

Diseases, syndromes, lesions and methods with finder's name, T-Z

Diseases, syndromes, lesions and methods with finder's name, beginning with T-Z, are summarized: T = 5 disorders, U = 1 disorder, V = 16 disorders, W = 26 disorders, Z = 8 disorders. Representative figures are illustrated in the respective disorders.

T = 5 disorders, U = 1 disorder, V = 16 disorders,
W = 26 disorders, Z = 8 disorders

T: Takayasu aortitis, Tay-Sachs disease, Touton giant cell, Trousseau's syndrome, Turner syndrome

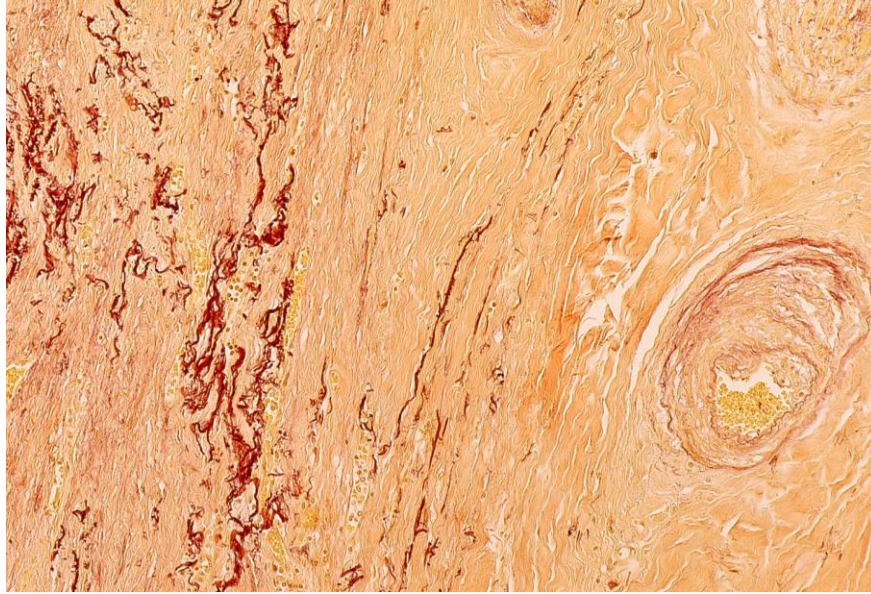
U: Unna's nevus

V: Valsalva retinopathy, Valsalva sinus aneurysm, Van Gieson stain, Venereal disease, Vidal's lichen, Virchow's lymph node metastasis, Virchow's method vs Rokitansky method, Virchow's triad, Vogt-Koyanagi-Harada's disease, von Brunn's nests, von Gierke's disease, von Hippel-Lindau's disease, von Kossa stain, von Myenburg complex, von Recklinghausen's disease, von Willebrand disease

W: Waldenström's macroglobulinemia, Wallerian degeneration, Walthard cell nest. Warthin's tumor, Warthin-Finkeldey giant cell, Warthin-Starry stain, Watanabe's silver impregnation, Waterhouse-Friderichsen syndrome, Weber-Christian disease, Wegener's granulomatosis, Weil's disease, Well's syndrome, Werding-Hoffmann's disease, Wermer syndrome, Werner syndrome, Wernicke encephalopathy, Whipple's disease, Wickham's striae, Willis' circle occlusion, Wilms tumor, Wilson-Mikity syndrome, Wilson's disease, Wiskott-Aldrich syndrome, Wolffian duct cyst, Wolf's isotopic response, Wolman's disease

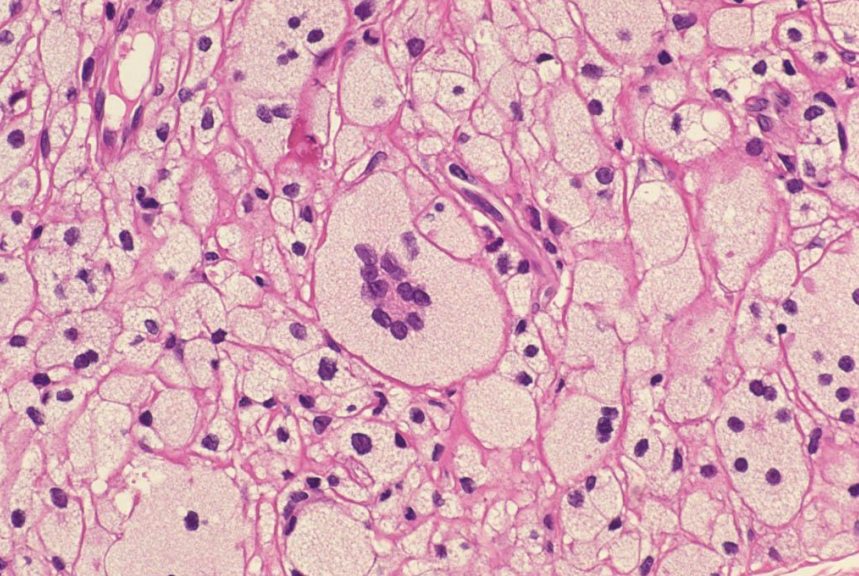
Z: Zahn infarct, Zamboni's fixative, Zellweger syndrome, Zenker's diverticulum, Zenker's fixative, Ziehl-Neelsen stain, Zollinger-Ellison syndrome, Zoon balanitis

Takayasu aortitis (autoimmune aortitis)
Vascular-74-1-aorta and Vascular-74-2-aorta



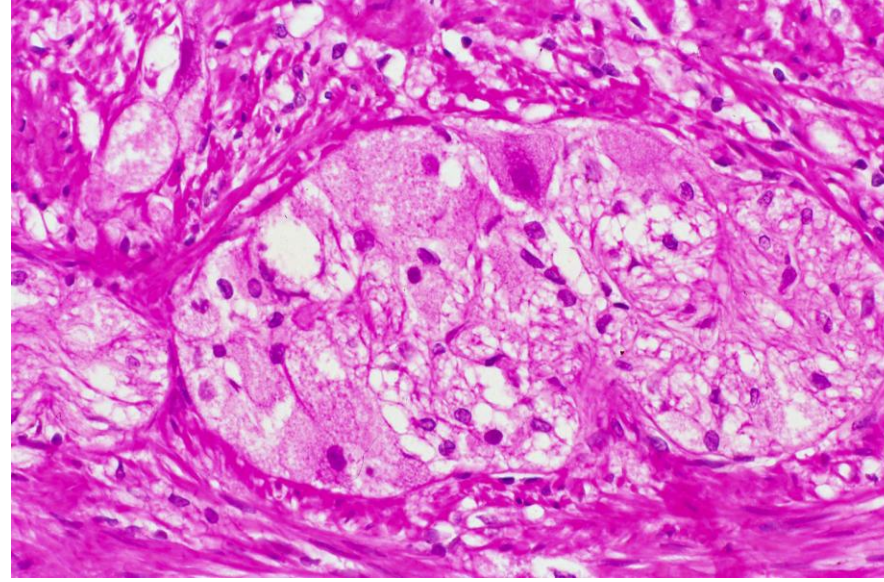
moth-eaten
decrease of
the medial
elastic
lamina and
involvement
of vasa
vasorum
(EVG)

Touton giant cell (multinucleated foamy giant cells in xanthogranulomas). Sk-560-BNENeo



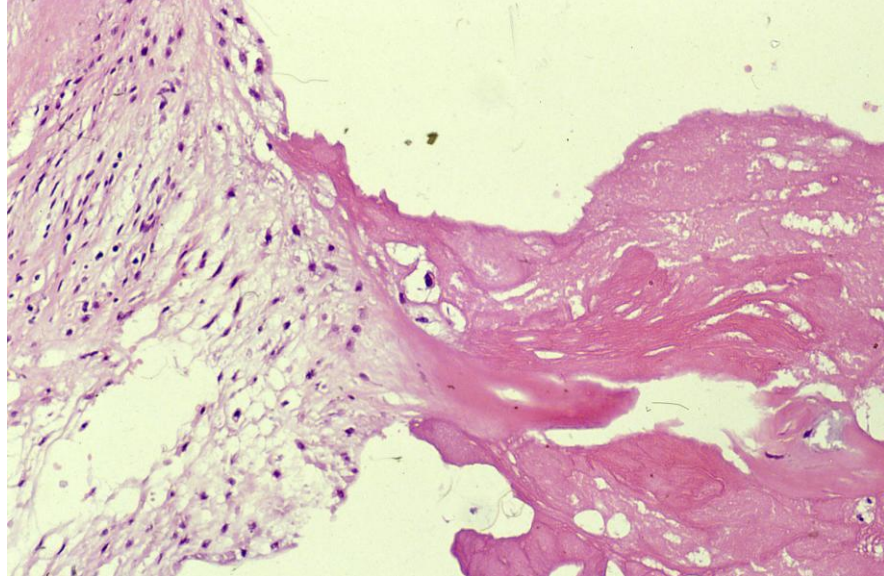
In Touton
giant cell,
the nuclei
are
clustered
in the
center of
the foamy
cytoplasm.

Tay-Sachs disease (GM2 gangliosidosis, lysosomal storage disease). neuro-24-brain, GI-337-colorectum



deposition of
GM2
gangliosides in
ganglion cells
of Auerbach's
plexus of the
colon

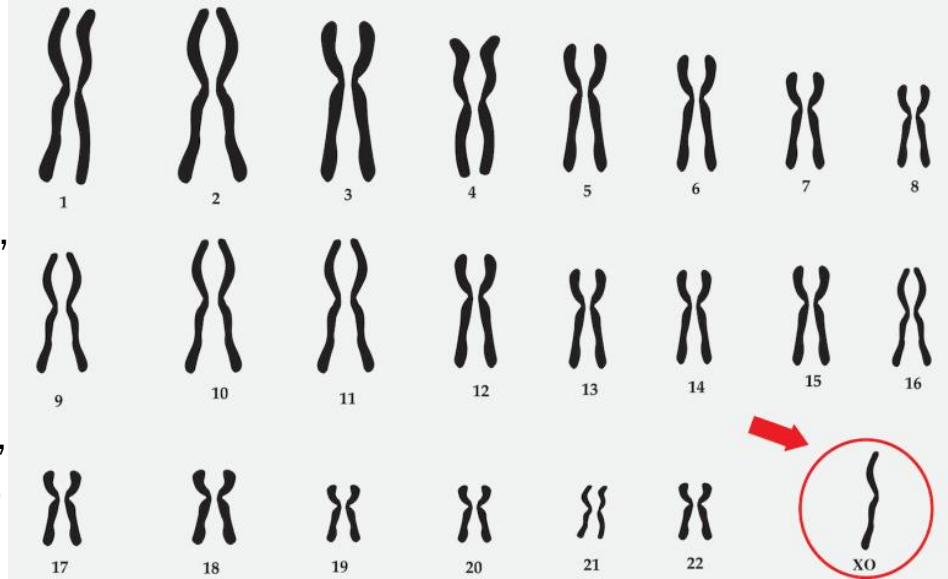
Trousseau's syndrome (solid cancer-associated thrombosis). Vascular-55-2-valve



non-bacterial
thrombotic
endocarditis on
the mitral valve,
causing multiple
cerebral
infarction in a
case of pancreas
head cancer

Turner syndrome (karyotype 45XO: phenotype: female, missing second sex chromosome (encircled)).

DPE-
General-1



short stature,
cardiovas-
cular issues,
endocrine
dysfunctions,
and numbers
of nevi.

