

# Diseases, syndromes, lesions and methods with finder's name, K-N

Diseases, syndromes, lesions and methods with finder's name, beginning with K-N, are summarized: K: 21 disorders, L: 13 disorders, M: 29 disorders, N: 9 disorders.

Representative figures are illustrated in the respective disorders.

# K: 21 disorders, L: 13 disorders, M: 29 disorders, N: 9 disorders

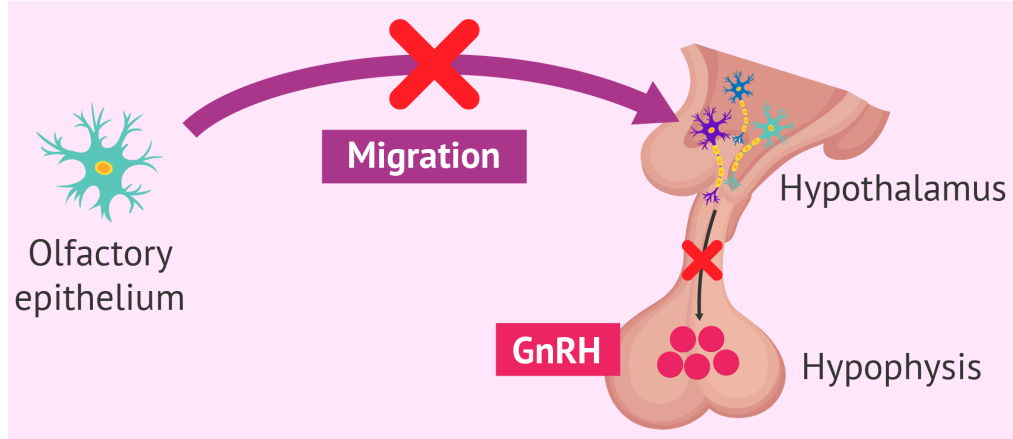
**K:** Kallmann's syndrome, Kaposi's sarcoma, Kartagener syndrome, Kasabach-Meritt syndrome, Kawasaki's disease, Kayser-Fleischer's ring, Kienböck's disease, Kikuchi-Fujimoto's disease, Kimmelstiel-Wilson's nodule, Kimura's disease, Klinefelter syndrome, Klippel-Trenanay-Weber's syndrome, Klüver-Barrera stain, Kogoj's spongiform pustule, Köhler's disease, Koplik spot, Korsakoff syndrome, Krabbe's disease, Krukenberg tumor, Kugelberg-Welander's disease, Kveim reaction

**L:** Lambert-Eaton syndrome, Langerhans cell histiocytosis, Langhans' giant cell, Lehman-Hart proliferation, Leigh syndrome, Lennert lymphoma, Leriche syndrome, Letterer-Siwe disease, Lewy body, Libman-Sacks endocarditis, Löffler syndrome, Lyell syndrome, Lynch syndrome

**M:** Machado-Joseph disease, Majocchi's disease, Mallory body, Mallory stain, Mallory-Wiess syndrome, Marfan syndrome, May-Giemsa stain, May-Hegglin anomaly, McArdle's disease, Meckel's diverticulum, Meibomean gland carcinoma, Meigs syndrome, Ménétrier's disease, Merkel cell carcinoma, Miescher's nevus, Mikulicz' disease, Milroy's disease, Mirizzi's syndrome, Miyoshi distal muscular dystrophy, Mönckeberg-type arteriosclerosis, Mondor's disease, Morgani hernia, Morton's neuroma, Morquio syndrome, Mucha-Habermann disease, Müllerian cyst, Müllerian mixed tumor, malignant, Munto's microabscess, Myerson's nevus

**N:** Nabothian follicle, Nanta nevus, Negri body, Nelson syndrome, Netherton syndrome, Nicolsky phenomenon, Niemann-Pick's disease, Noonan syndrome, Nuck's cyst

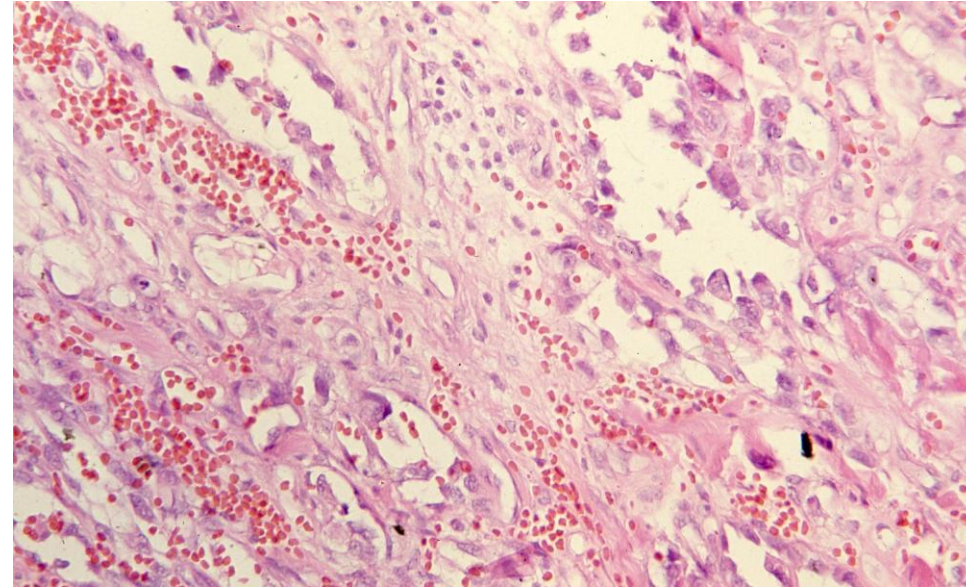
## Kallmann's syndrome (anosmia and hypogonadism)



Kallmann syndrome is a genetic disorder often inherited with an X-linked recessive pattern. Symptoms include anosmia and delayed or absent puberty. The syndrome is primarily caused by defective migration of gonadotropin-releasing hormone (GnRH) neurons from the olfactory placode to the hypothalamus during fetal development, causing a deficiency in GnRH.

## Kaposi's sarcoma (HHV8-induced malignancy)

Sk-640-MNENeo through Sk-641-2-MNENeo



Malignant endothelial cells are infected with HHV8.

## Kartagener syndrome (immotile cilia syndrome with situs inversus totalis). Lung-8-1-general and Lung-8-2-general

Ultrastructure of the cilia on the nasal mucosa, with the absence of both inner and outer dynein arms with abnormality of central singlets

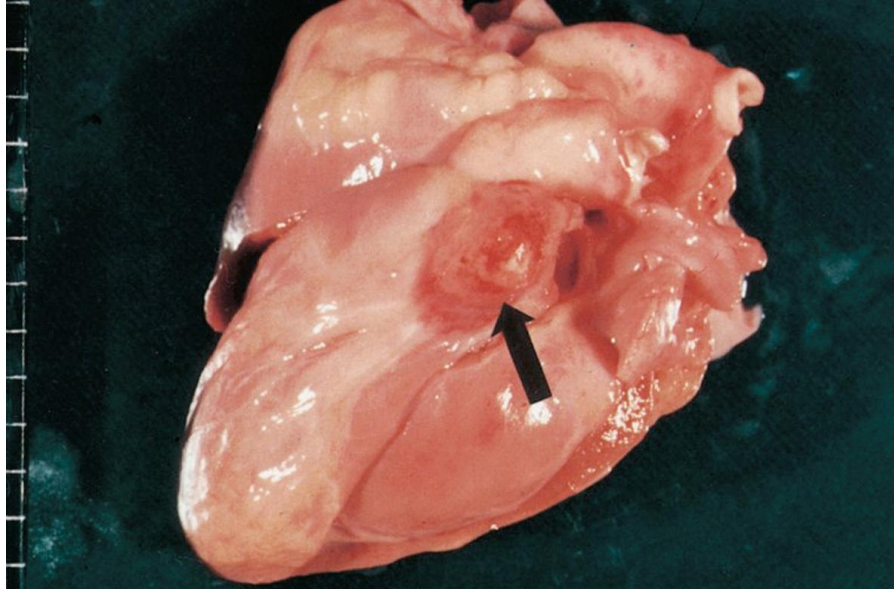


## Kasabach-Meritt syndrome (hemangiomas with consumption coagulopathy). Sk-581-2-BNENeo



systemic hemangiomas provoking lethal DIC in infancy

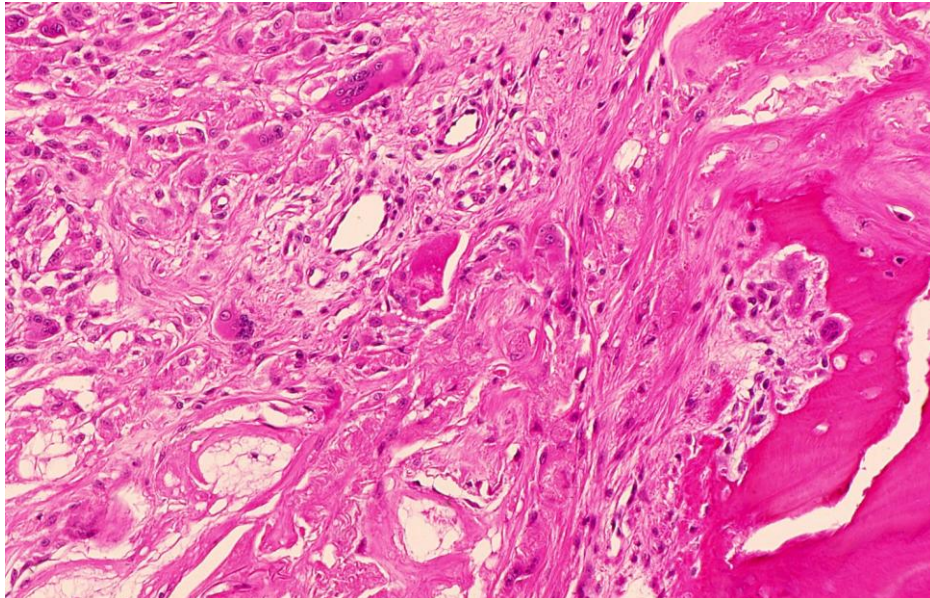
**Kawasaki's disease** (acute febrile mucocutaneous syndrome). Vascular-72-coronary



lethal  
coronary  
aneurysm  
in infancy

**Kienböck's disease** (avascular necrosis of the lunate carpal bone of the wrist).

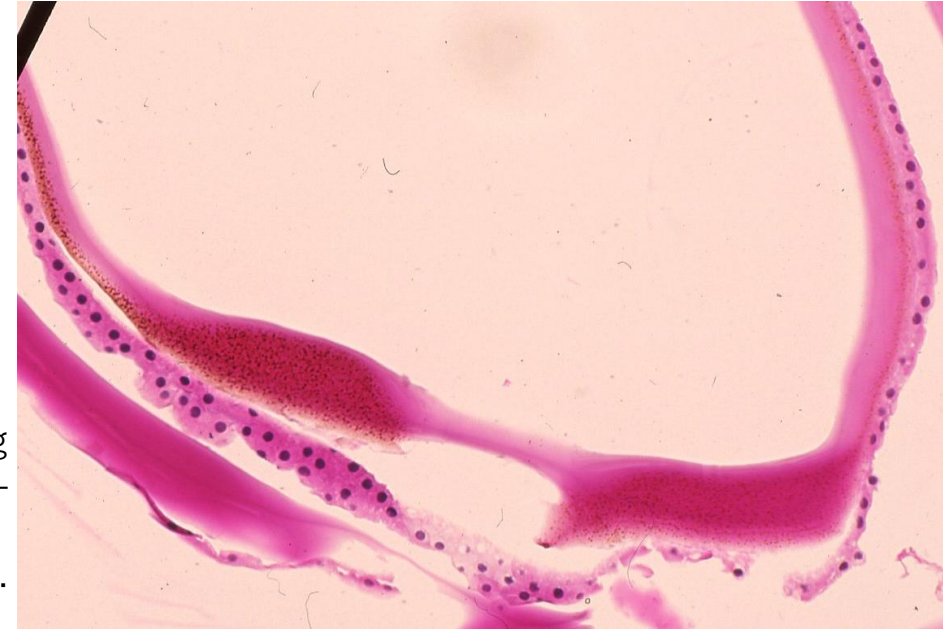
ConnectT-44-2-bone



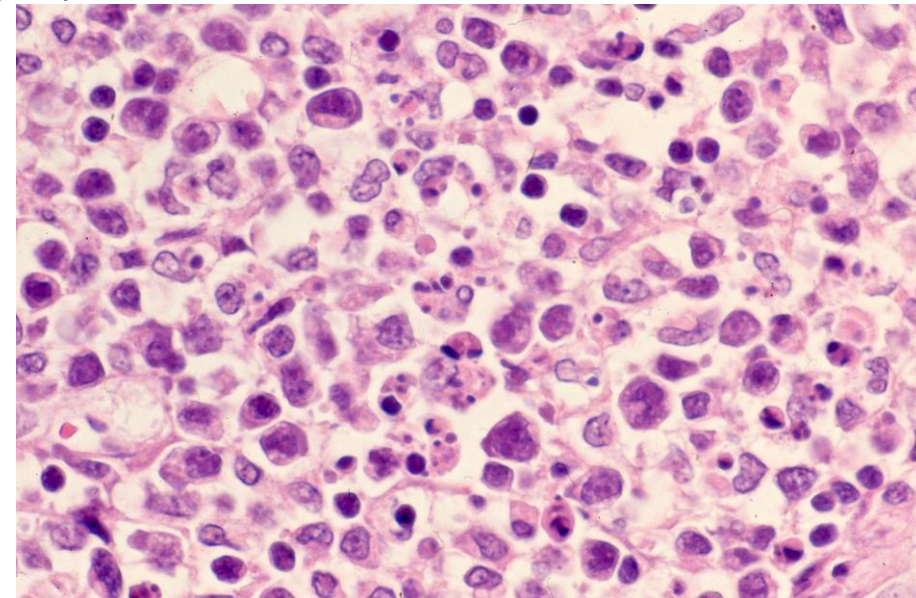
aseptic  
necrosis of  
the lunar  
bone with  
bone loss  
and granu-  
lation tissue  
reaction

