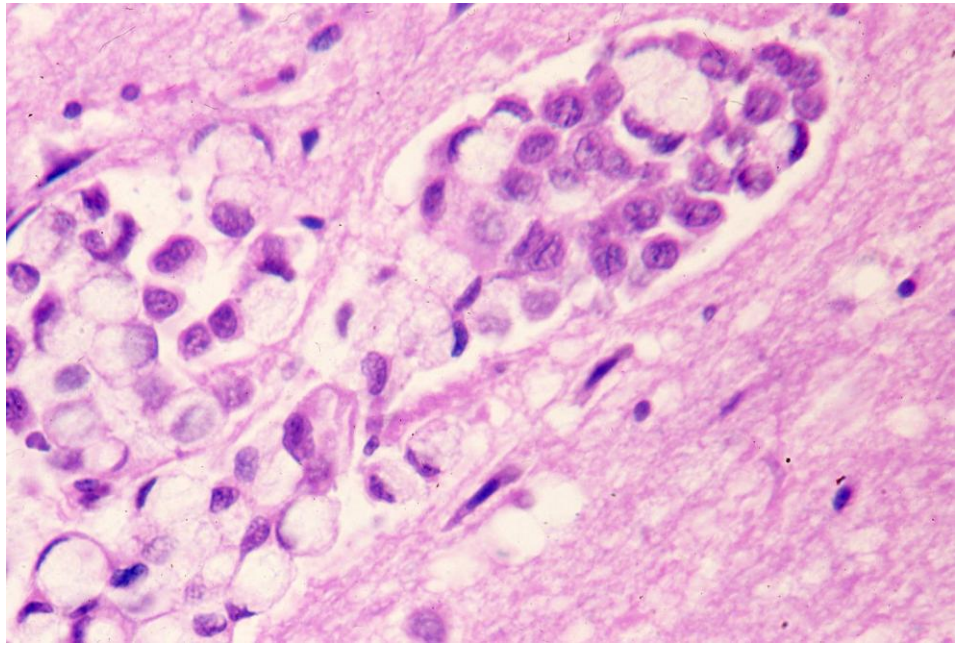
common duct formed by union of the common bile duct and the pancreatic duct within the duodenal wall

Vater-Paccini's corpuscle (Pacinian corpuscle)

mechano-receptor responsive to vibration or pressure, found in the skin and other internal organs



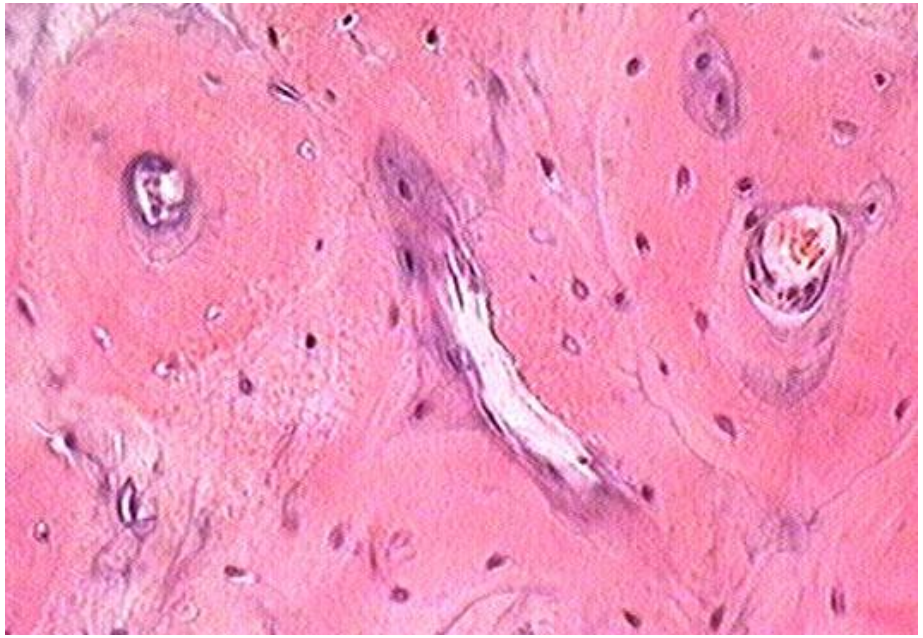
Virchow-Robin's space (perivascular space)