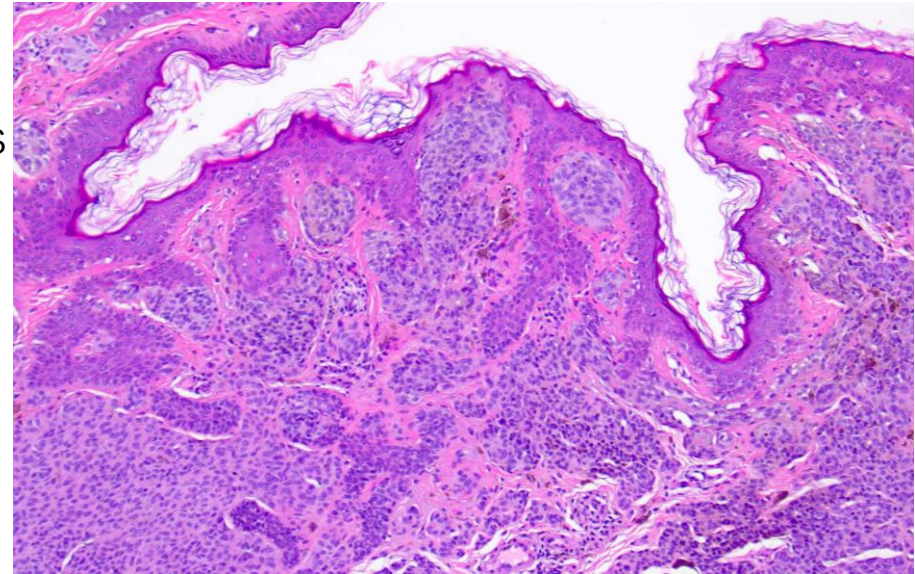
Valsalva retinopathy (retinal bleeding)

Valsalva retinopathy is a preretinal hemorrhage caused by a sudden increase in intrathoracic or intraabdominal pressure. Hemorrhage occurs due to spontaneous rupture of retinal capillaries.



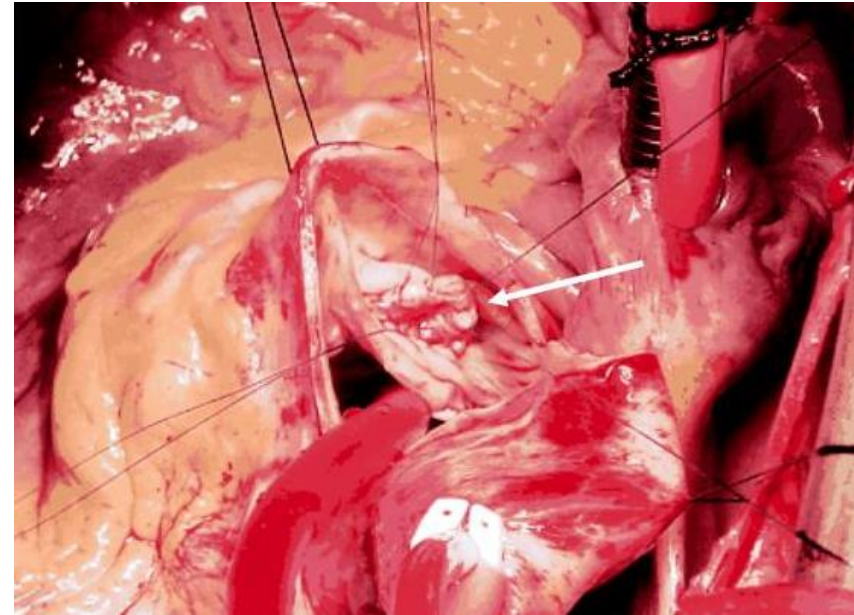
Unna's nevus (polypoid/sessile papillomatous intradermal melanocytic nevus located on the trunk, arms and neck).

Sk-
399-
Nevus



Unna's
nevus
somewhat
resembles
a raspberry,
protruding
from the
surface of
the skin

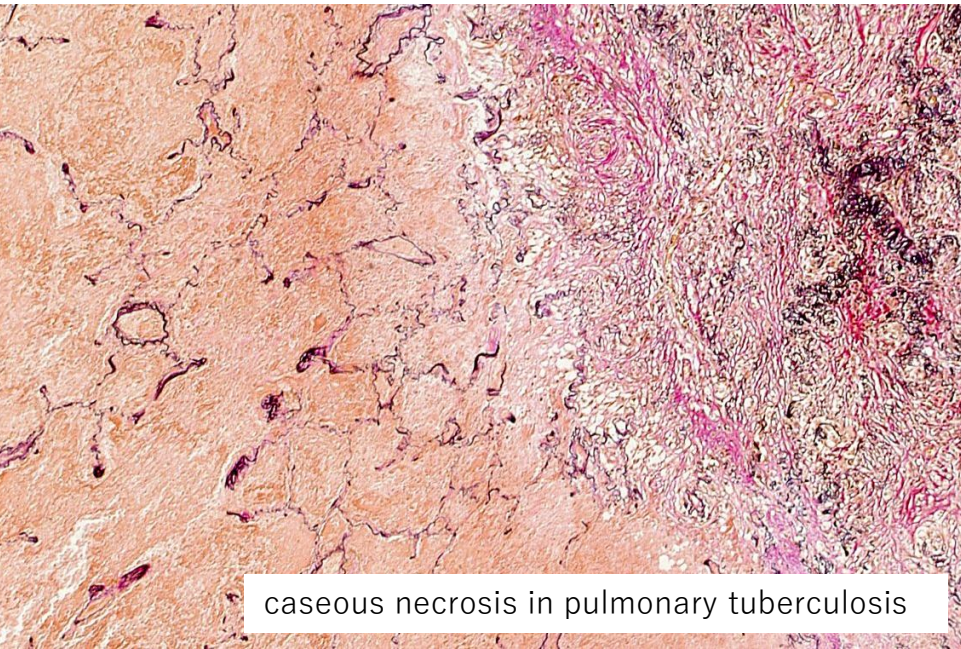
Valsalva sinus aneurysm (aortic sinus aneurysm)



The normal aorta has three small pouches located above the aortic valve called (Valsalva sinuses). Valsalva sinus aneurysm affects the right (65–85%), non-coronary (10–30%) or rarely the left (< 5%) coronary sinus. Rupture of the aneurysm may occur.

Van Gieson stain (commonly used as elastica Van Gieson stain)

Van Gieson stain containing picric acid and acid fuchsin is useful for differentiating between collagen fiber (stained red) and other tissue elements (stained yellow) in sections. Commonly, it is combined with Weigert's elastica stain as "elastica Van Gieson (EVG) stain". The elastic fibers are stained black.



caseous necrosis in pulmonary tuberculosis

Venereal disease (morbus venereus: malady of Venus), sexually transmitted diseases originated from "illicit love".

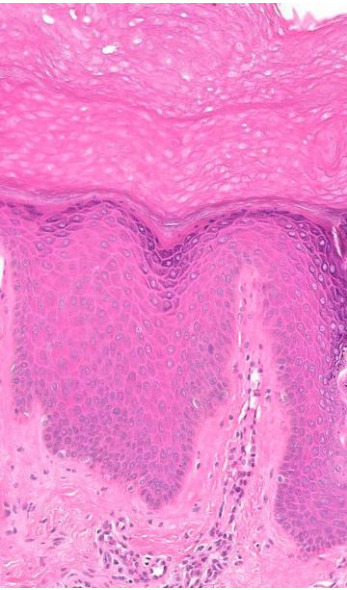


The 2nd stage syphilis: palmar eruptions. Also called lues venerea.

Vidal's lichen (lichen Vidal, lichen simplex chronicus, chronic prurigo). Sk-16-a-Lich



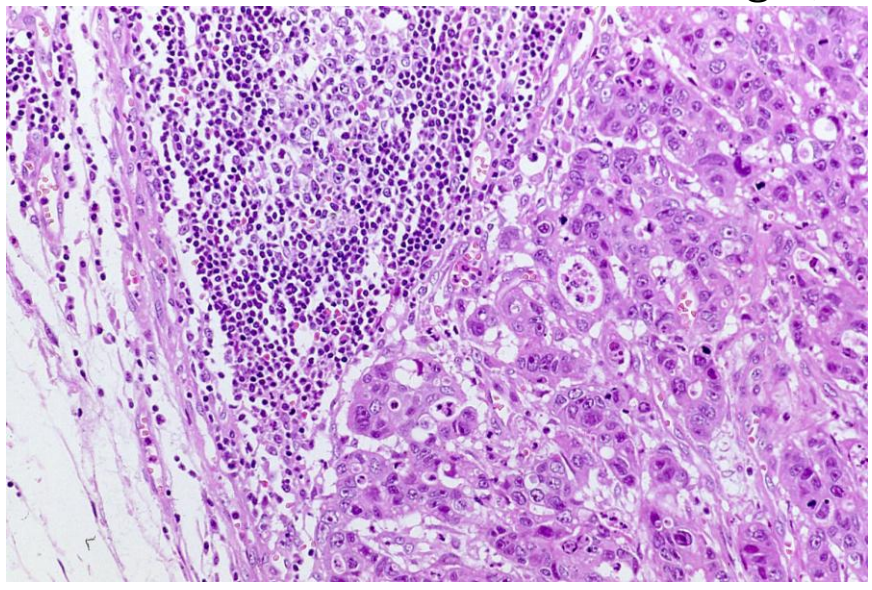
a chronic eczema-like pruritic lesion on the neck



Virchow's lymph node metastasis (left subclavian node metastasis from cancer of abdominal origin)

Hemato-160-3-LN

Virchow metastasis of gastric adenocarcinoma



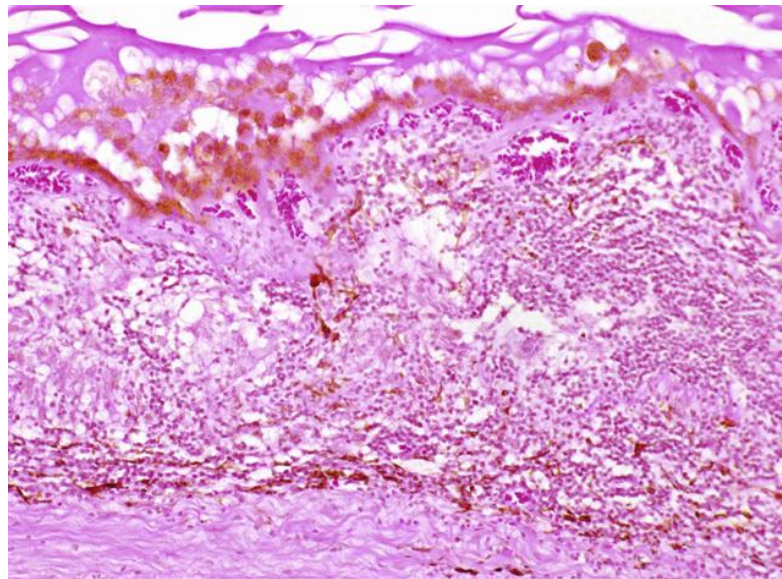
Virchow's method vs. Rokitansky's method (traditional evisceration techniques of autopsy)

Virchow's method and Rokitansky's method are commonly used traditional evisceration techniques of autopsy. In Virchow's method, the organs are removed one by one, while in Rokitansky's method the organs are removed en bloc, as shown here. Topographic relationship between the organs (liver, gallbladder, pancreas and spleen) are clearly visible.