**Kayser-Fleischer's ring** (pathognomonic eye finding in Wilson's disease). Eye-12, HBP-105-liver

Kayser-Fleischer ring, a dark ring encircling the cornea, is caused by copper deposition on the Descemet's membrane in Wilson's disease accompanying liver dysfunction, long-standing speech difficulties and tremor.



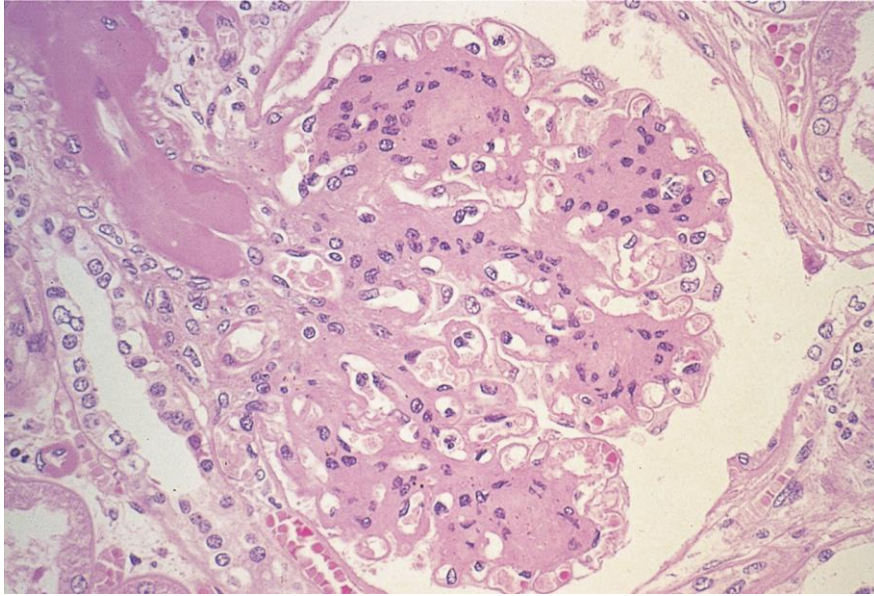
**Kikuchi-Fujimoto's disease** (subacute necrotizing lymphadenitis). Hemato-117-LN



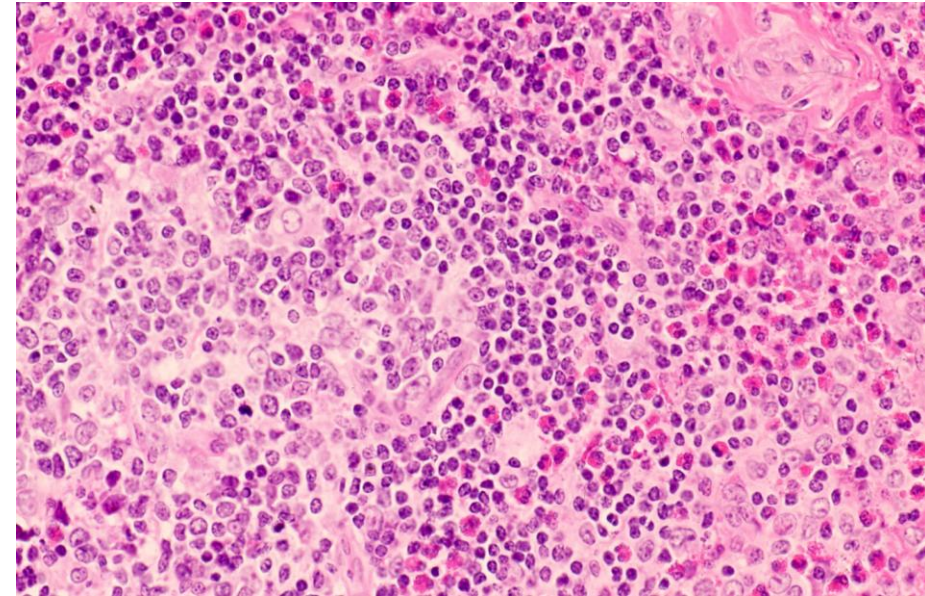
The enlarged  
cervical LN  
shows  
pronounced  
apoptosis in  
the  
paracortex  
(common in  
Japan).

**Kimmelstiel-Wilson's nodule** (diabetic glomerulosclerosis). Uro-52-1-kidney, Uro-52-2-kidney

Nodular lesions characterized by accumulation of homogeneous eosinophilic material in the mesangium are a pathological hallmark of advanced diabetic nephropathy. Arteriolosclerosis is associated.



**Kimura's disease** (subcutaneous inflammatory nodule). Sk-54-1-Eosino, Sk-54-2-Eosino



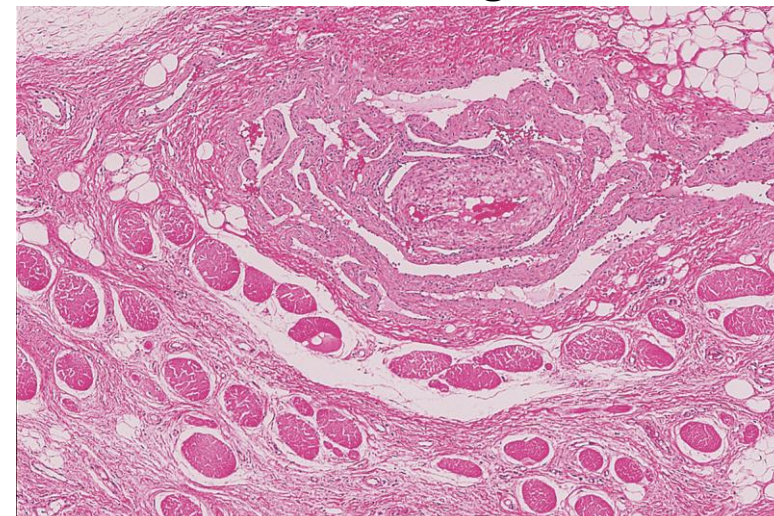
eosinophilia and lymphoid hyperplasia with IgE deposition: a type of IgG4-related disease

**Klinefelter syndrome** (sex chromosome abnormalities: XXY). DPE-General-1

Klinefelter syndrome (47: XXY) accompanies hypogonadism, aspermia and gynecomastia. Borrowed from Wikipedia



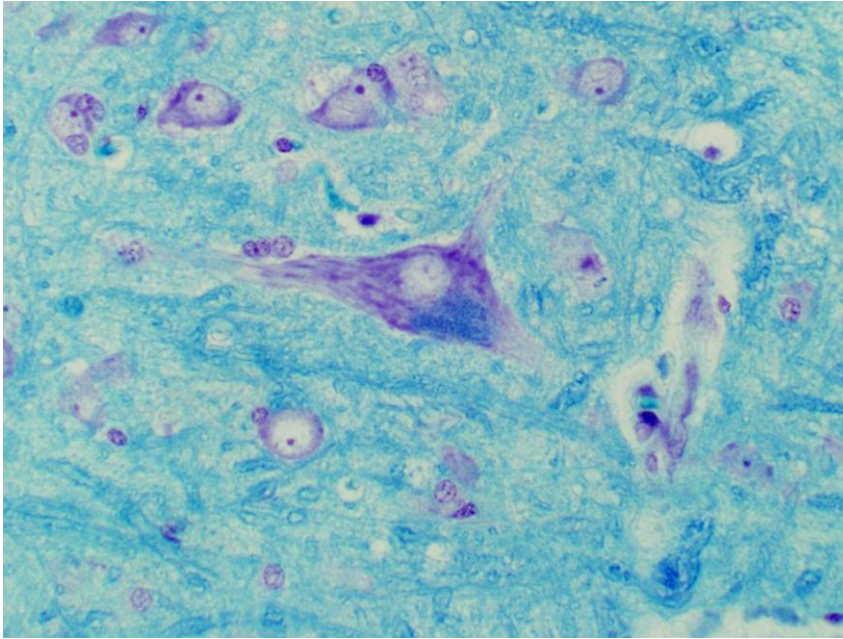
**Klippel-Trenanay-Weber's syndrome** (angio-osteohypertrophy: portwine stain on the limbs with limb overgrowth). Sk-591-BNENeo



Arteriovenous malformation seen in the thigh of a 5 y-o girl. Arteries and abnormal venules are clustered in striated muscle.

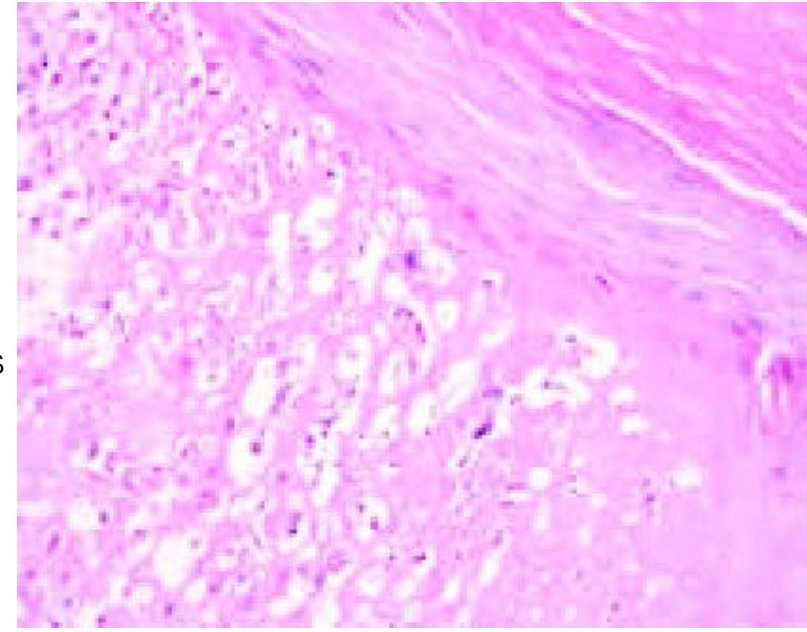
**Klüver-Barrera stain** (Nissle-Luxol Fast Blue myelin stain)

Klüver-Barrera stain is a double stain for the central nervous system lesions. Nissl granules in neurons are stained with Cresyl Violet in purple and myelinated fibers are stained with Luxol Fast Blue in blue.