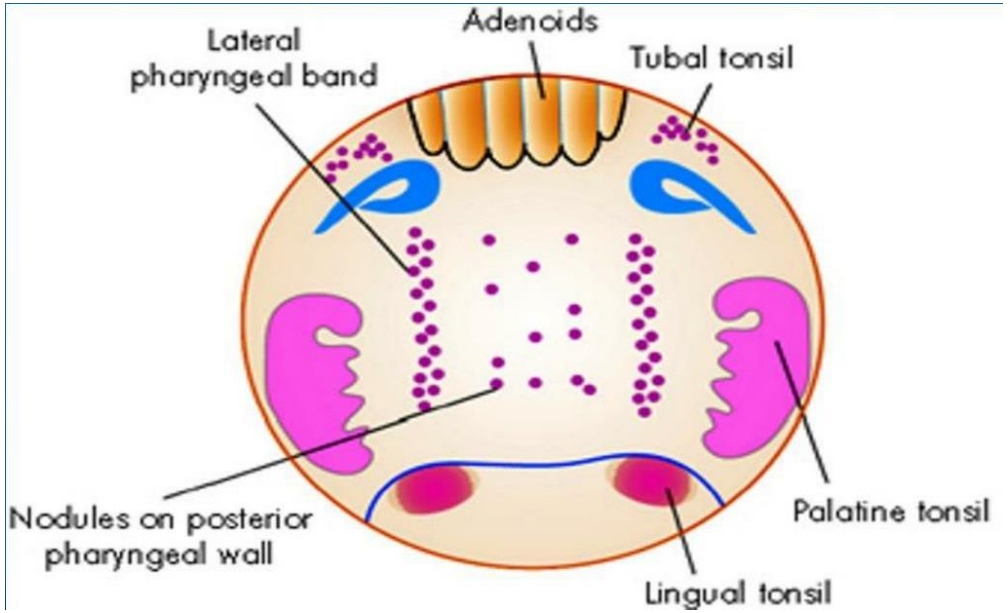
Virchow-Robin's space is a fluid-filled space around blood vessels, particularly in the brain. The space becomes the site of inflammation or cancer dissemination. Meningeal metastasis by gastric signet ring cell carcinoma is shown.

Volkmann's canal (perforating holes)

anatomic structures horizontally distributed in the cortical bone, to allow blood vessels to enter the bones from periosteum, and interconnecting the Haversian canals



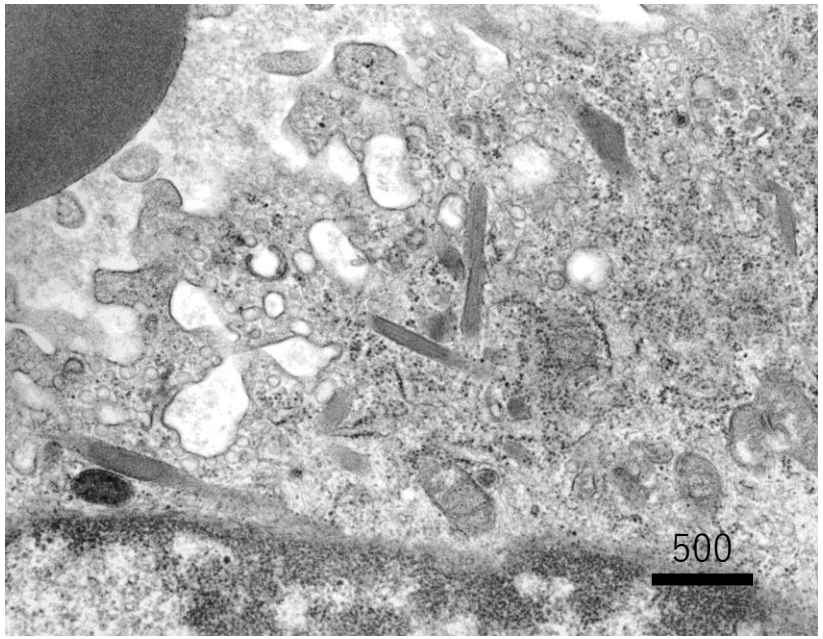
Waldeyer's tonsillar ring (Waldeyer's ring)



Waldeyer's ring is a virtically oriented tonsillar ring in the pharynx: pharyngeal, palatine and lingual tonsils.

Weibel-Palade body (endothelial secretory granule)

a small rod-shaped, storage and secretory granules in vascular endothelial cells and endocardial cells, but are absent from lymphatic vessels. They store P-selectin and von Willebrand factor, playing important roles in inflammation and hemostasis.