Vogt-Koyanagi-Harada's disease (autoimmune disorder affecting melanocytes, resulting in loss of vision (uveitis) and hearing). Eye-9-a

dense infiltration of lymphocytes and derangement of the melanocytes in the biopsied thickened iris



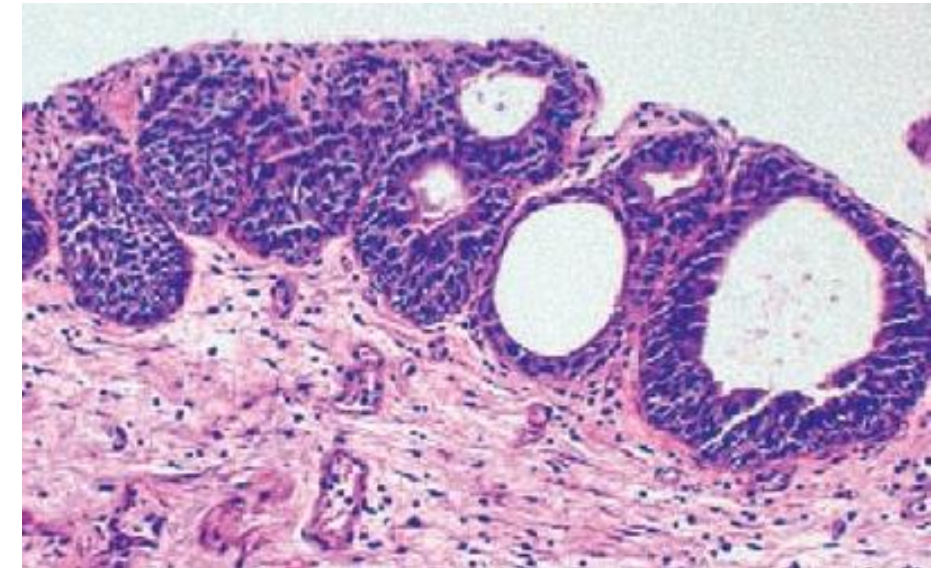
Virchow's triad (mechanisms of thrombosis)



Rudolf Ludwig Karl Virchow (1821-1902) is known as the father of modern pathology. He identified mechanisms of pulmonary thrombosis. The 3 factors of Virchow's triad include 1) intravascular vessel wall damage, 2) stasis of flow, and 3) a hypercoagulable state.

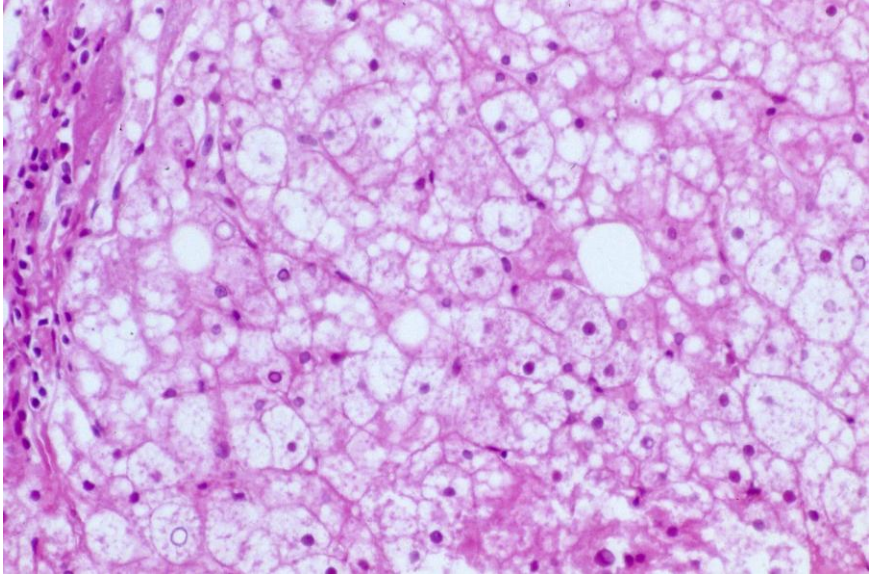
von Brunn's nests (invaginated clustered benign urothelial cells in the superficial lamina propria). Uro-123-ureter

von Brunn's nests in the urinary bladder



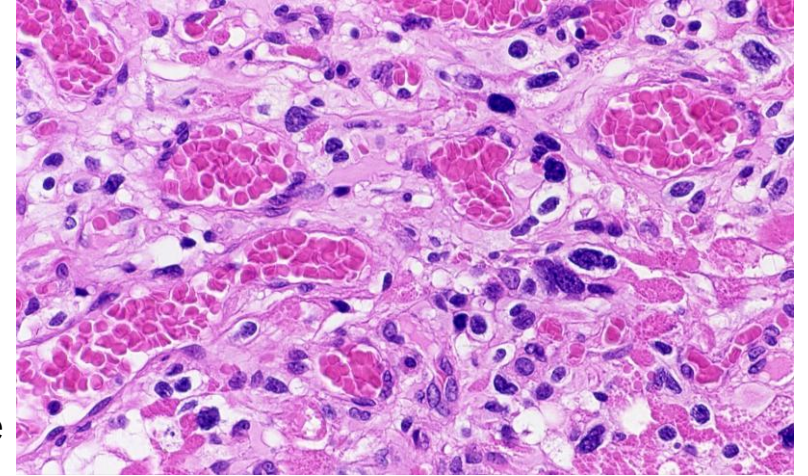
von Gierke's disease (glycogen storage disease, type 1: G6Pase deficiency). HBP-99-1-1-liver, HBP-99-1-2-liver

liver biopsy from a 22 y-o female patient. Glycogen deposition is seen in the cytoplasm and nuclei of hepatocytes. Fatty change is associated.



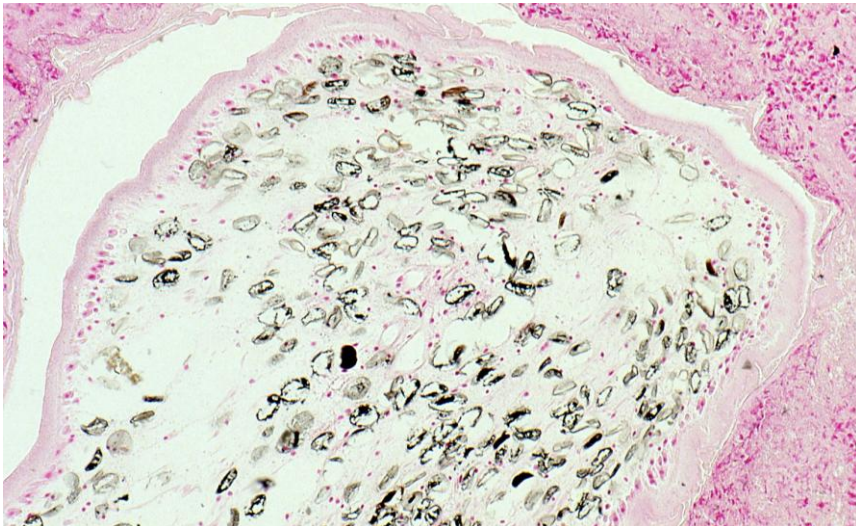
von Hippel-Lindau's disease (autosomal dominant disease accompanying hemangioblastoma, renal cell carcinoma and pheochromocytoma. neuro-101-1-brain, neuro-101-2-brain, Uro-93-kidney, Endo-87-1-Adrenal

hemangioblastoma of the cerebellum in von Hippel-Lindau's disease

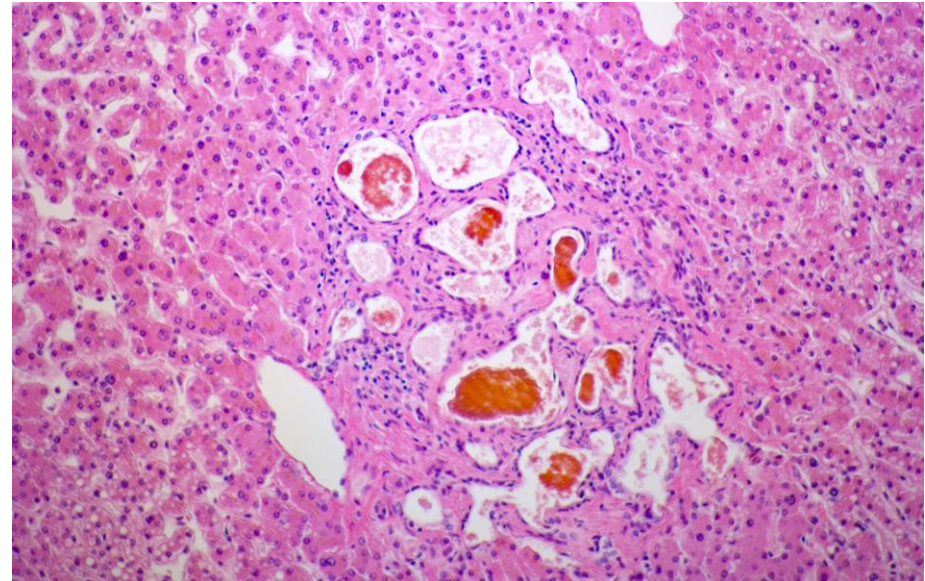


von Kossa stain (silver method for detecting calcified material in sections). Inf-446-2-cest, Inf-475-2-others, Uro-143-UB, Sk-234-2-Derm

sparganosis of the skin. von Kossa stain demonstrates calcareous bodies characteristic of the cestode.