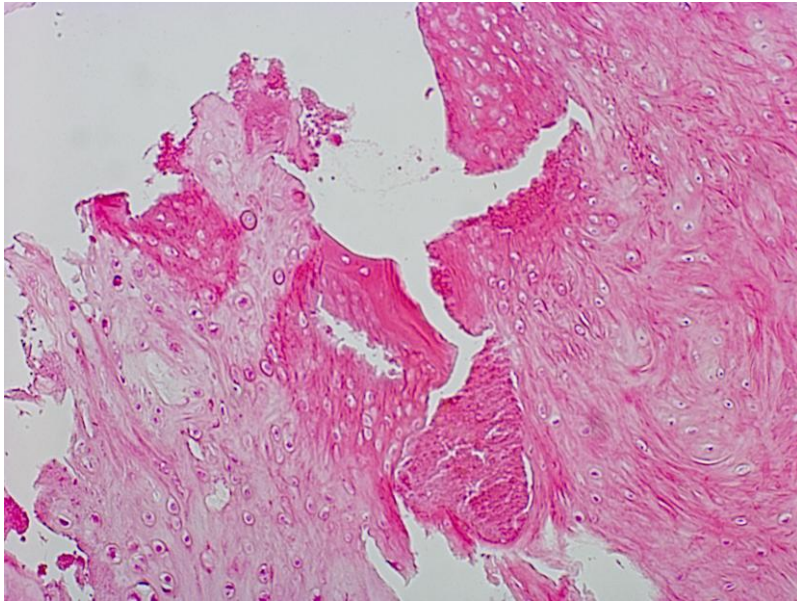
**Kogoj's spongiform pustule** (a type of pustular psoriasis).  
Sk-22-Pso

Kogoj's spongiform pustule, a histological finding associated with generalized pustular psoriasis, is featured by the presence of sterile pustules in the epidermis with the formation of a spongiform "basket-like" structure. The disease may be complicated with liver dysfunction.

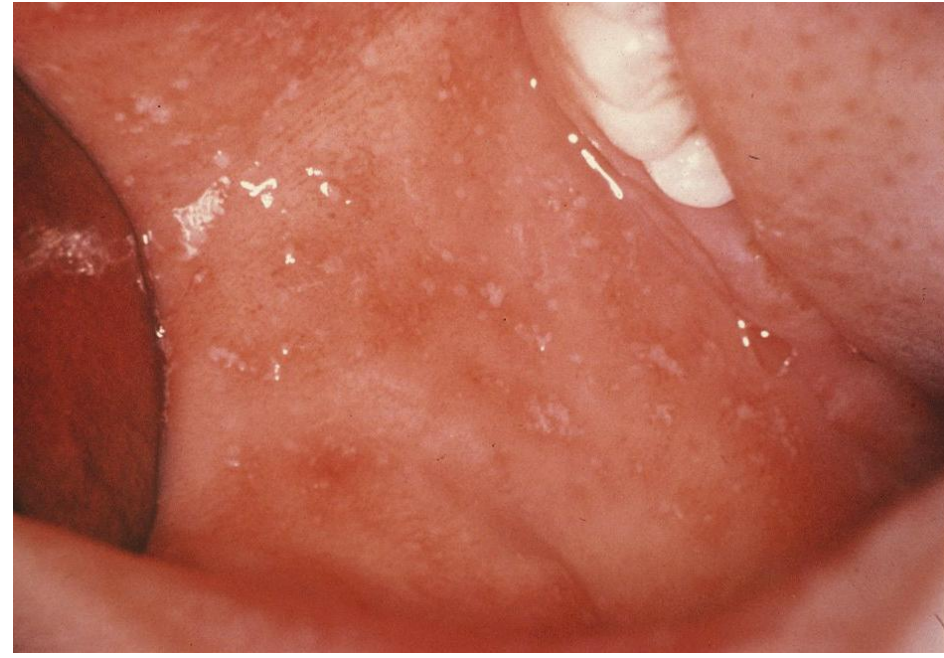


**Köhler's disease** (avascular necrosis of the navicular bone of the foot of a 14 y-o girl). ConnectT-44-1-bone

The cartilaginous cap of the navicular bone is eroded, and bone tissue is fragmented.



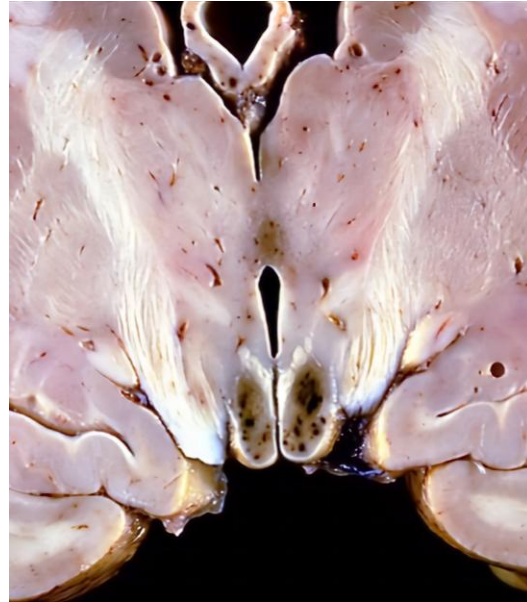
**Koplik spot** (early sign of measles)



Koplik spots, a pathognomonic sign of measles viral infection, are small, white, grain-like lesions seen on the inside of the mouth, specifically on the cheek and gum.

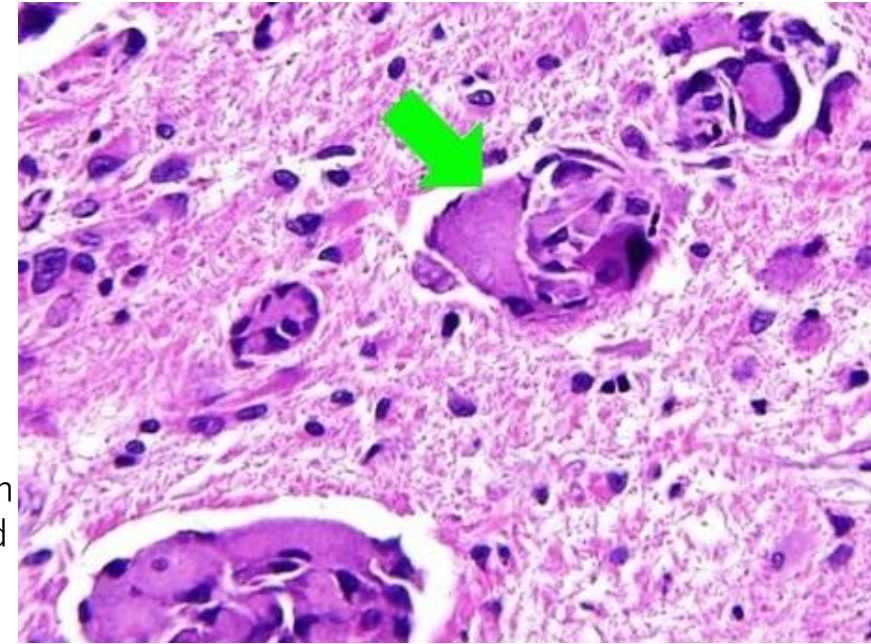
**Korsakoff syndrome** (Wernicke-Korsakoff syndrome). neuro-16-brain

Korsakoff syndrome is a chronic neurocognitive disorder caused by thiamine (vitamin B1) deficiency, principally due to excessive alcohol consumption. Symptoms include memory loss, confabulation and difficulty in learning new information. Anterior thalamic nucleus and mamillary bodies are involved. It occurs as a complication of Wernicke's encephalopathy.



**Krabbe's disease** (globoid cell leukodystrophy/galactosylceramide lipidosis)

a fatal, infantile-onset, autosomal recessive lysosomal storage disease with mutations in the GALC gene, resulting in CNS damage by demyelination and accumulation of sphingolipids. PAS+ multinucleated "globoid macrophages" are seen with extensive loss of myelin and oligodendrocytes. Borrowed from: Flashcard quizlet.com

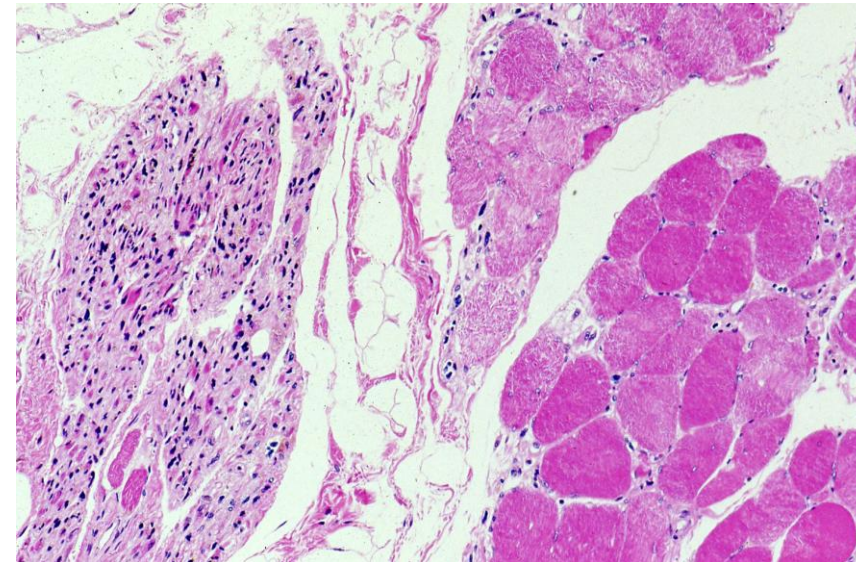


**Krukenberg tumor** (bilateral ovarian metastasis of gastric cancer). Gyne-223-ovary

bilateral solid ovarian metastasis of signet ring cell carcinoma of the stomach at autopsy



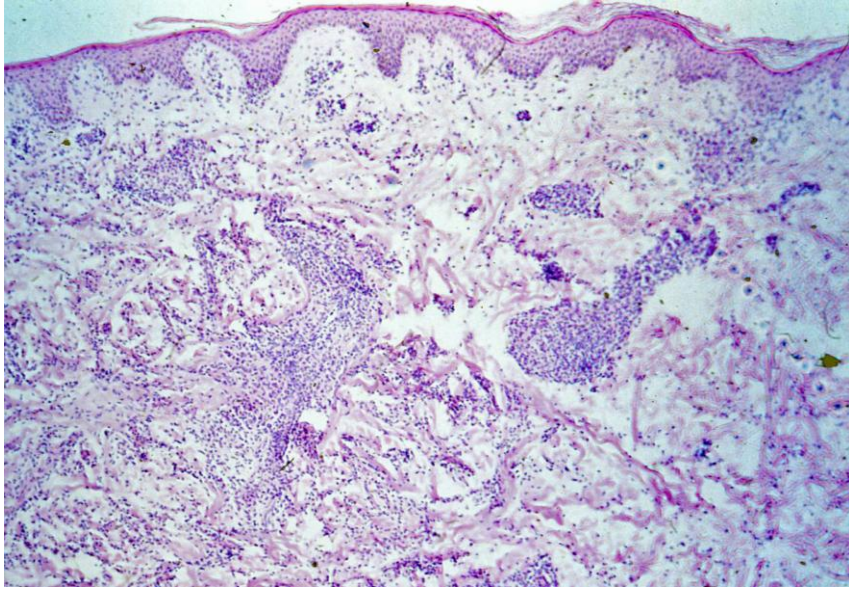
**Kugelberg-Welander's disease** (spinal muscular atrophy, juvenile type). neuro-123-3-spinalC



In SMA, juvenile type, distal striated muscle shows neurogenic muscular atrophy (grouping atrophy).