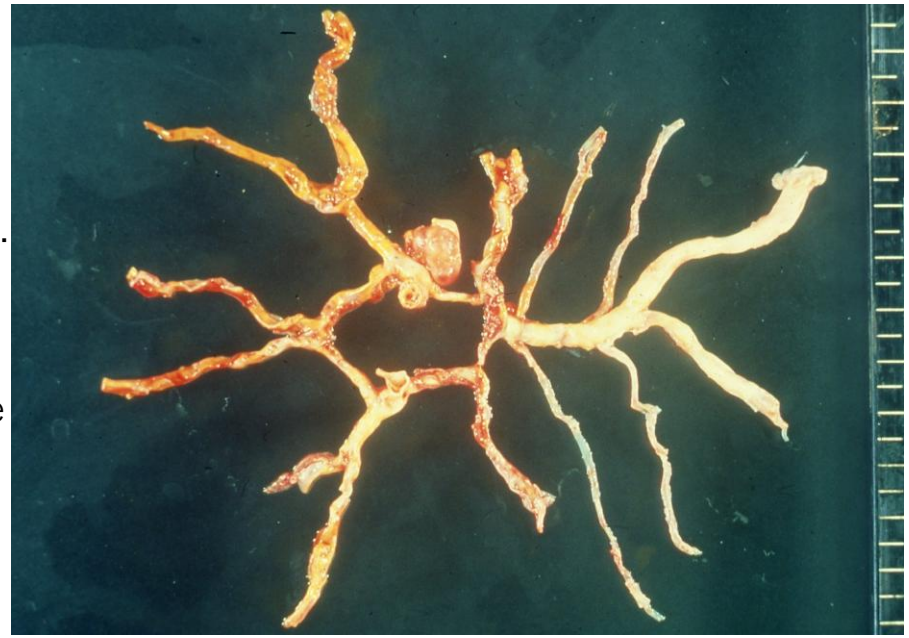


Wharton's jelly (gelatinous umbilical cord component)

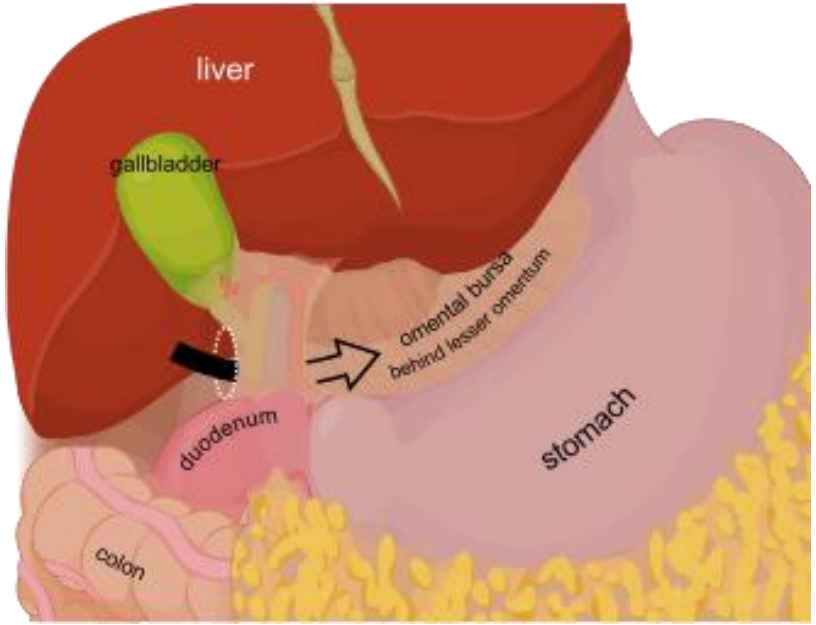
Wharton's jelly of the umbilical cord is rich in mucopolysaccharides (hyaluronic acid and chondroitin sulfate). Of note is that Wharton's jelly is an abundant source of mesenchymal stem cells, capable of differentiating into various cell types, including the bone, fat, cartilage and muscle cells.

Willis' circle (circle of Willis)

The circle of Wilis with right carotid artery aneurysm shown. The network provides a collateral blood flow between the anterior and posterior arterial systems of the brain.