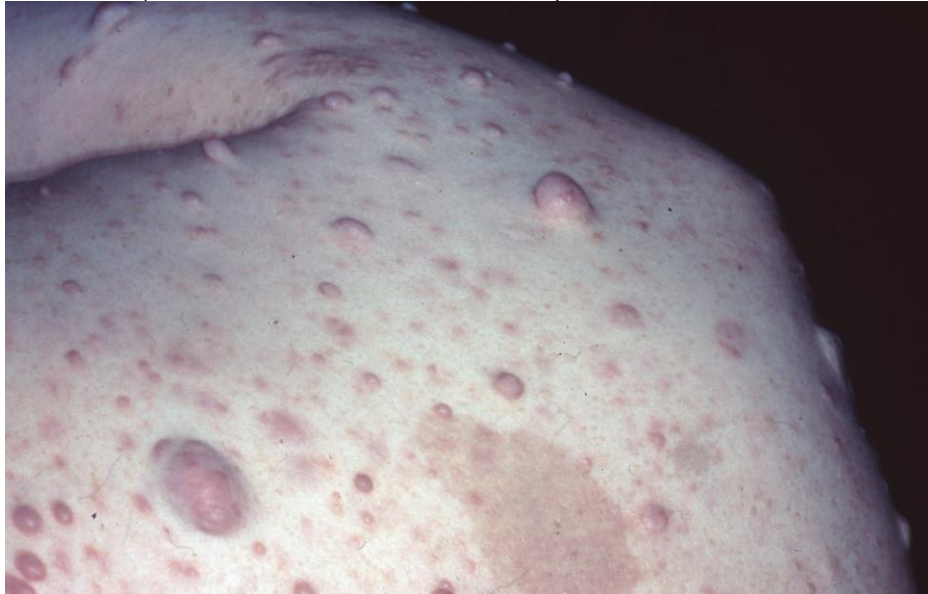


von Myenburg complex (incidentally found bile duct hamartoma). HBP-133-liver



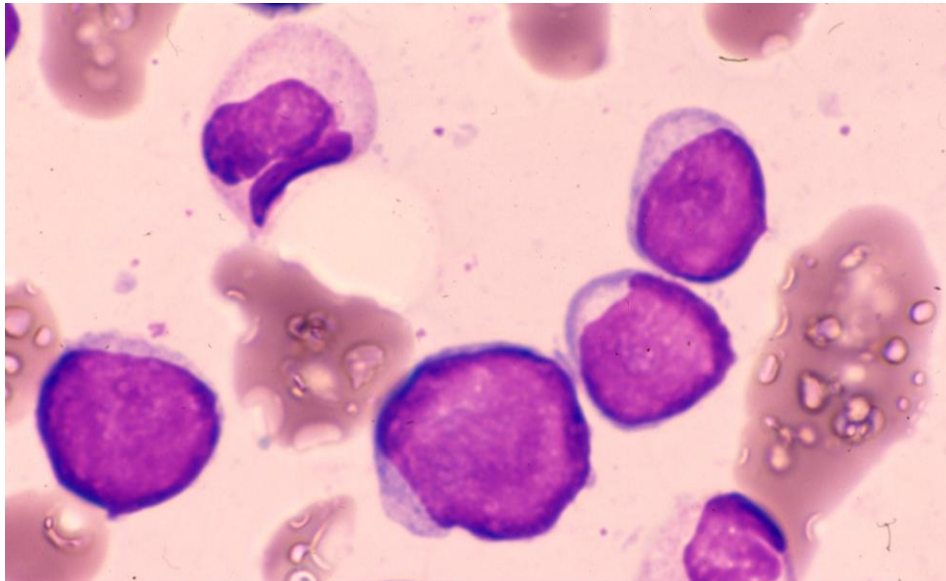
dilated bile ducts with bile retention focally clustered in the portal tract

von Recklinghausen's disease (neurofibromatosis with café-au-lait macules). Sk-616-BNENeo, neuro-178-peripheralN



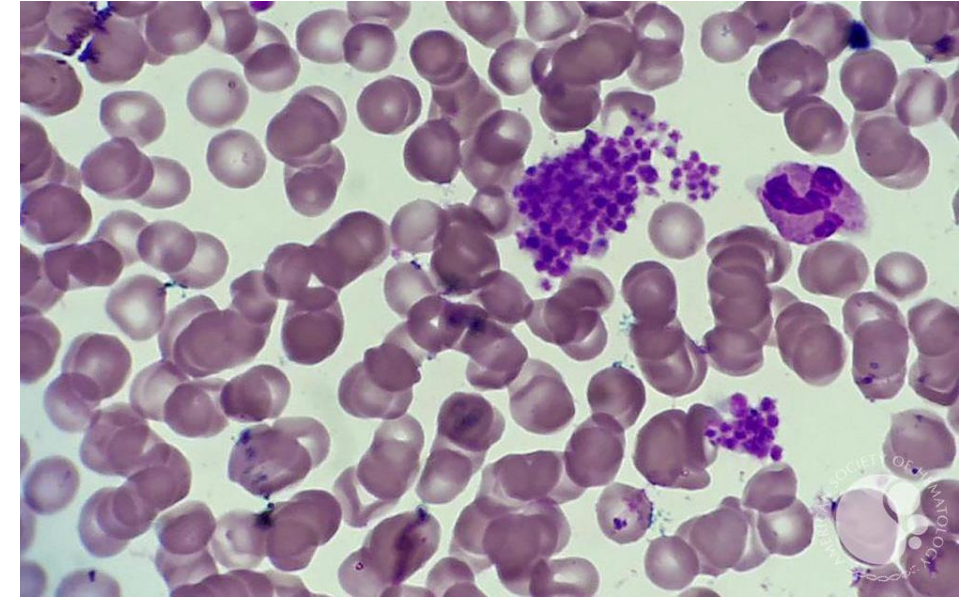
multiple neurofibromas and café-au-lait macules on the skin.

Waldenström's macroglobulinemia (lymphoplasmacytic lymphoma secreting monoclonal IgM). Hemato-82-BM



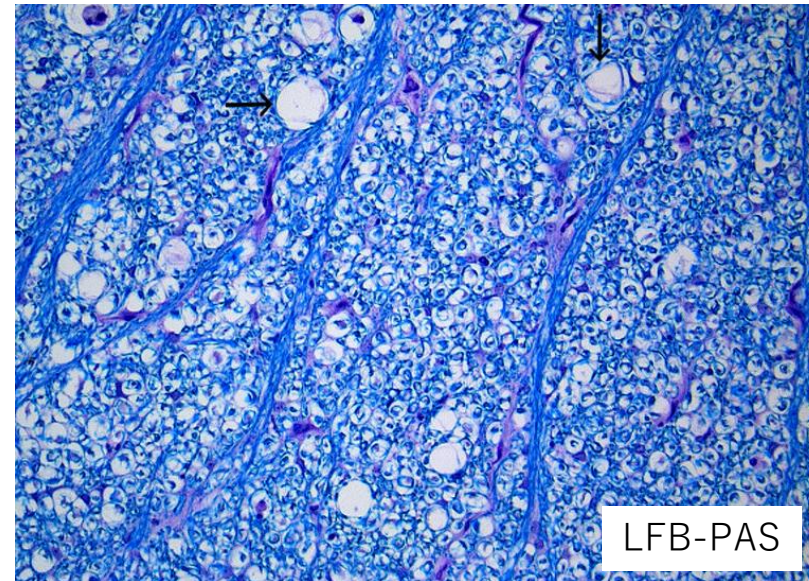
B-cell malignancy caused by lymphoplasmacytic cells (BM aspirate)

von Willebrand disease (autosomal dominant deficiency of von Willebrand factor). Hemato-46-3-BM



platelets clustering in EDTA blood

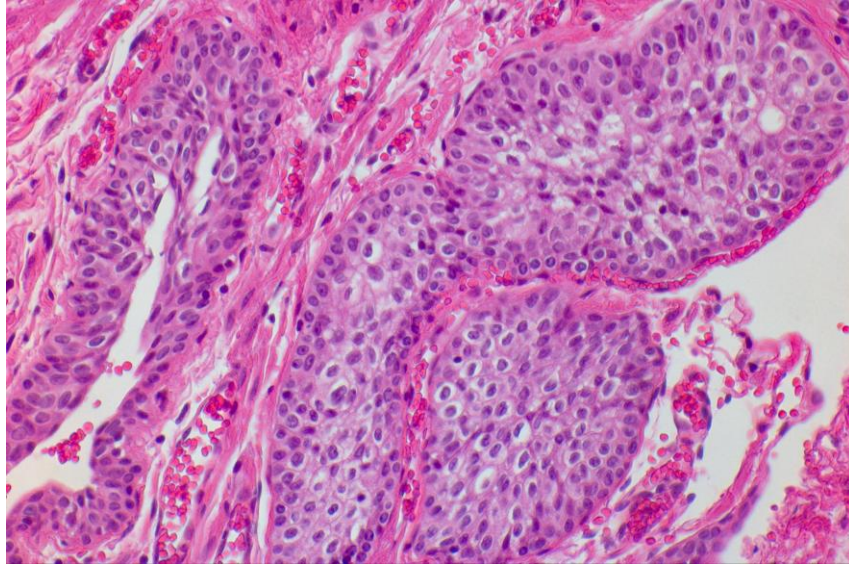
Wallerian degeneration (disintegration of axons and myelin sheaths after nerve injury)



LFB-PAS

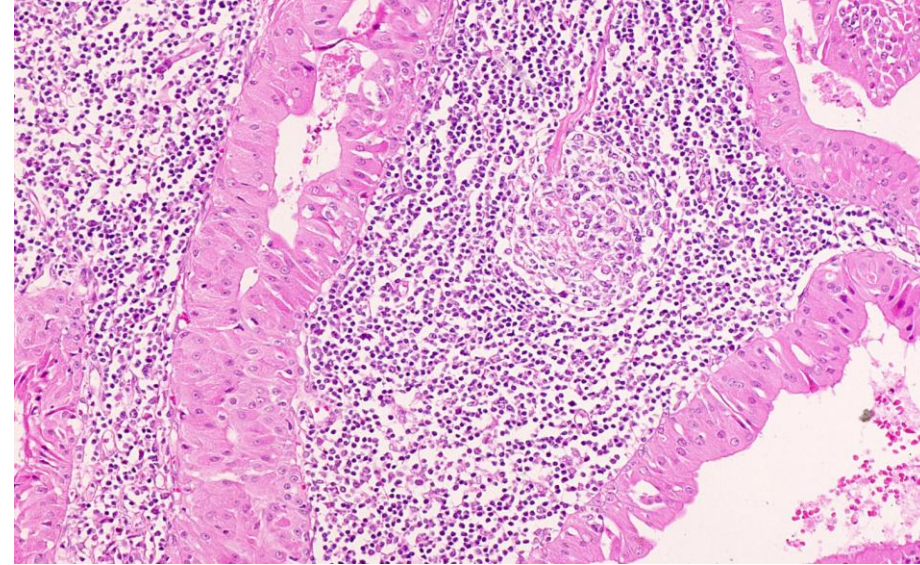
Wallerian degeneration is the process of antegrade degeneration of the axons and the myelin sheaths due to a proximal axonal or neuronal cell body insult in the central and peripheral nervous systems. The causes of neuronal loss include cerebral infarction, trauma or hemorrhage.

Walthard cell nest (ectopic occurrence of benign urothelial cells in the fallopian tube). Gyne-163-1-oviduct



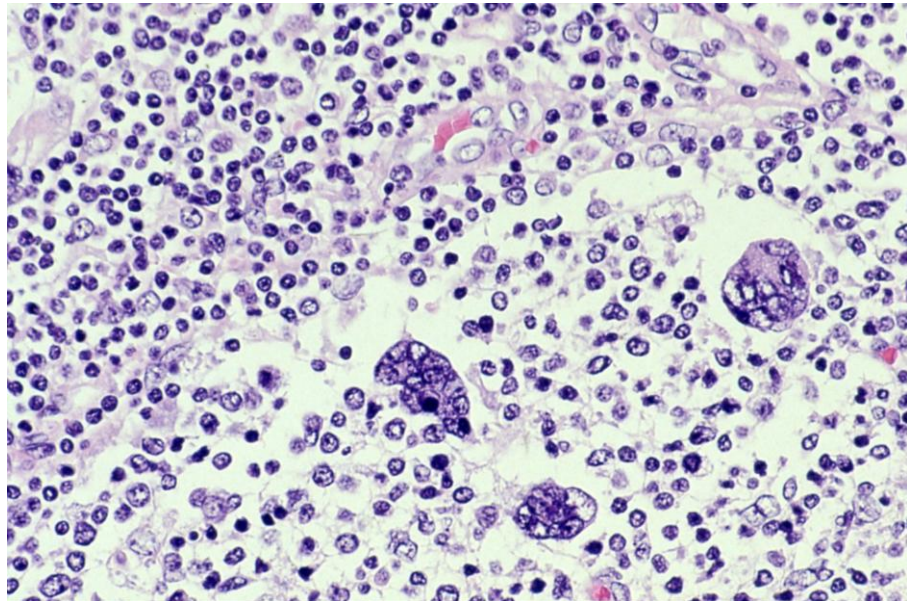
benign/bland urothelial nests with coffee bean nuclei seen adjacent to the oviduct epithelia