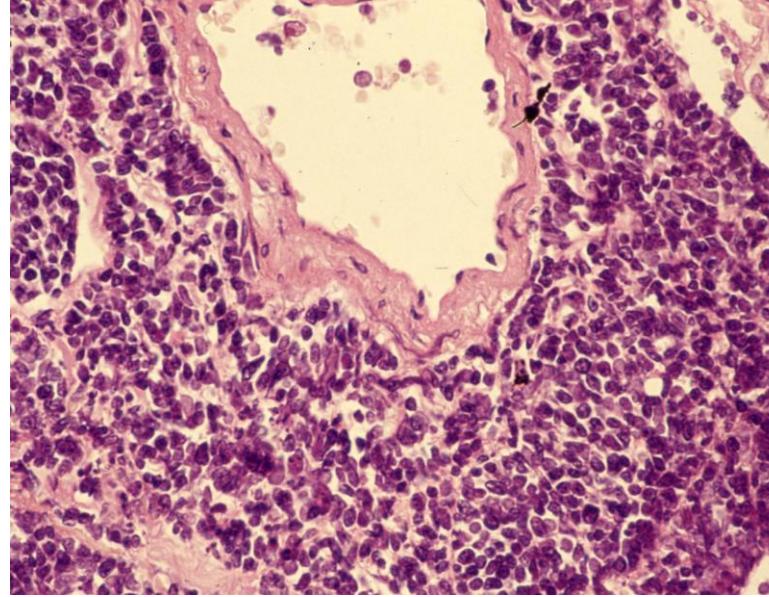
**Kveim reaction** (skin test for detecting sarcoidosis using sarcoidosis splenic extract). Sk-98-2-Granul

perivascular lymphocytic infiltration seen 6 weeks after injection of the splenic extract



**Lambert-Eaton myasthenic syndrome** (paraneoplastic neurological syndrome with small cell lung carcinoma)

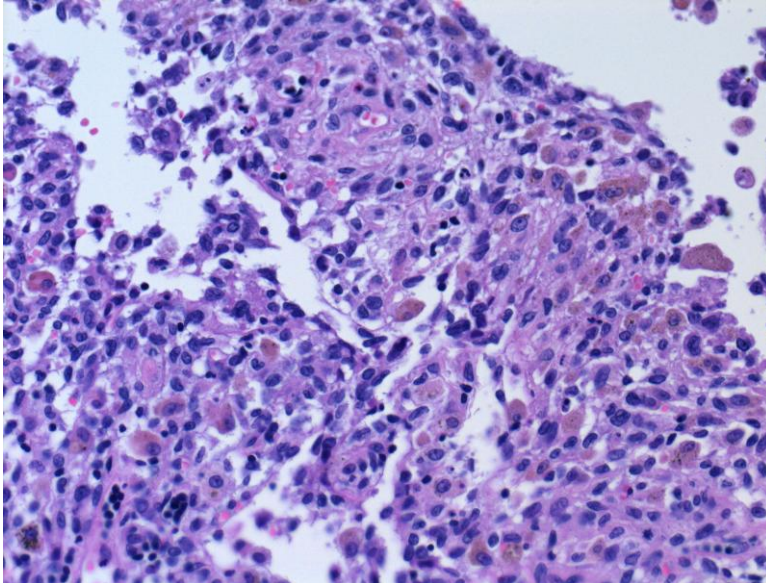
an autoimmune presynaptic disorder of the neuromuscular junction often associated with small cell lung carcinoma. Quantal release of acetylcholine is impaired by autoantibodies for P/Q-type voltage-gated calcium channels. Proximal muscle weakness, depressed tendon reflexes with post-tetanic potentiation and autonomic symptoms are seen.



**Langerhans cell histiocytosis** (eosinophilic granuloma, often localized in the lung or bone).

Lung-152-1-benignT,  
Lung-152-2-benignT,  
ConnectT-47-bone

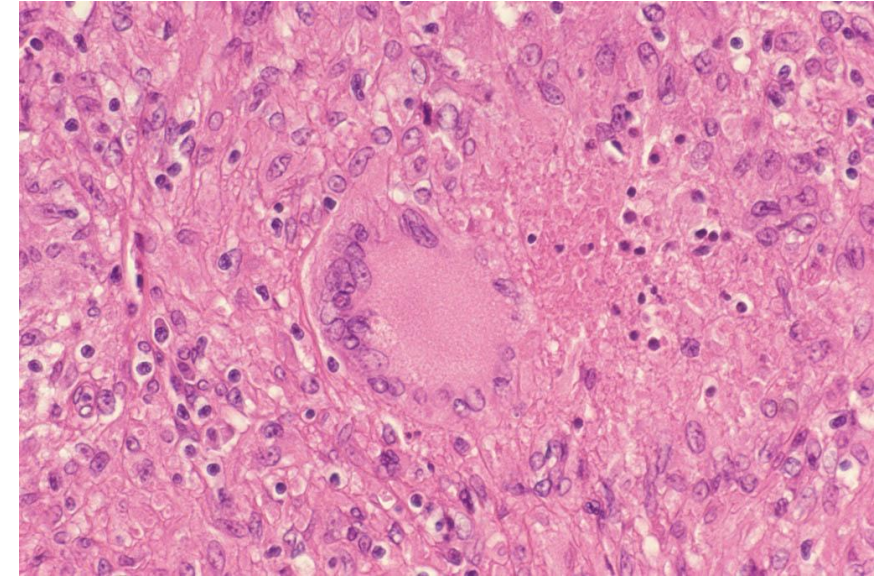
So-called eosinophilic granuloma of the smokers' lung shows localized infiltration of Langerhans cells and eosinophils.



**Langhans' giant cell** (containing horseshoe-shaped ring of nuclei in mycobacteriosis and sarcoidosis).

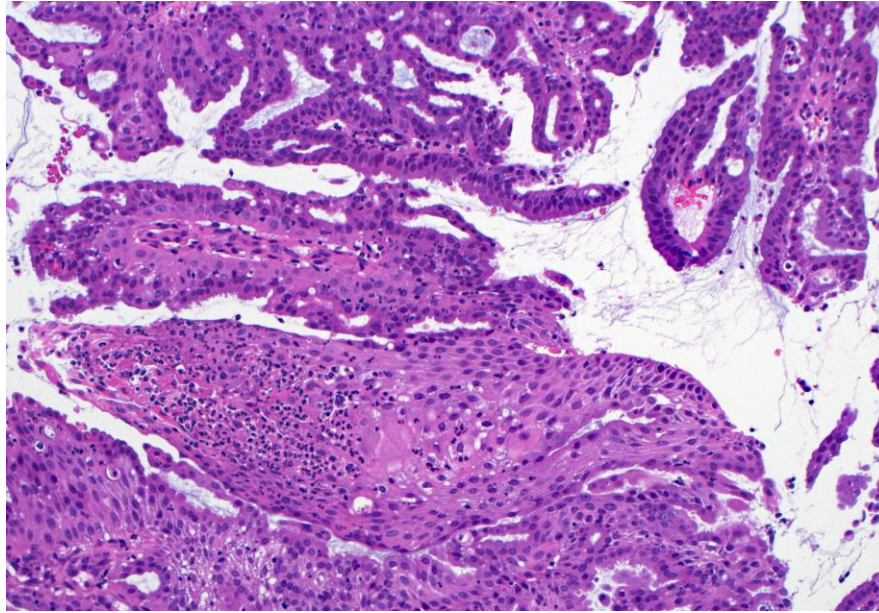
Lung-101-1-bact

Langhans-type giant cell in tuberculosis, with acellular cytoplasm facing to caseous necrosis



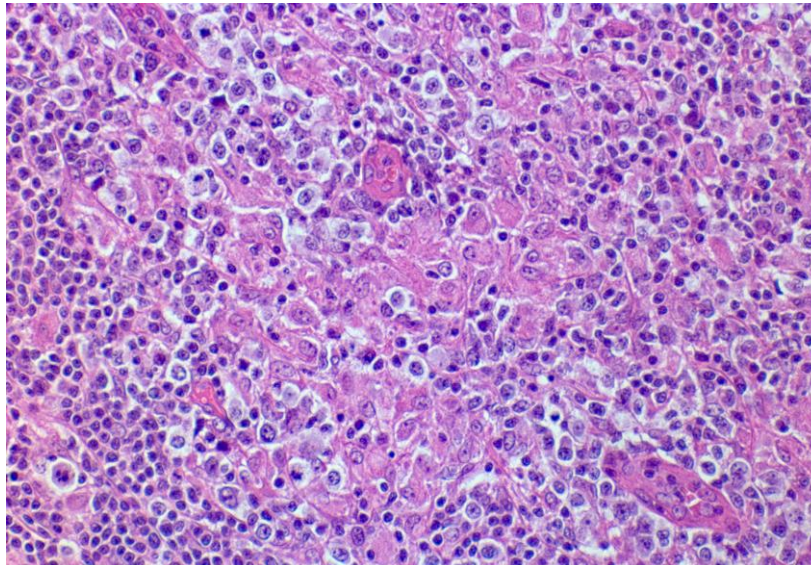
**Lehman-Hart proliferation** (benign papillary proliferation of the endometrium). Gyne-122-1-EM, Gyne-122-2-EM

pseudo-malignant papillary growth of endometrial glandular cells, seen in a 51 y-o lady

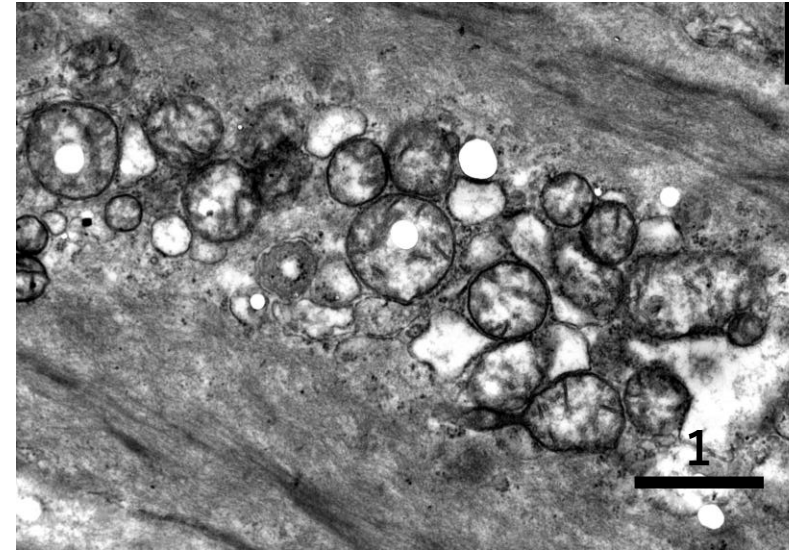


**Lennert lymphoma** (lymphoepithelioid cell lymphoma, a variant of T-cell lymphoma). Hemato-150-1-1-LN through Hemato-150-2-LN

Epithelioid cells are rich among the T-cell lymphoma.



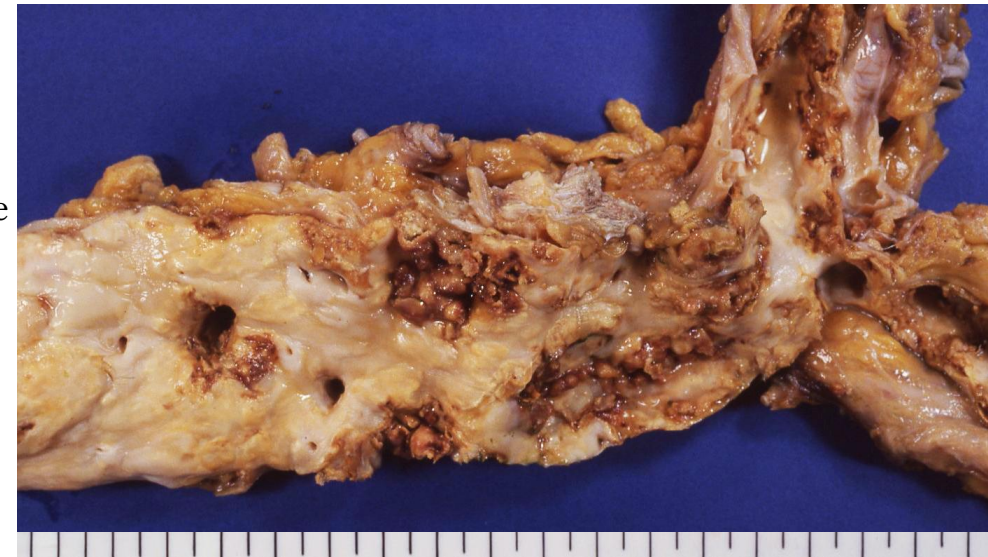
**Leigh syndrome** (mitochondriopathy manifesting chronic intestinal pseudo-obstruction or subacute necrotizing encephalomyelopathy). GI-336-colorectum



Leigh syndrome with mtDNA variant showed chronic intestinal pseudo-obstruction. Smooth muscle cell in the proper muscle layer reveals increase of mitochondria.