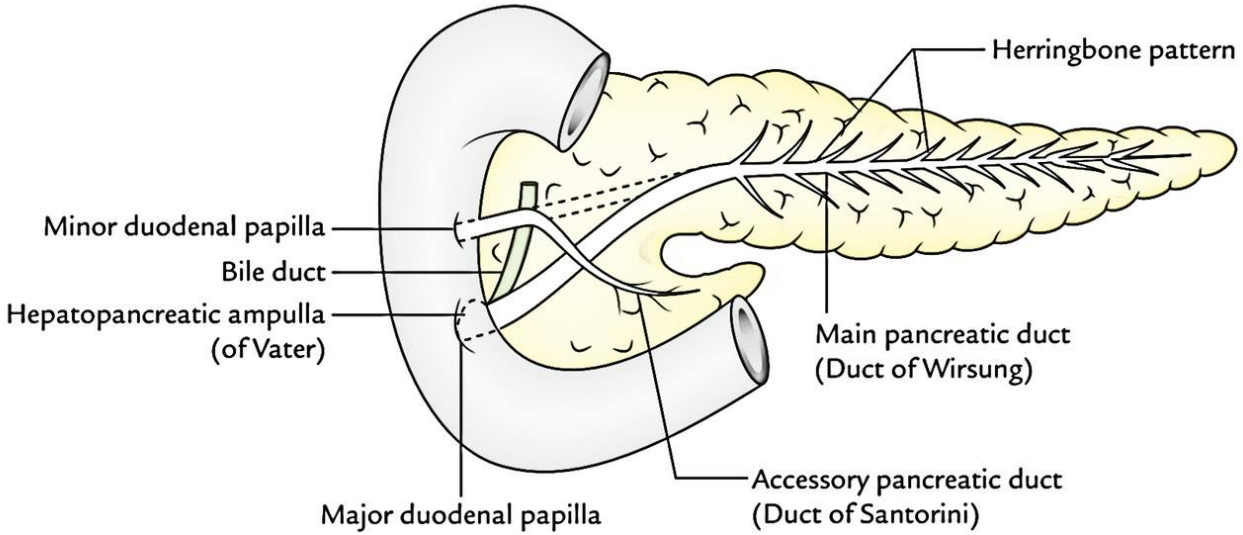
Winslow's foramen (omental foramen/epiploic foramen)



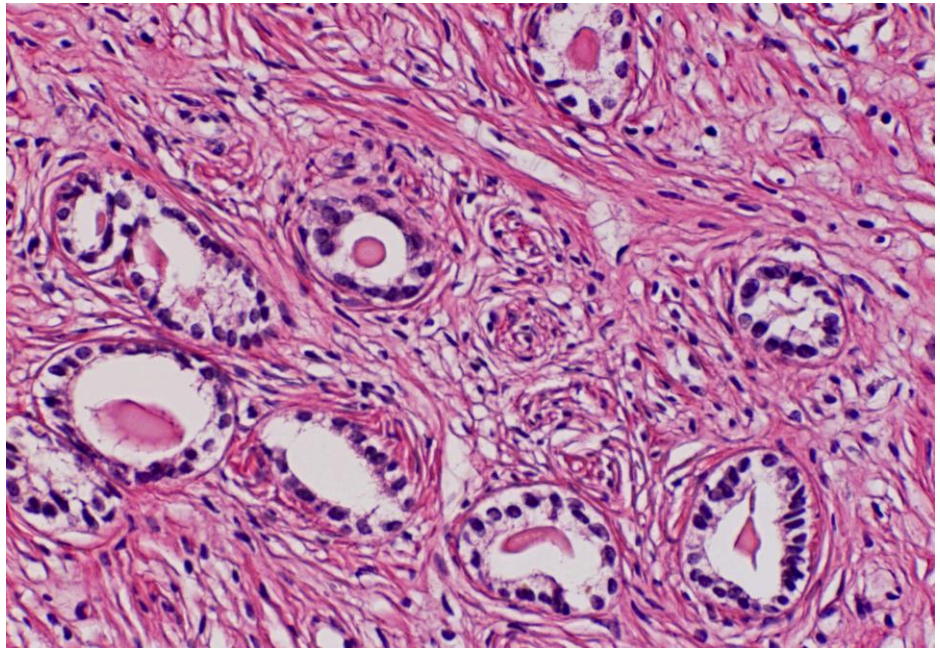
The foramen of Winslow is the passage of communication between the greater sac and the lesser sac (so-called hepatoduodenal ligament) of the peritoneal cavity. Entry to omental bursa (black arrow) by Winslow's foramen (white mark) (borrowed from: Wikipedia).

Wirsung's duct (main pancreatic duct)

(Wirsung's duct vs. Santorini's duct)



Wolffian duct (mesonephric duct)



Wolffian duct plays a crucial role in the development of male reproductive organs. In the female, the vestigial epoophoron may persist along the fallopean tube (figure, H&E).

Zinn's zonula (ciliary zonule)

Zonule of Zinn is a ring of fibrous strands connecting the ciliary body with the crystalline lens of the eye. The zonular fibers act like suspensory ligaments.

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Zuckerkandl organ (the largest paraganglion). Endo-102-Paraganglion

Zuckerkandl organ in the fetal retroperitoneum Is located adjacent to lymph node and celiac ganglion.