Warthin's tumor (benign parotid gland tumor: papillary cystadenoma lymphomatosum). HN-221-SalivG



oncocytic growth with lymphoid stroma containing lymphoid follicles

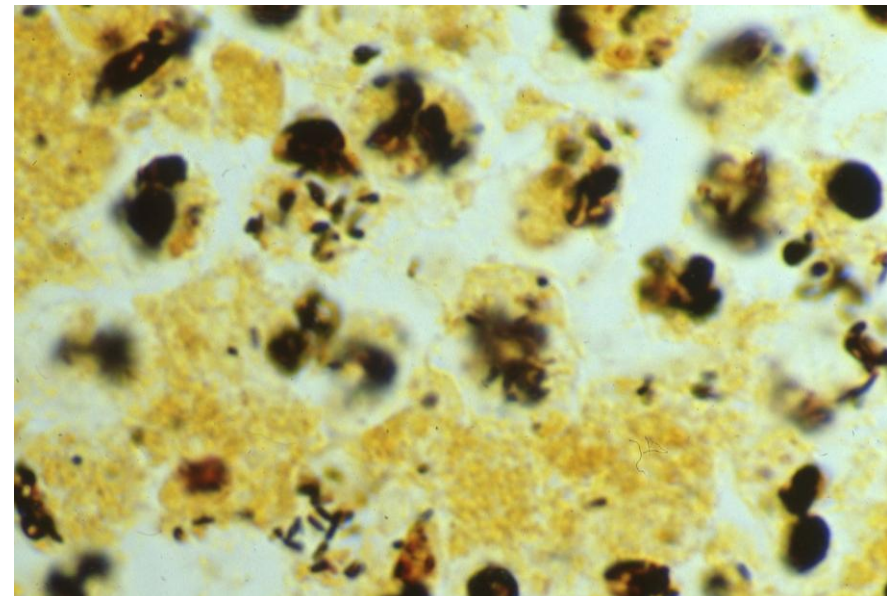
Warthin-Finkeldey giant cell (seen in measles lymphadenitis). Inf-345-virus



W-F giant cells in measles lymphadenitis

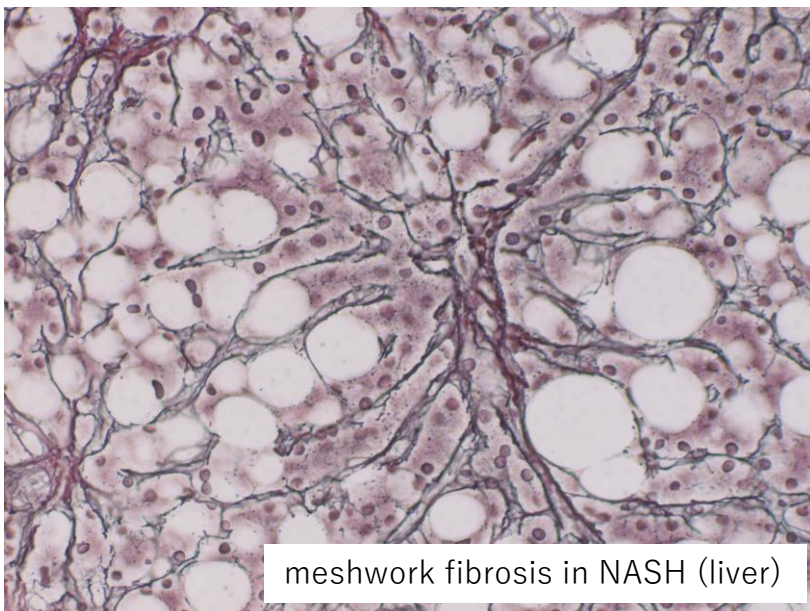
Warthin-Starry stain (silver nitrate-based stain for detecting *Spirocheta*, *Helicobacter* and *Legionella*). Inf-86-2-rods, Inf-91-2-rods, Inf-419-4-nemat

In lobar pneumonia caused by *Legionella pneumophila* infection, black-stained rods grow in the cytoplasm of alveolar macrophages.



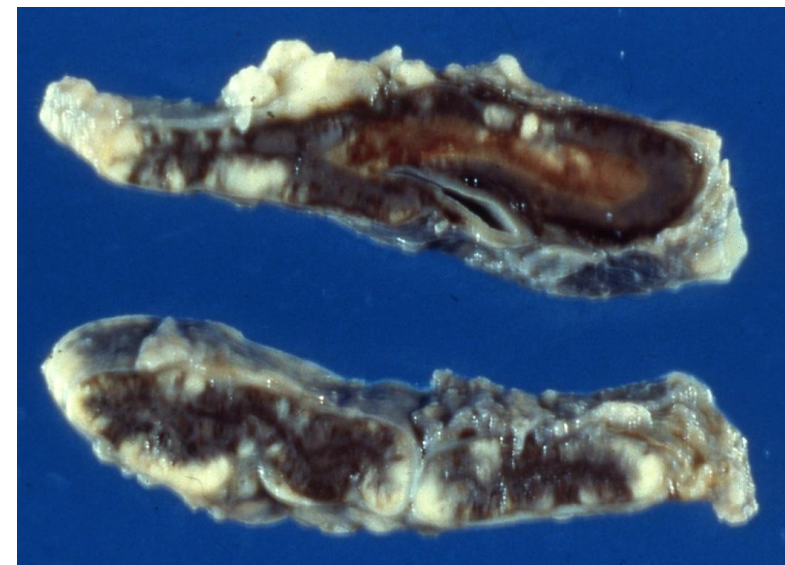
Watanabe's silver impregnation (reticulin fiber stain)

Watanabe's silver impregnation using 1:5 diluted ammonium silver oxide solution is useful for clearly detecting reticulin fibers in tissue sections. In contrast to the Bielschowsky's original method, the nuclei are not impregnated. The nuclei are stained red with Kernechtrot or green with Light Green.



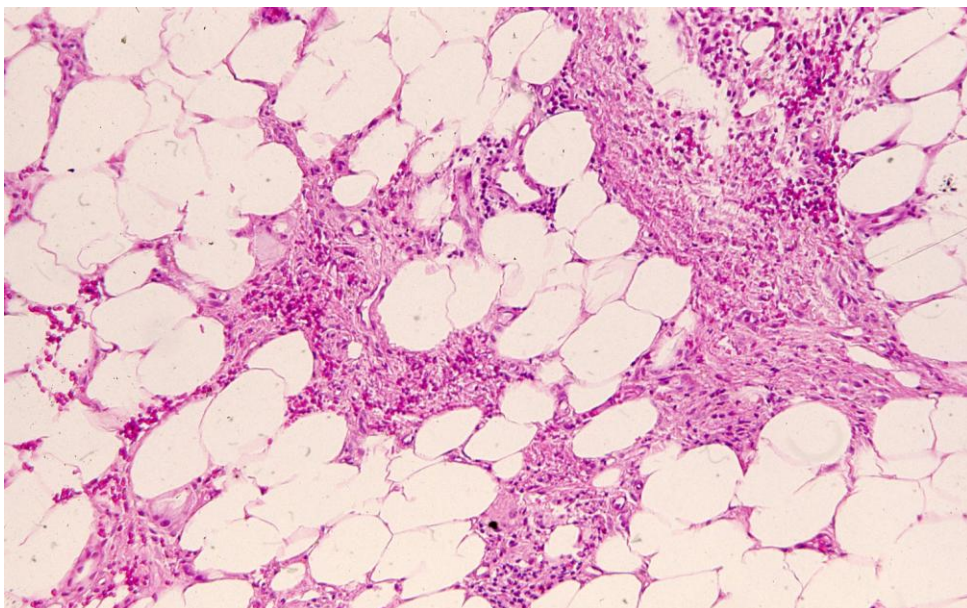
Waterhouse-Friderichsen syndrome (meningococcal meningitis-induced bilateral adrenal hemorrhage). Inf-32-3-coc, neuro-142-3-meninges

Bilateral adrenal hemorrhage results in lethal acute adrenal failure with DIC.

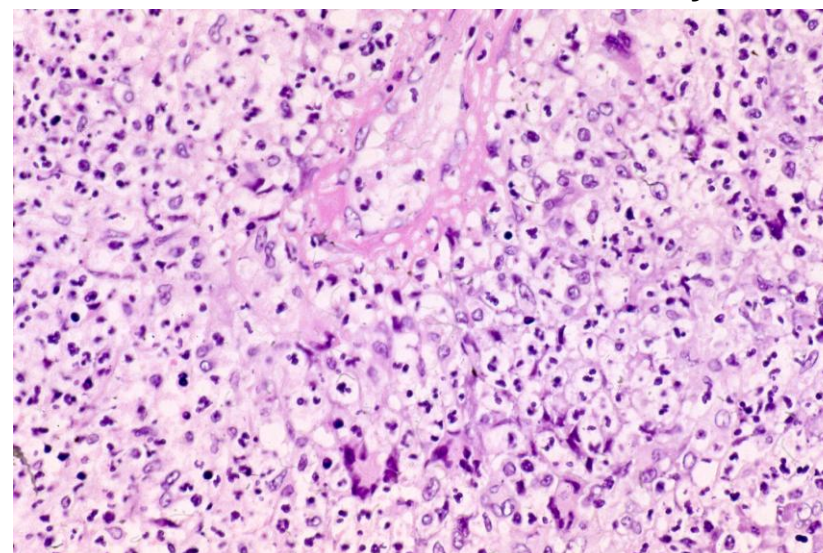


Weber-Christian disease (recurrent nodular non-suppurative panniculitis). Sk-134-Pannic

Biopsied painful subcutaneous lump shows chronic fibrosing inflammation.



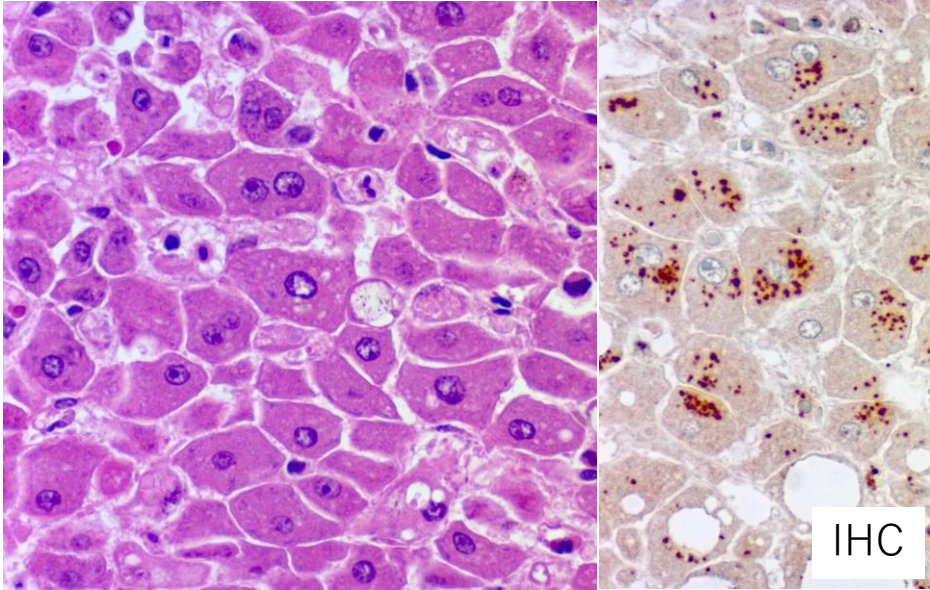
Wegener's granulomatosis (granulomatosis with polyangiitis). HN-12-2-nose, Lung-34-1-autoimmune, Uro-45-1-kidney