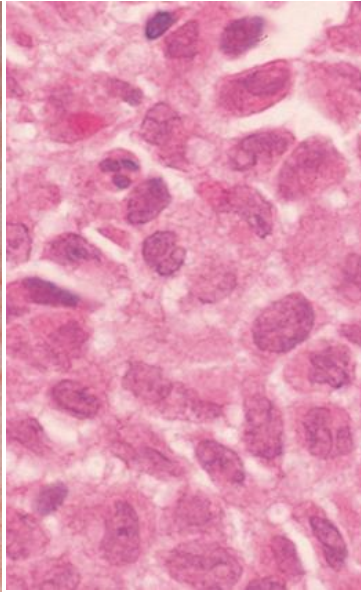
**Leriche syndrome** (atherosclerosis obliterans). Vascular-87-1-artery

an aortoiliac occlusive arterial disease accompanying decreased peripheral pulses, claudication and erectile dysfunction

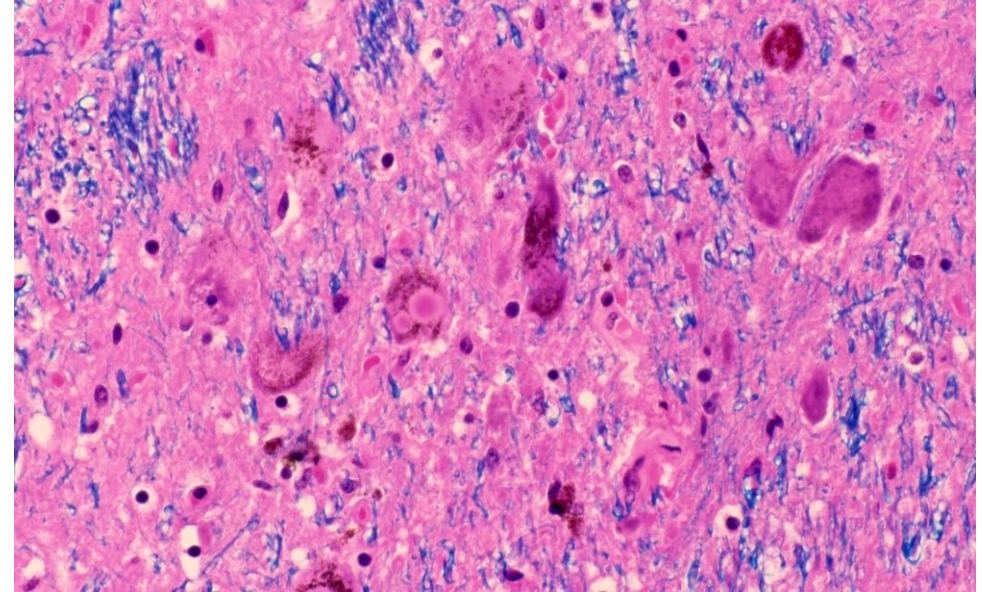


**Letterer-Siwe disease** (acute disseminated form of Langerhans cell histiocytosis in infancy). Sk-522-1-LPD, Sk-522-2-LPD

Small hemorrhagic skin rash on the trunk. Bx reveals growth of atypical Langerhans cells.



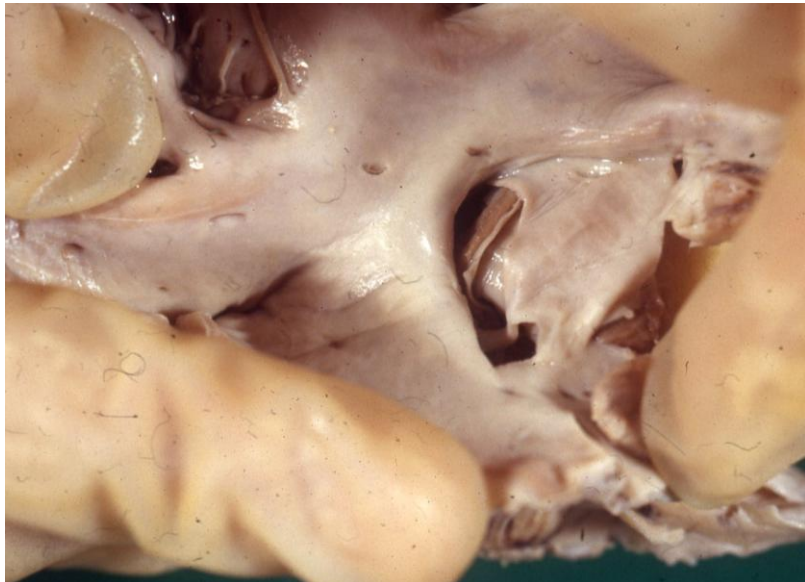
**Lewy body** (substantia nigra in Parkinson's disease). neuro-63-a-brain, neuro-18-1-brain, neuro-18-2-brain



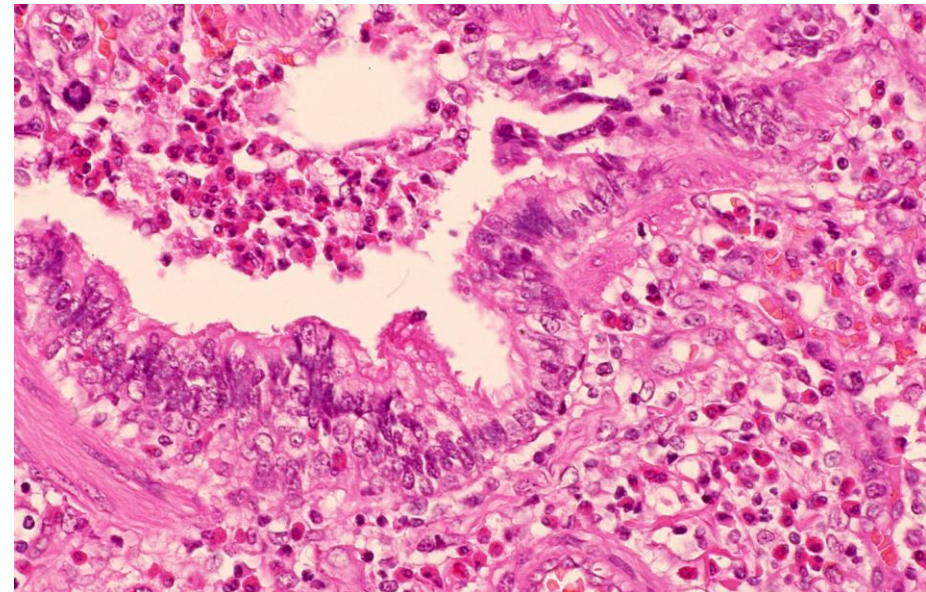
round eosinophilic and targeted cytoplasmic structures composed of alpha-synuclein

**Libman-Sacks endocarditis** (non-bacterial endocarditis in SLE). Vascular-56-2-valve

verrucous valvular lesion on the mid-portion of the mitral valve in a case of SLE



**Löffler syndrome** (eosinophilic pneumonia) Lung-56-1-inflammation, Lung-56-2-inflammation

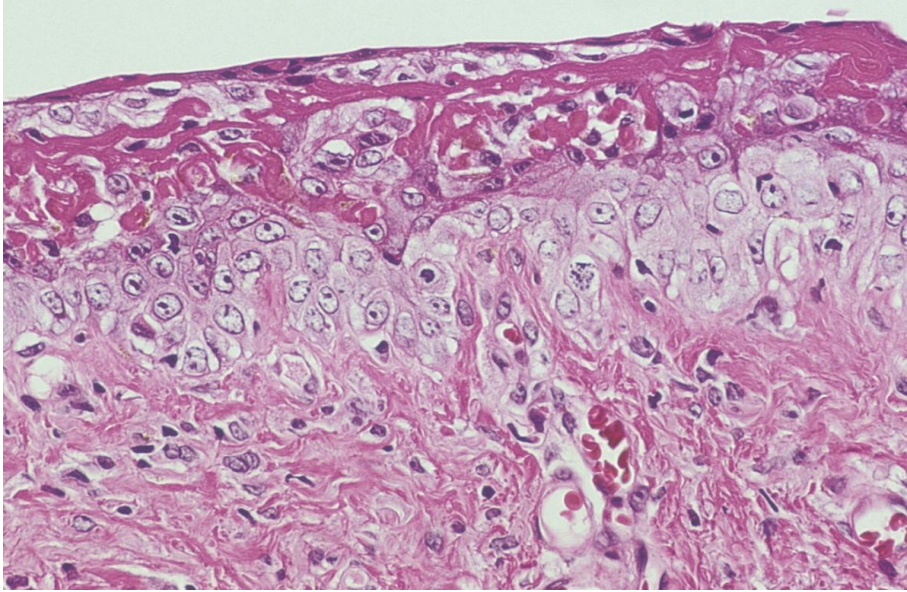


marked eosinophilic infiltration in the alveolar septa, peribronchial tissue and in the bronchial lumen

**Lyell syndrome** (toxic epidermal necrolysis: TEN).

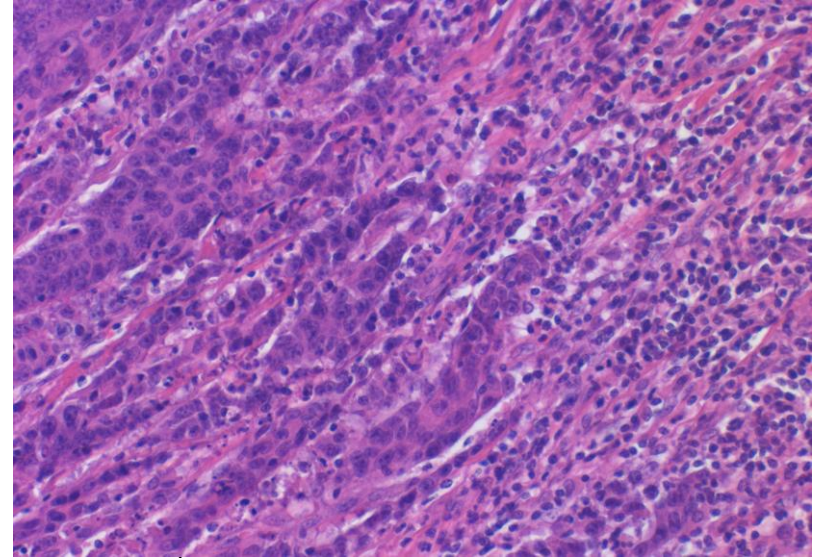
Sk-28-EM, Sk-258-Bact

TEN belongs to severe mucocutaneous adverse reaction with blister and peel-forming painful and necrotizing skin rash. caused by drugs (D-TEN) or *Staphylococcus aureus* (S-TEN).



**Lynch syndrome** (hereditary nonpolyposis colorectal carcinoma: medullary carcinoma with lymphoid stroma and microsatellite instability). GI-441-1-colorectum, GI-441-2-colorectum

In Lynch syndrome, medullary carcinoma often occurs in the right-sided colon.



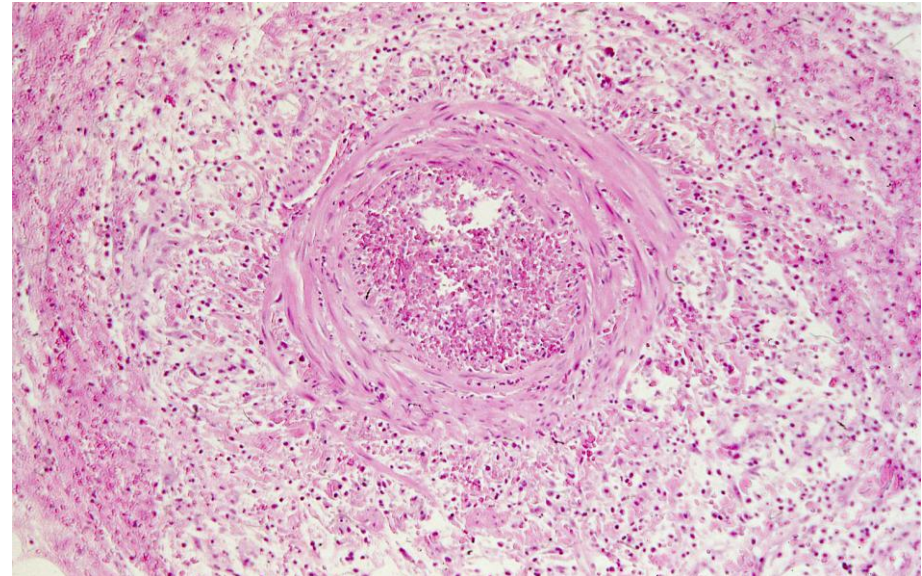
**Machado–Joseph disease** (spinocerebellar ataxia type 3) (autosomal dominant heredity with abnormal "CAG" trinucleotide repeats in the ATXN3 gene).

In SCA type 3, the neuronal loss is seen in Clarke's, basal pontine, dentate and red nuclei and in dorsal root ganglia. The cerebellar cortex and olivary nuclei are spared.



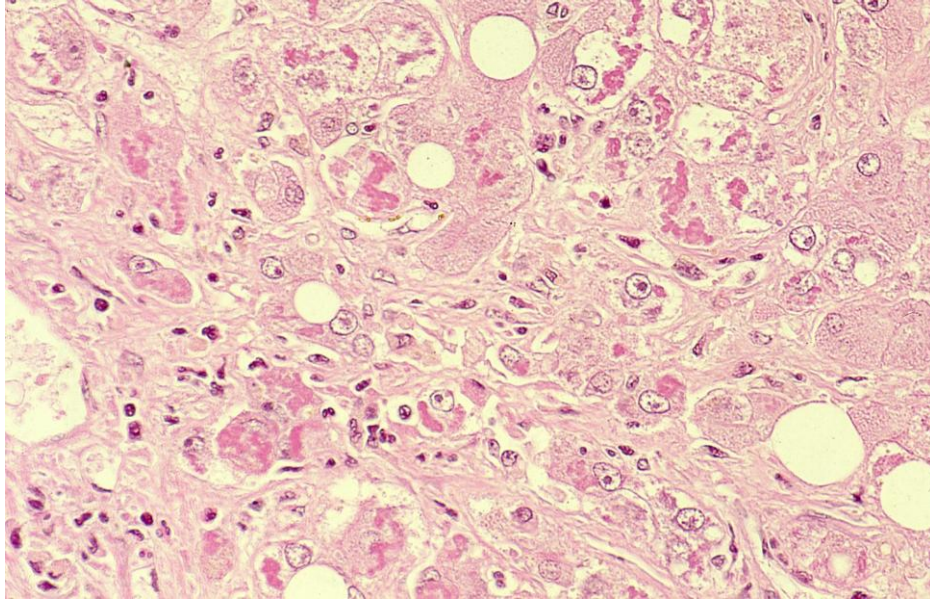
**Majocchi's disease** (purpura annularis telangiectodes of Majocchi). Sk-111-a-Vascul

A bluish-red annular patch on the leg, featured by petechial telangiectasia.

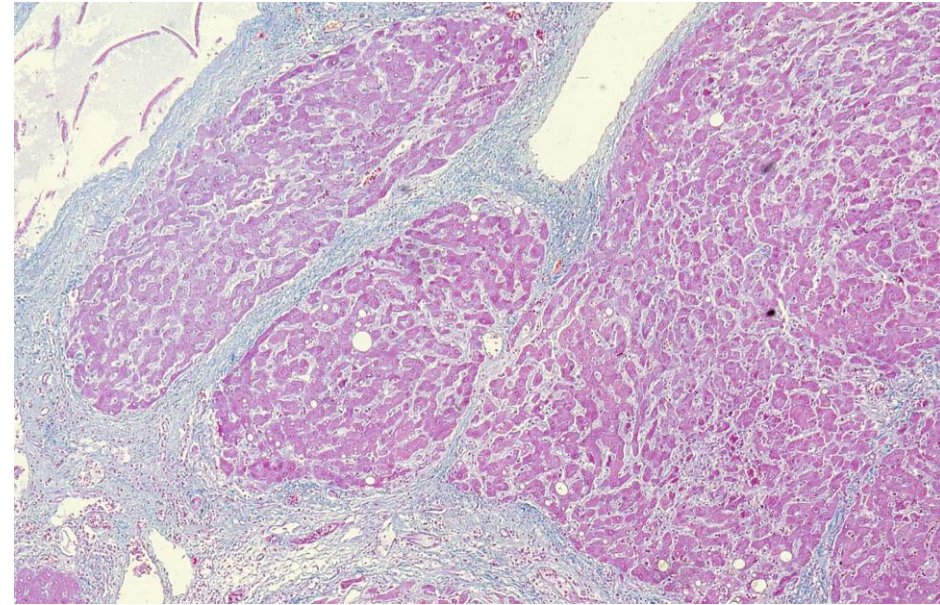


**Mallory body** (alcoholic hyaline in alcoholic liver disease: amorphous cytoplasmic eosinophilic inclusion). HBP-12-2-liver

liver biopsy from alcoholic hepatitis, featured by numbers of Mallory bodies and fatty change.



**Mallory stain** (trichrome stain with aniline blue, acid fuchsin and orange G). HBP-42-4-liver



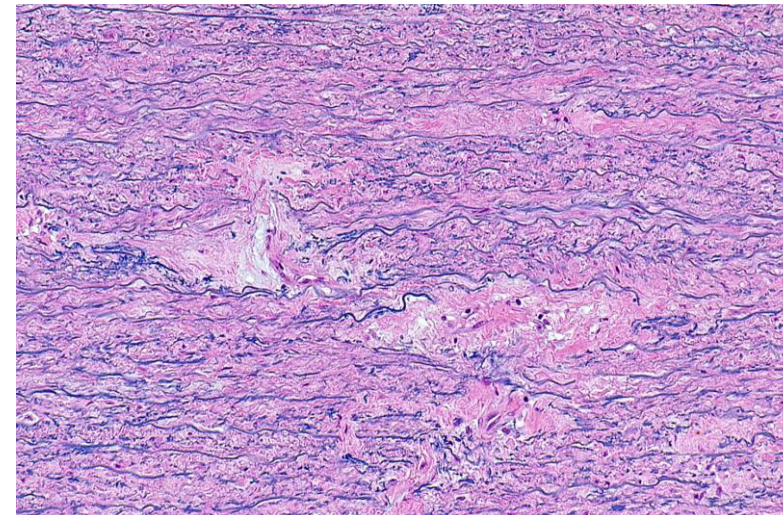
Collagen fibers are stained blue (liver cirrhosis).

**Mallory-Weiss syndrome** (longitudinal mucosal lacerations in the distal esophagus caused by forceful or prolonged vomiting)

Endoscopic findings of Mallory-Weiss tear in the lower esophagus. Borrowed from: Gastrointestinal Blueprint



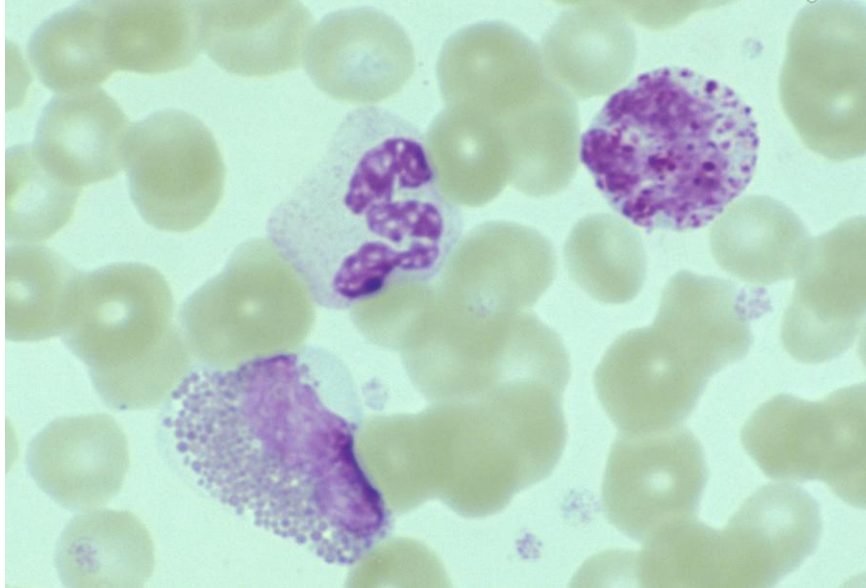
**Marfan syndrome** (often provoking aortic dissection microscopically with cystic medial necrosis). Vascular-65-2-1-aorta, Vascular-65-2-2-aorta



Long limbs and fingers and pectus excavatum characterize Marfan syndrome. Cystic medial necrosis is associated (VB-H&E).

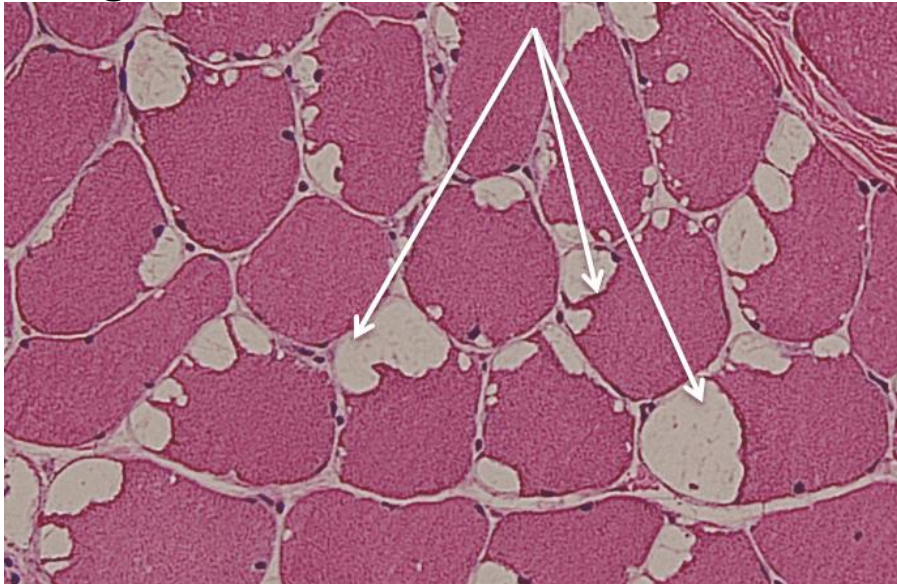
**May-Giemsa stain** (routine stain mainly for hematopoietic cells using dry fixation)

May-Giemsa-stained bone marrow aspirate contains eosinophil, neutrophil and basophil (from left to right) in one high-powered field.



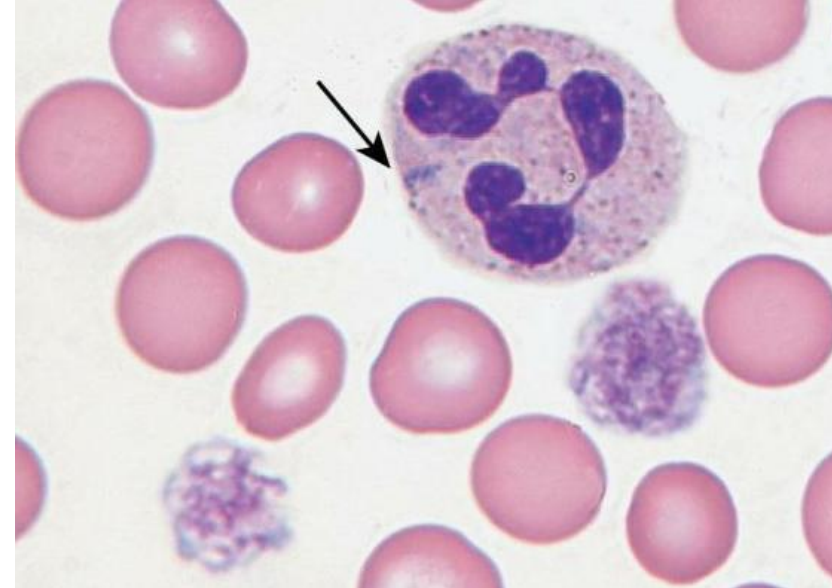
**McArdle's disease** (glycogen storage disease type 5, mainly involving skeletal muscles). neuro-183-a-Smuscle

glycogen-filled vacuoles in peripheral cytoplasm of the striated muscle cells (arrows)



**May-Hegglin anomaly** (hereditary thrombocytopenia) Hemato-46-3-BM

May-Hegglin anomaly is an autosomal dominant hereditary disorder caused by mutations of the MYH9 gene. Thrombocytopenia with giant platelets and mild bleeding tendency, Döhle bodies in neutrophils are noted. Hearing loss, cataracts and renal dysfunction may be seen.