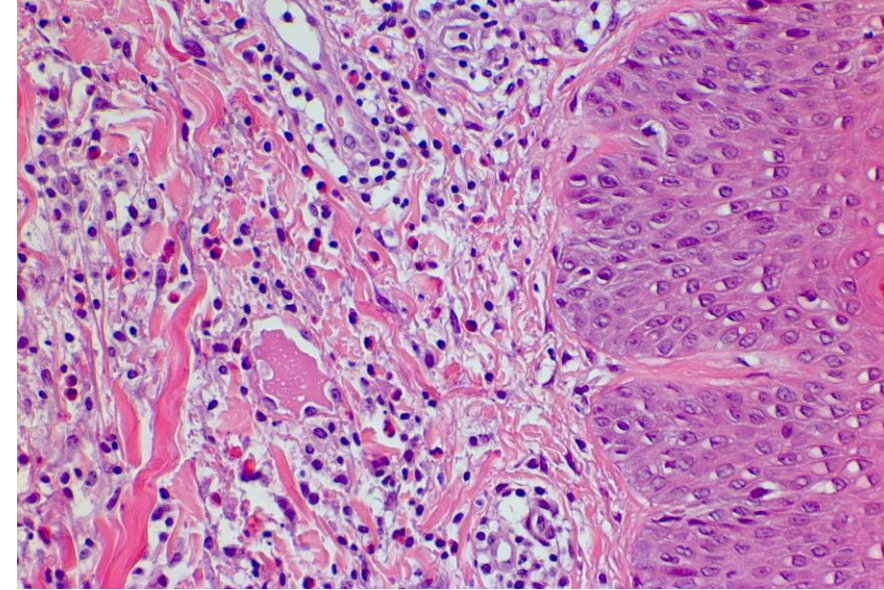
necrotizing angitis and granulomatous reaction with giant cells (nasal Bx)

Weil's disease (systemic *Leptospira interrogans* infection). Inf-177-1-spiro, Inf-177-2-spiro

L. interrogans mainly involves the liver and kidney. The liver reveals disorganization of the hepatic cord (left), and the pathogens are detected in the liver cells (right).



Well's syndrome (eosinophilic cellulitis on the limb). Sk-50-Eosino



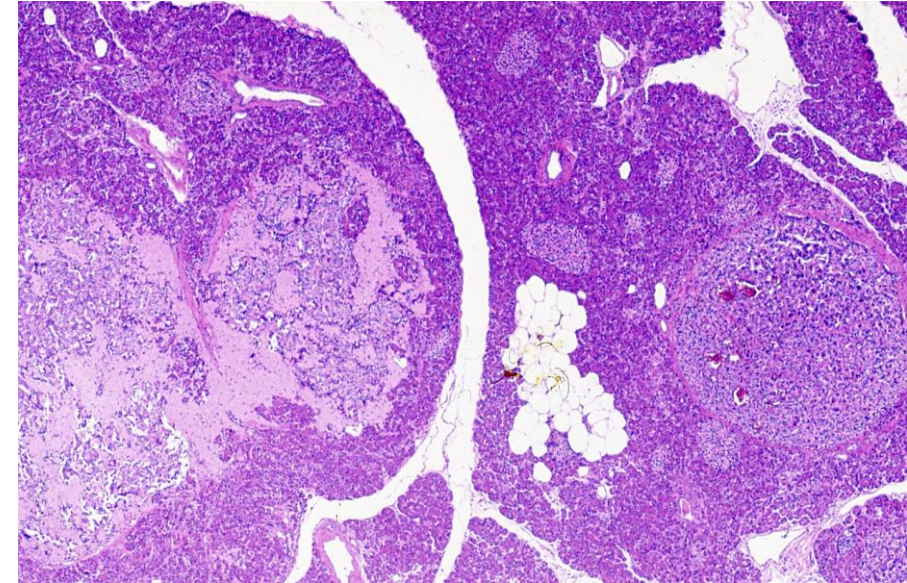
diffuse infiltration of eosinophils seen in the edematous dermis

Werding-Hoffmann's disease (spinal muscular atrophy, infantile type). neuro-119-1-spinal, neuro-119-2-spinalC

The male baby presented with a floppy infant at birth. He died of severe pneumonia at 2 months of age. At autopsy, hypotonic muscles are noted (left). In the cauda equina, myelin loss of the motor fibers is evident (right: LFB-HE).



Wermer syndrome (multiple endocrine neoplasia, type I). HBP-248-2-panc



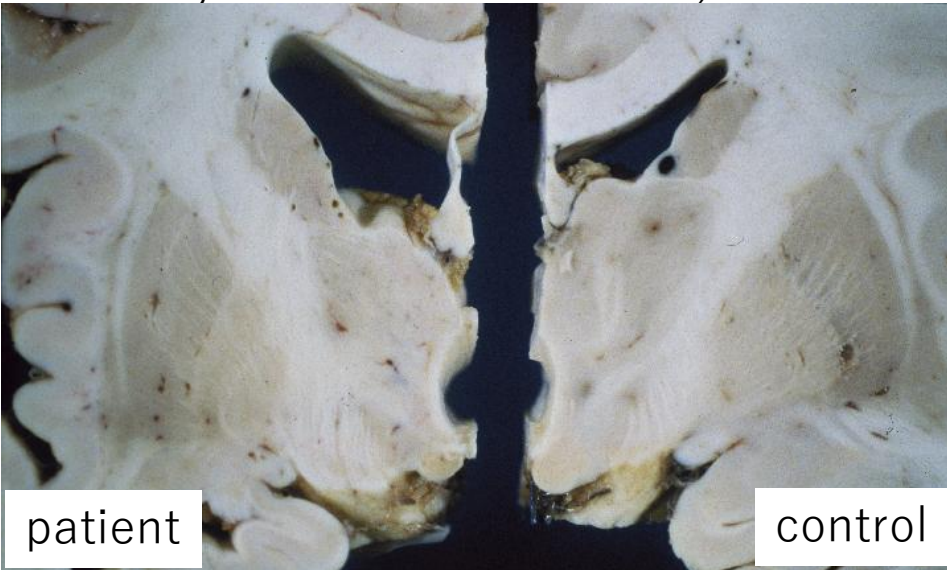
pancreas adenomatosis, including insulinoma with amyloid stroma (left) and glucagonoma (right)

Werner syndrome (adult progeria predominantly seen in Japan). Sk-162-2-Derm

a 42-year-old Japanese male patient. Alopecia, skin pigmentation and dentures (left). The skin of hand is pigmented and the nails are deformed (right).



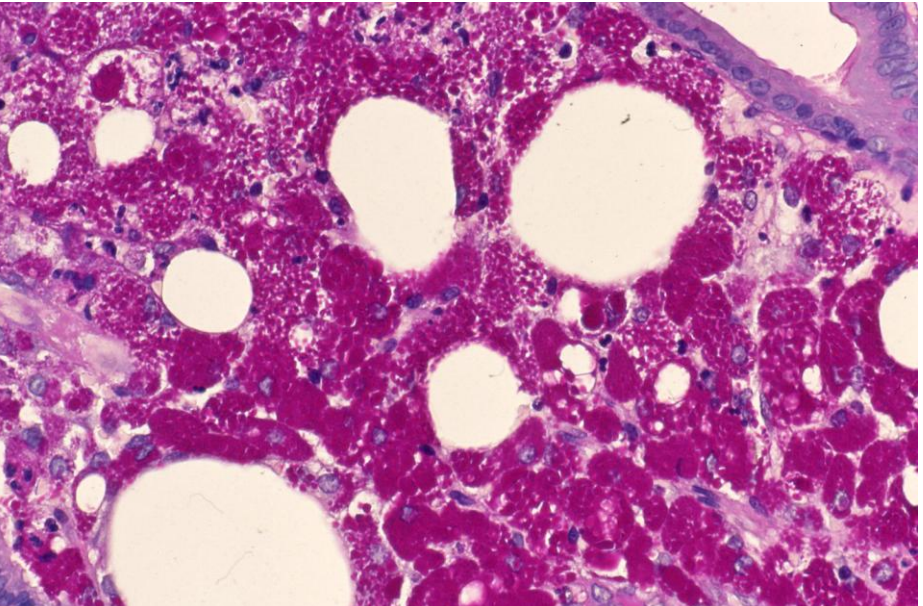
Wernicke encephalopathy (thiamine: vitamin B1 deficiency in chronic alcoholism). neuro-16-brain



atrophy of the mamillary body. Compare with the normal control.

Whipple's disease (*Tropheryma whipplei* infection in small bowel). GI-209-1-1-small bowel through GI-209-2-small bowel

accumulation of PAS-reactive macrophages in the lamina propria of the duodenal mucosa (PAS)



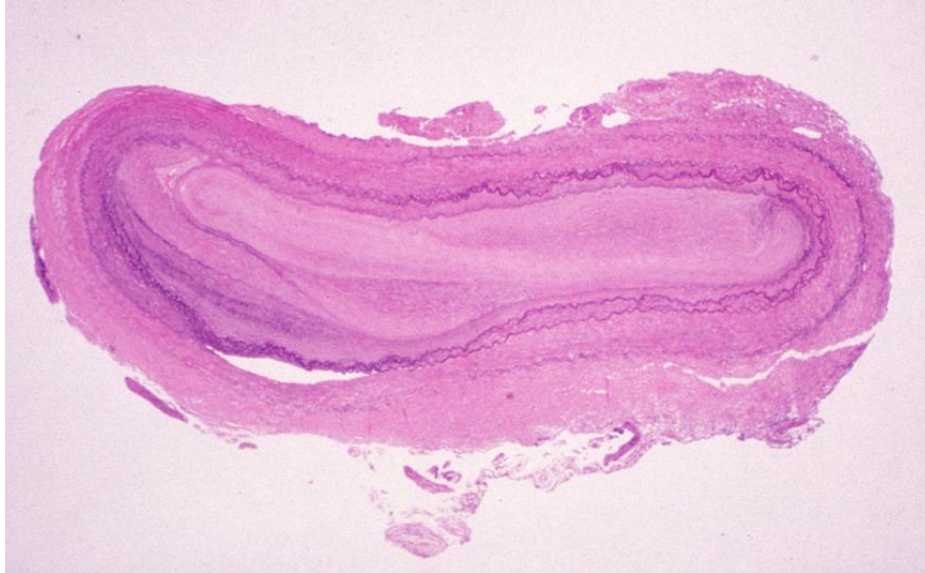
Wickham's striae (oral lichen planus). HN-65-OC



Wickham's striae are whitish lines visible in the papules of lichen planus, typically in the oral mucosa. The microscopic appearance shows hypergranulosis.

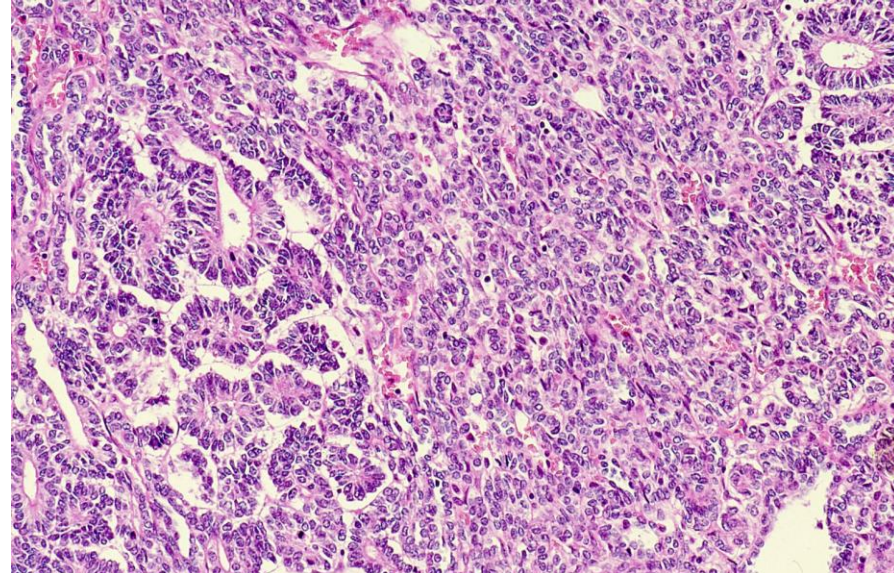
Willis' circle occlusion (occlusion in the circle of Willis: Moyamoya disease). neuro-34-brain

complete luminal occlusion of the left internal carotid artery (VB-H&E)



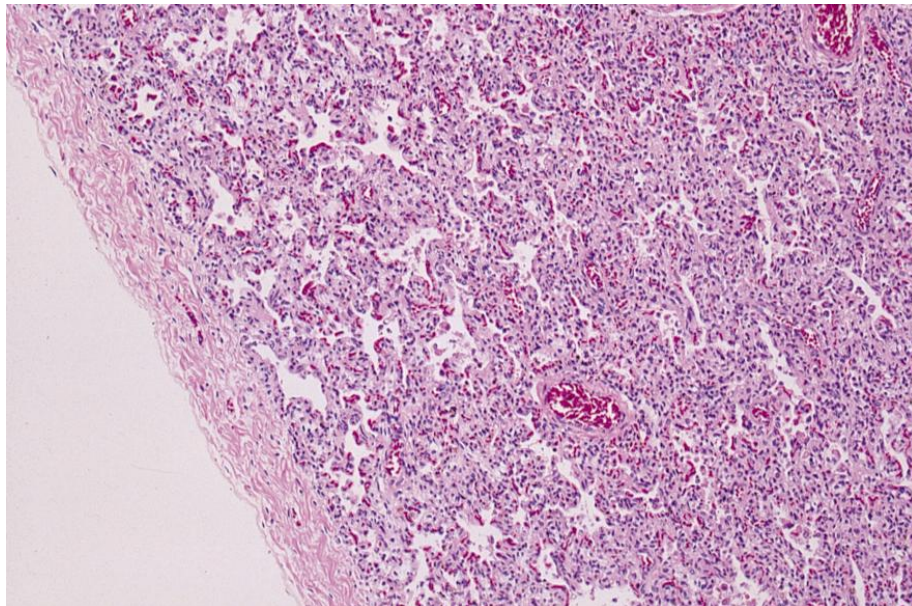
Wilms tumor (nephroblastoma in infancy) Uro-110-1-kidney through Uro-110-5-kidney

Wilms tumor consists of metanephric blastemal cell nests and immature epithelial cells.



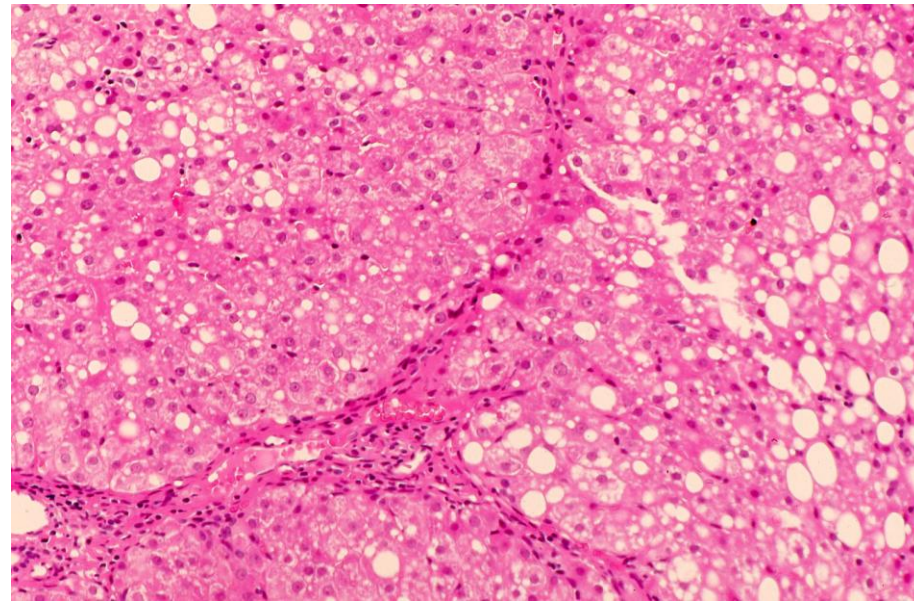
Wilson-Mikity syndrome (a type of respiratory distress syndrome with lung collapse and emphysema). Lung-11-3-general

alveolar collapse without hyaline membrane formation



Wilson's disease (autosomal recessive hepatolenticular degeneration). HBP-105-liver, Eye-12

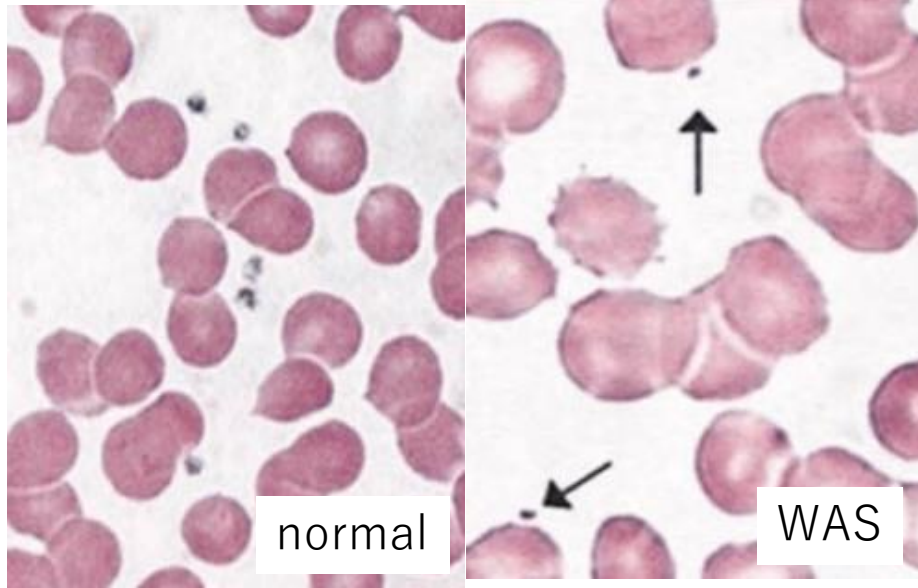
liver cirrhosis caused by copper deposition



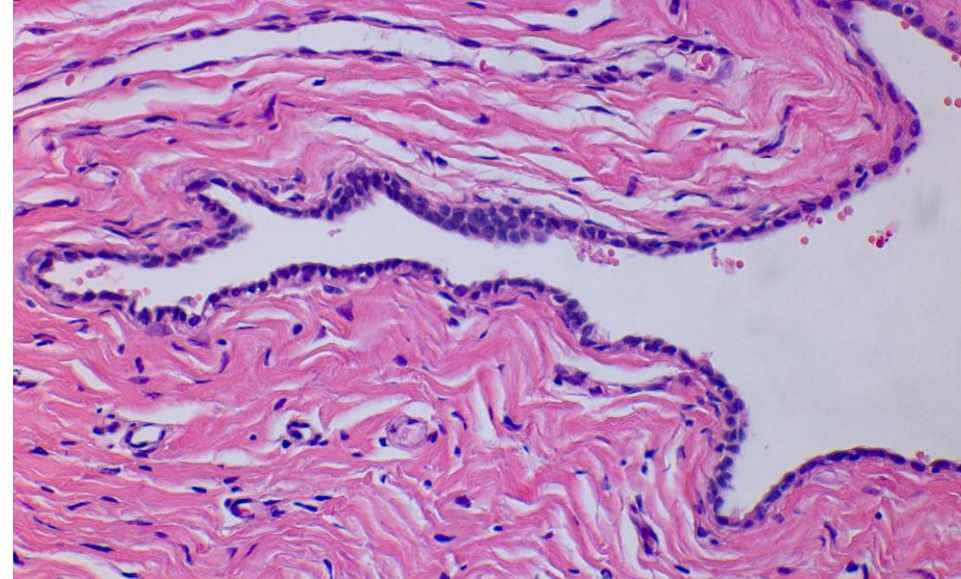
Wiskott-Aldrich syndrome (X-linked thrombocytopenia, eczema, and recurrent infections).

Hemato-46-3-BM

The platelet size is small (arrows).



Wolffian duct cyst (Gartner's duct cyst, a vestigial remnant of the mesonephric duct). Gyne-24-vagina

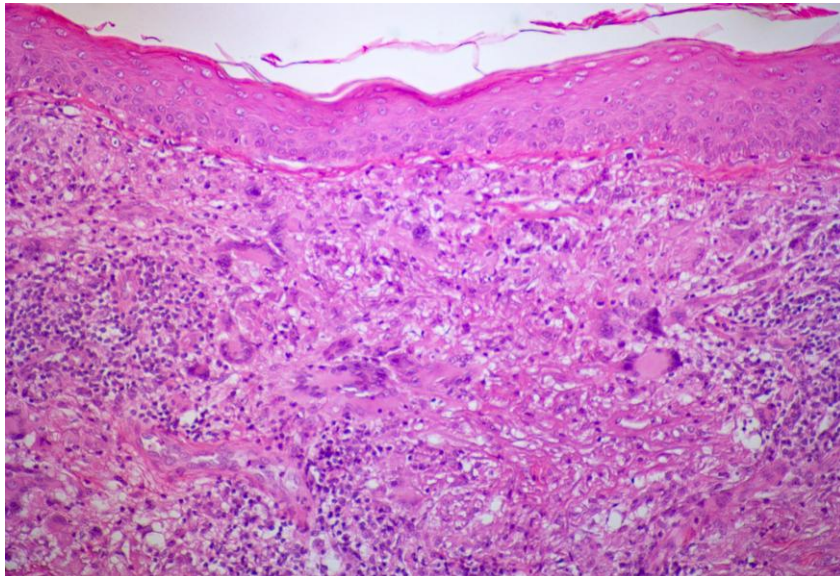


non-mucinous cyst in the vaginal wall

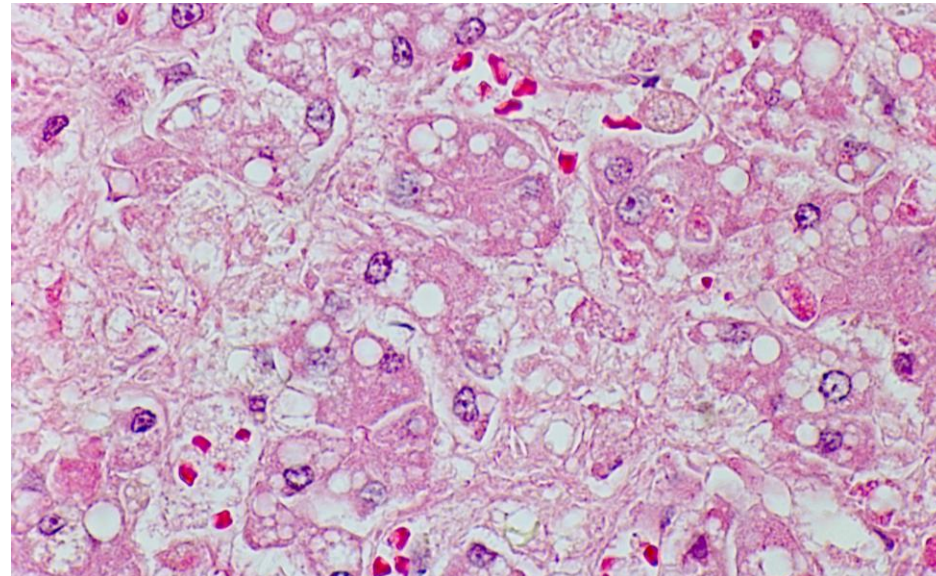
Wolf's isotopic response (new granulomatous lesions in unrelated skin after herpes zoster).