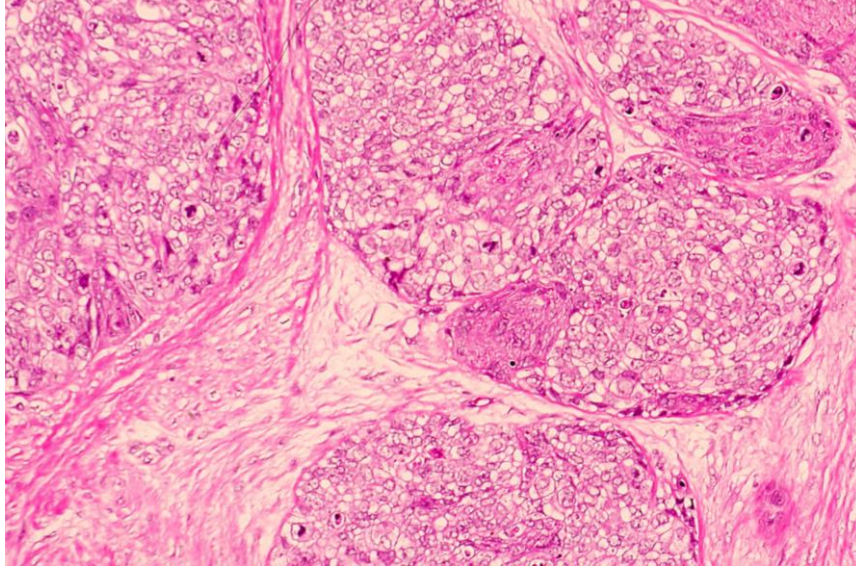
**Meckel's diverticulum** (congenital true diverticulum of the ileum often with ectopic gastric mucosa and pancreas). GI-192-1-small bowel



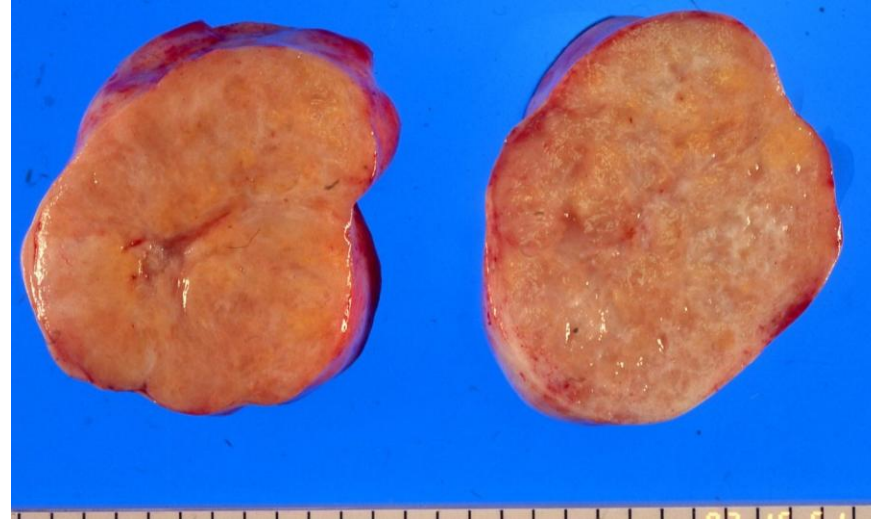
Meckel's diverticulum is located at the anti-mesenteric side.

**Meibomian gland carcinoma** (sebaceous gland carcinoma). Eye-29

sebaceous differentiation with clear and foamy cytoplasm



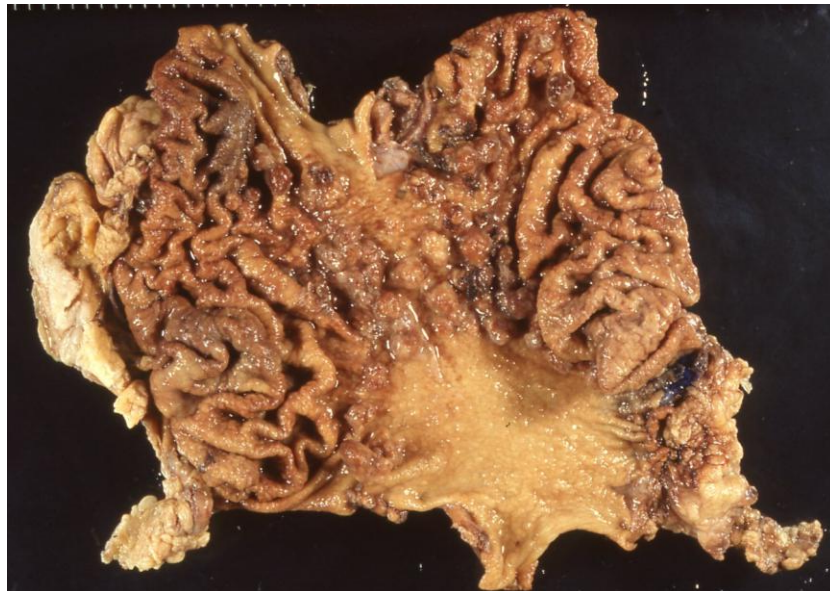
**Meigs syndrome** (triad: ascites, right-sided pleural effusion and benign ovarian tumor such as ovarian fibroma, fibrothecoma or Brenner's tumor). Gyne-189-1-ovary



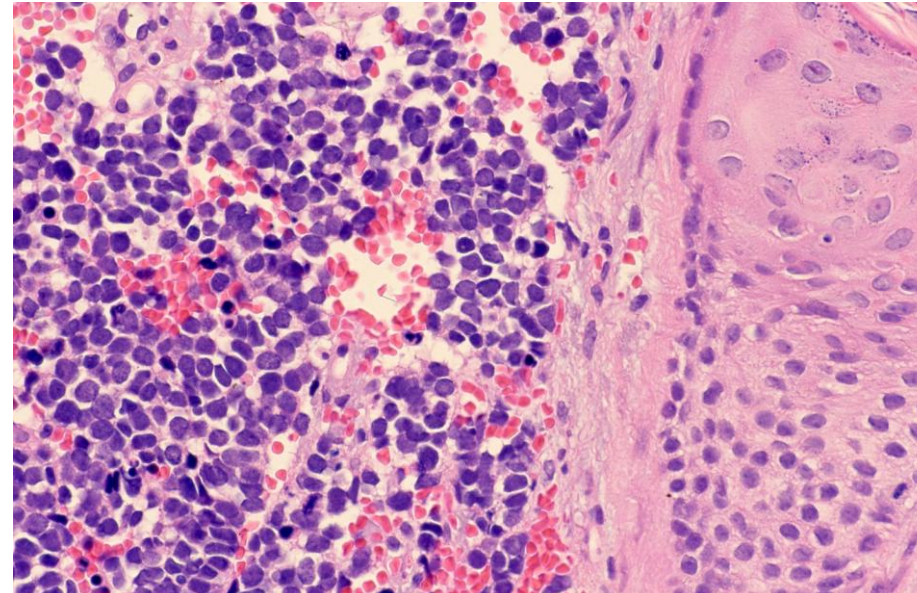
Gross appearance of ovarian fibroma. Ascites and pleural effusion disappeared after the removal of the tumor.

**Ménétrier's disease** (hypertrophic gastropathy) GI-75-1-1-stomach and GI-75-1-2-stomach

giant gastric mucosal folds in the gastric body resembling cerebral convolutions



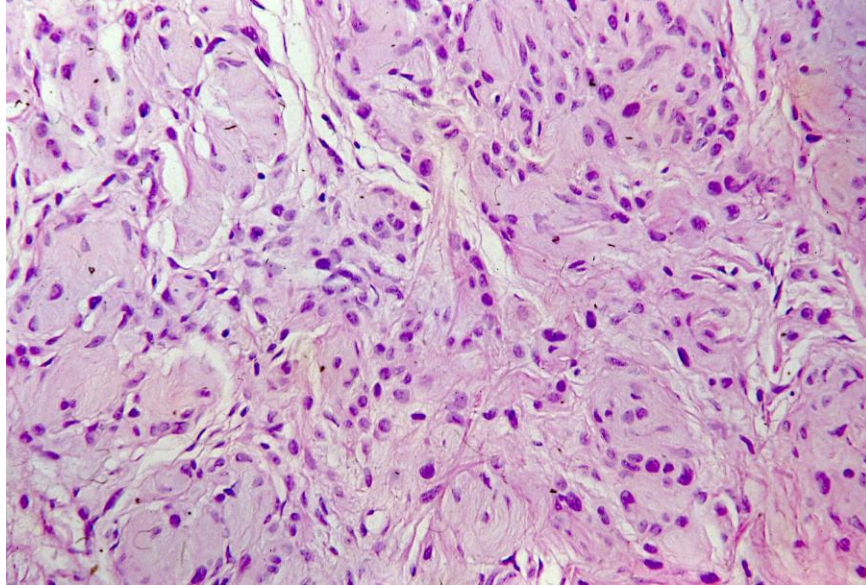
**Merkel cell carcinoma** (cutaneous neuroendocrine carcinoma). Sk-464-1-MENeo through Sk-464-3-MENeo



The tumor, caused by infection of Merkel cell polyomavirus, resembles small cell carcinoma of the lung. The epidermis is spared.

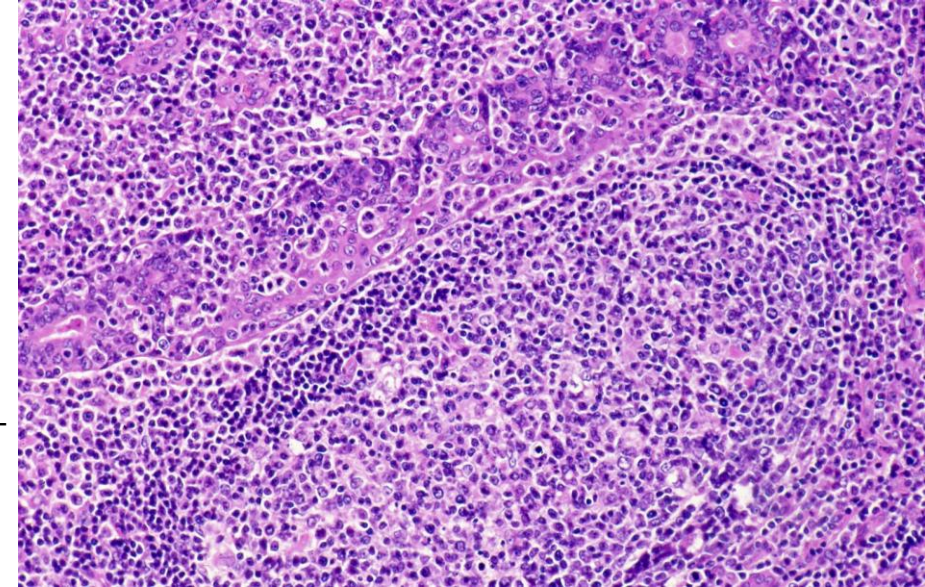
**Miescher's nevus** (dome-shaped intradermal nevus on the face with neuroid appearance). Sk-399-Nevus

Intradermal nevus on the face, showing differentiation toward Meissner's corpuscles



**Mikulicz' disease** (IgG4-related chronic sialadenitis of parotid gland). HN-213-1-SalivG through HN-213-3-SalivG

lymphoplasmacytic infiltration, lymphoid follicle formation and lymphoepithelial lesions are seen.



**Milroy's disease** (hereditary lymphangiectasia)

Milroy's disease is a genetic disorder with mutations of the FLT4 gene encoding VEGFR-3, a protein regulating the development and maintenance of the lymphatic system.



Lymphangiectasia with lymphedema leads to the accumulation of lymph fluid with marked swelling of the legs and feet.