Sk-351-Vir

non-caseous granulomas formed in the upper dermis



Wolman's disease (autosomal recessive lysosomal acid lipase deficiency). HBP-103-liver



micro- and macrovesicular steatosis in the hepatocytes and intercellular fine fibrosis

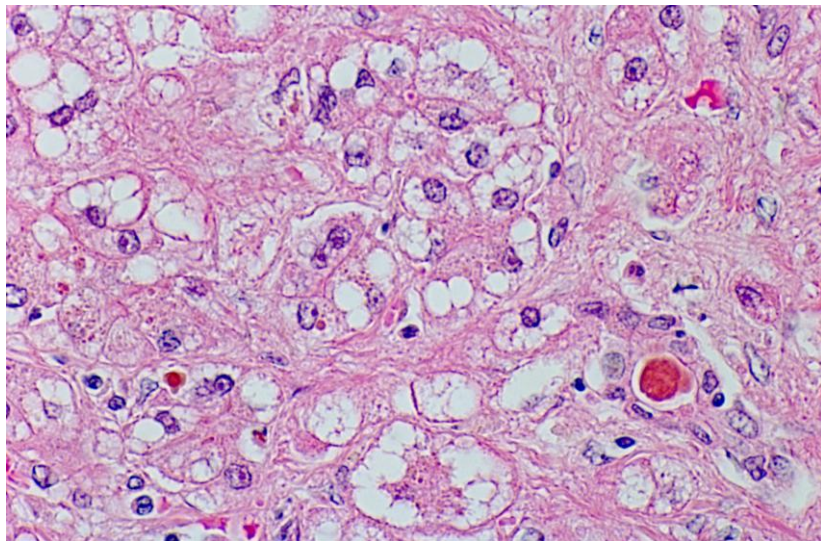
Zahn's infarct (pseudo-infarction of the liver)

Zahn's infarct, caused by the obstruction of a branch of the portal vein, is featured by subcapsular wedge-shaped congestion but without necrosis. Microscopically, sinusoidal congestion and liver cell atrophy are noted.



Zellweger syndrome (autosomal recessive peroxisome deficiency with impaired neuronal migration and loss of vision/hearing). HBP-102-1-liver

The enlarged liver consists of hepatocytes with moderate steatosis and focal bile stasis.

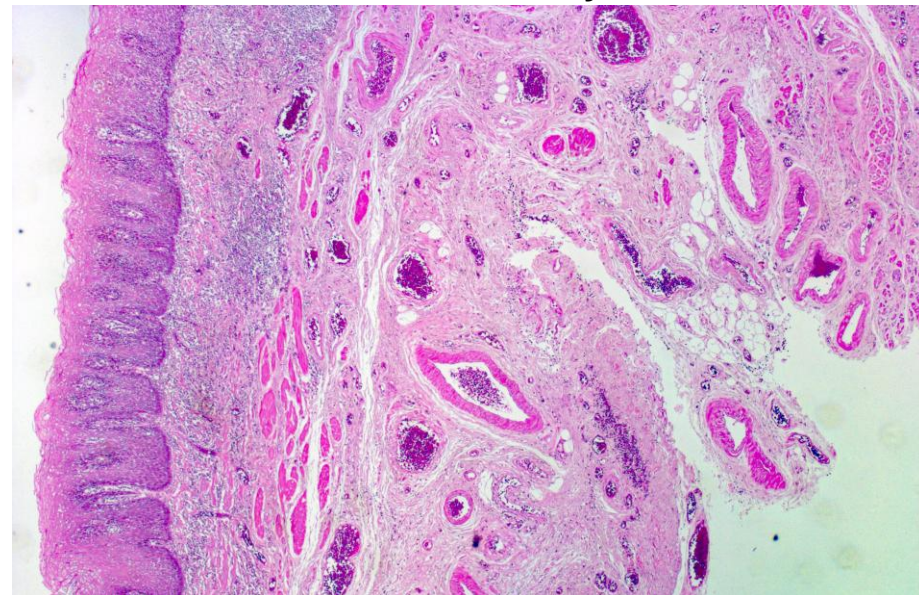


Zamboni's fixative (a variation of Bouin's fixative for EM study)



Zamboni fixative, a phosphate-buffered, picric acid-formaldehyde fixative, is applicable to both light and electron microscopy. Zamboni fixative allows rapid penetration to obtain optimal preservation and stabilization of cellular proteins.

Zenker's diverticulum (acquired pharyngoesophageal diverticulum of the elderly). GI-13-eso



a pulsion diverticulum lined by squamous mucosa but without muscular layers

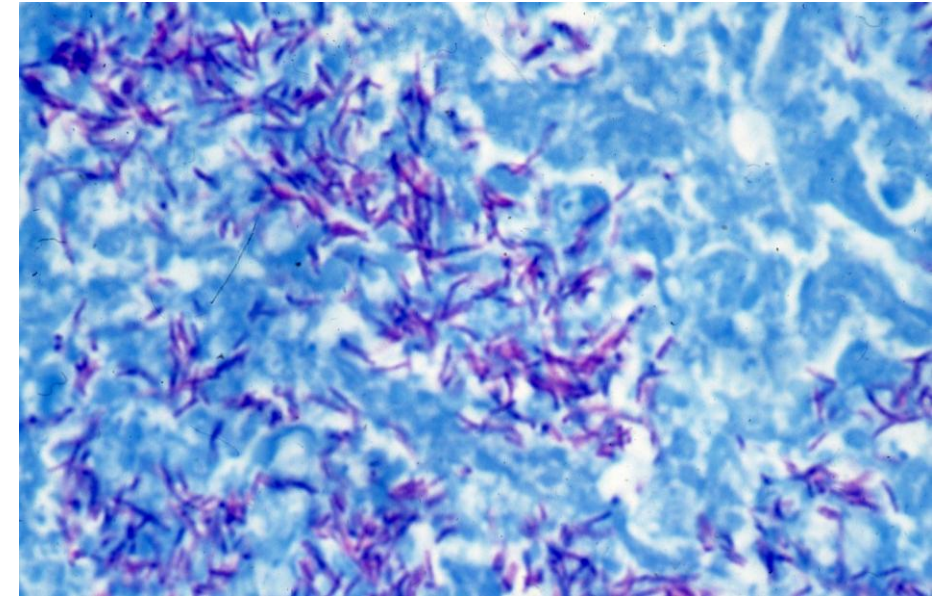
Zenker's fixative (modified Zenker's fixative for use)

Zenker fixative (Zenker's acetic fixative) contains mercuric chloride, potassium dichromate, sodium sulfate and glacial acetic acid. The fixative is toxic, making disposal as chemically hazardous waste, and is thus no longer available. Modified Zenker fixative with orange color is a mercury-free alternative to the original Zenker formulation, providing crisp nuclear detail, frequently used for bone marrow clots and biopsies.



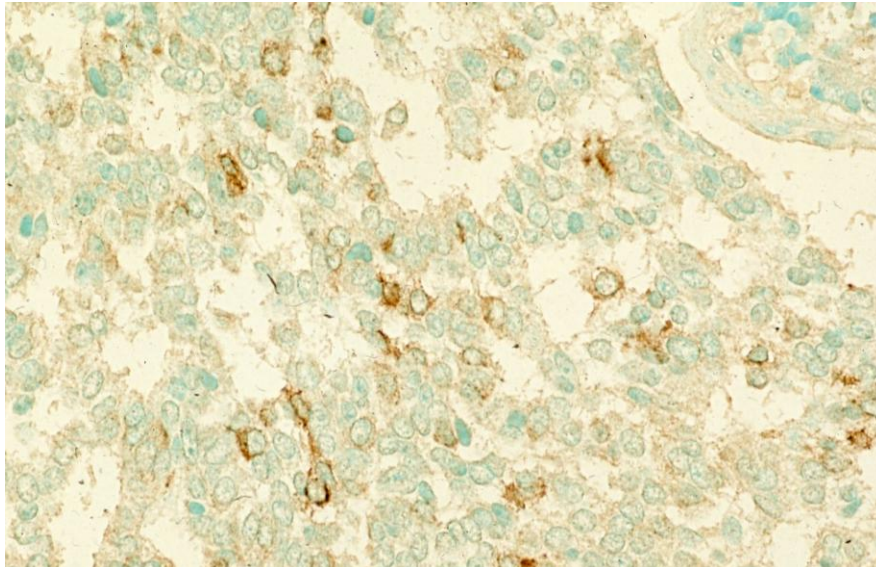
Ziehl-Neelsen stain (acid-fast stain for detecting mycobacteria). Lung-102-1-bact and Lung-102-2-bact

exudative lung tuberculosis after steroid treatment

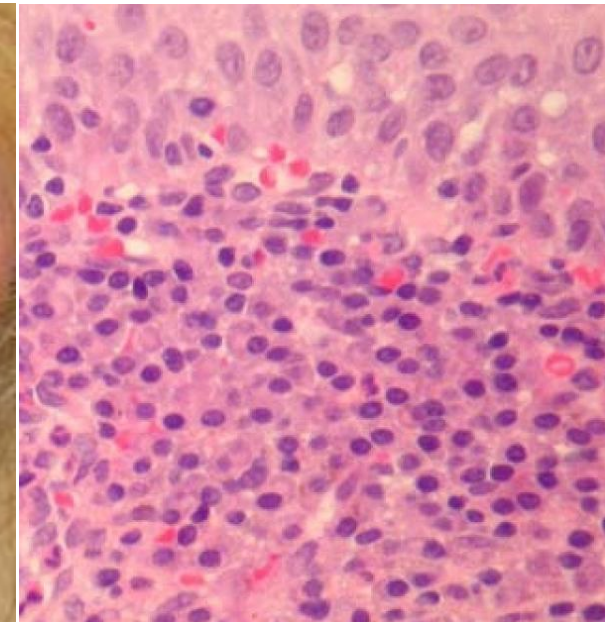


Zollinger-Ellison syndrome (liver-metastasizing malignant gastrinoma of the pancreas). HBP-251-panc

malignant islet cell tumor with gastrin immunoreactivity



Zoon balanitis (plasma cell balanitis)



Zoon balanitis primarily affects the glans penis in middle-aged to elderly men. It presents as irritable, shiny, red to orange-colored plaque on the glans. Microscopically, band-like accumulation of plasma cells is characteristic.