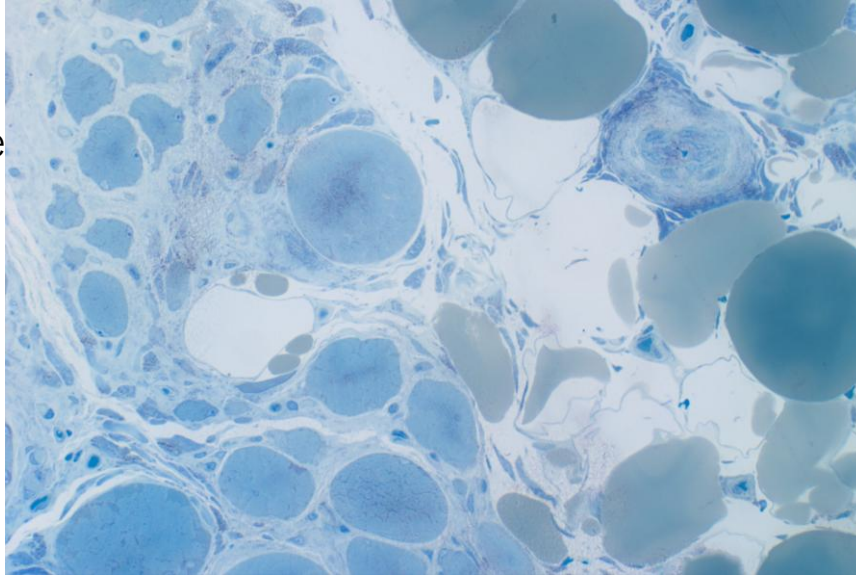
**Mirizzi's syndrome** (a gallstone impacted in the cystic duct causing obstructive jaundice). HBP-178-GB



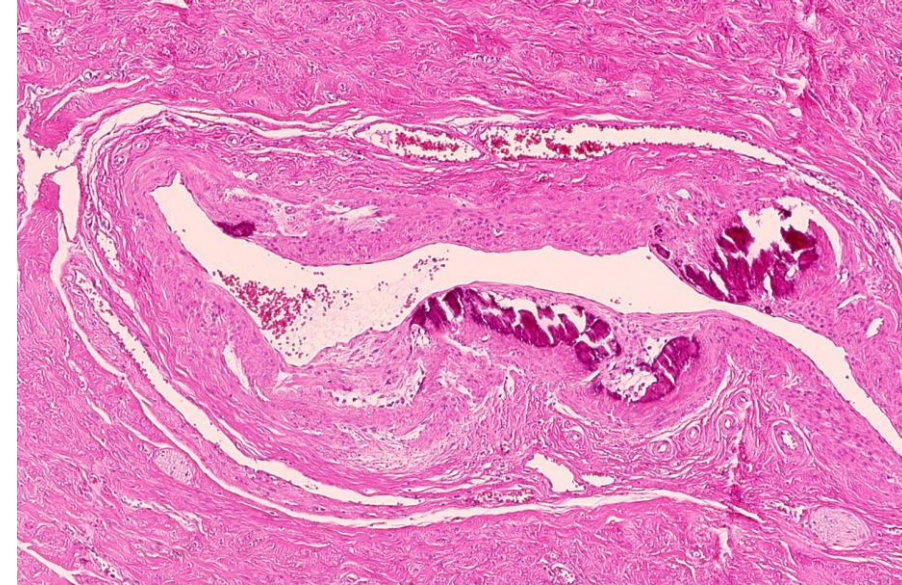
cholelithiasis at the neck provoking fibrotic stenosis of the CBD or hepatic duct

**Miyoshi distal muscular dystrophy** (autosomal recessive distal myopathy, dysferlinopathy, involving the legs). neuro-186-Smuscle

Distal leg muscle biopsy from a 31 y-o male patient shows myogenic atrophy with lipomatosis (toluidine blue stain for thick section).



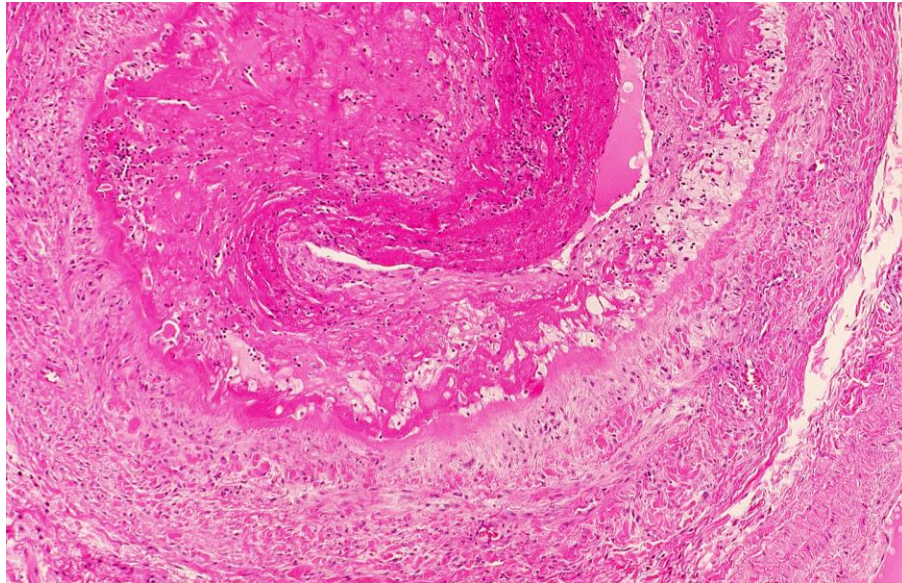
**Mönckeberg-type arteriosclerosis** (arteriomedial calcification). Vascular-88-artery



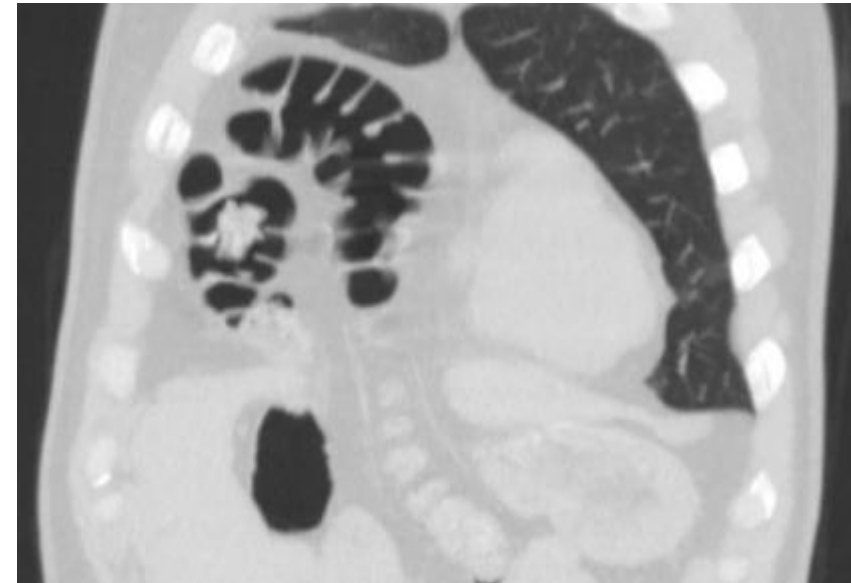
calcification of the media of the small artery, often seen in non-functioning organs such as post-menopausal uterus.

**Mondor's disease** (thrombophlebitis of the breast or penis). Sk-132-Vascul

organized thrombophlebitis of the penis, presenting as a cord-like structure under the penile skin



**Morgani hernia** (hernia through a congenital diaphragmatic defect behind the sternum frequently found in children)



CT demonstrates herniated gut into the right thoracic cavity of an infant through the foramen of Morgani.

## Morquio syndrome (mucopolysaccharidosis type IV)

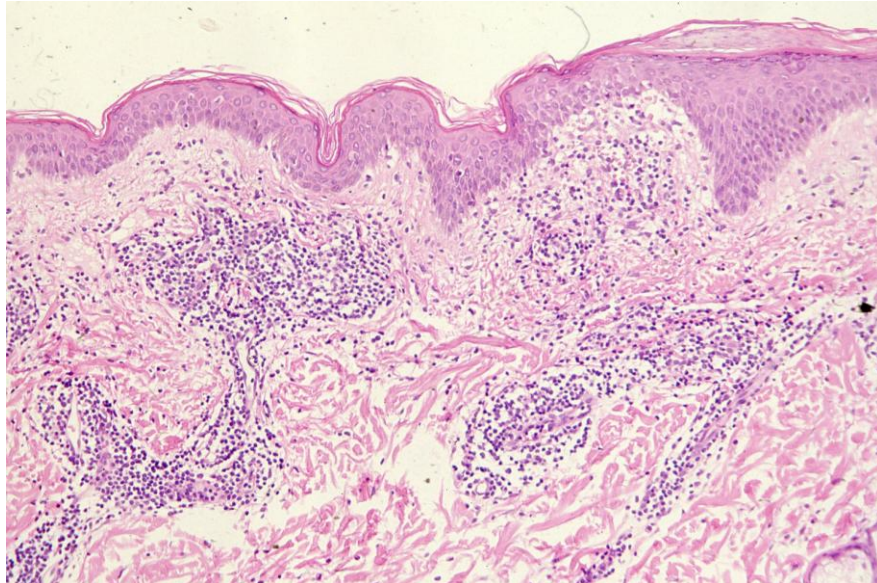
Morquio syndrome is an autosomal recessive lysosomal storage disorder. Accumulation of keratan sulfate results in skeletal changes of the ribs and chest, short stature, hearing loss and clouded cornea. Intelligence remains normal.



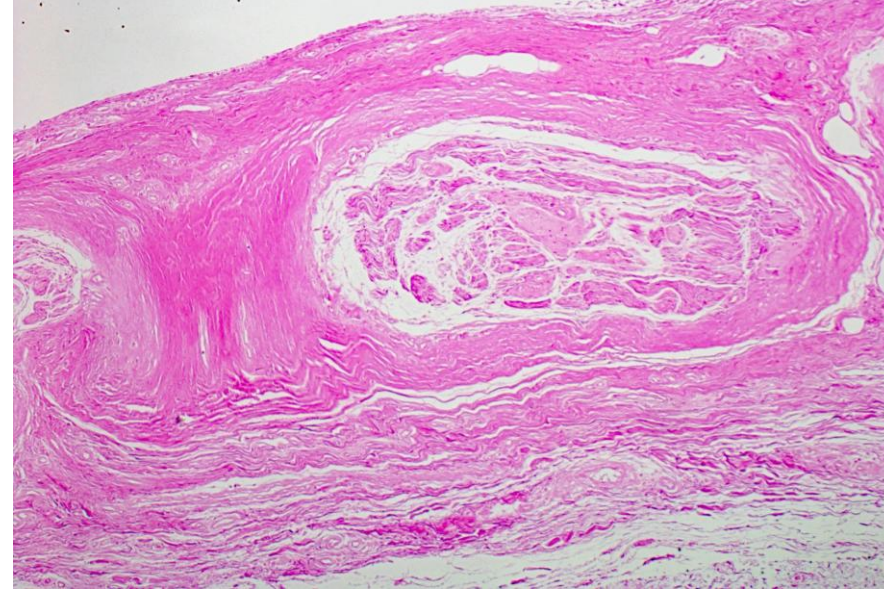
Genu valgum (borrowed from: healthjade.com)

## Mucha-Habermann disease (pityriasis lichenoides et varioliformis acuta: PLEVA). Sk-17-1-Lich

progressive pruritic rash appears on the trunk and proximal extremities. Perivascular lymphocytic infiltration is noted.



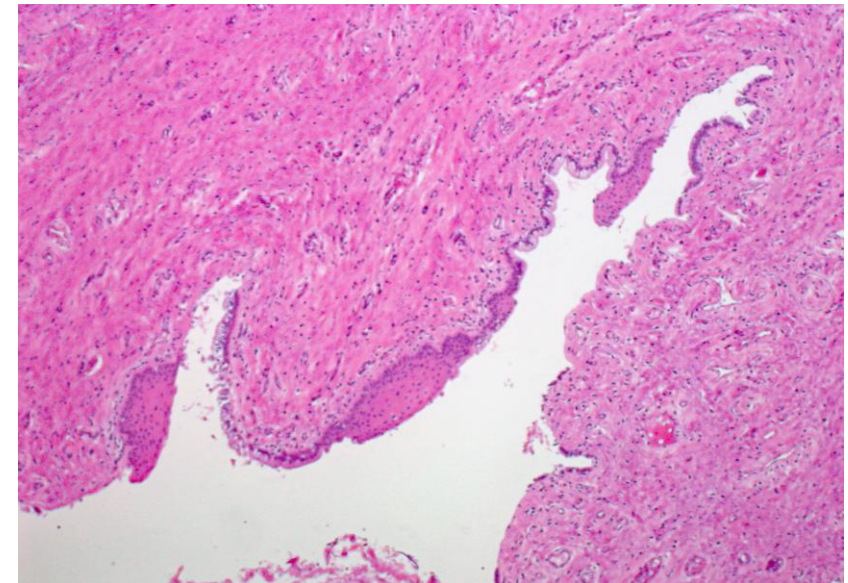
## Morton's neuroma (localized reactive hyperplasia of the intermetatarsal plantar nerve). ConnectT-114-SoftT



The peripheral nerve sheath is surrounded by thick hyaline fibrosis.

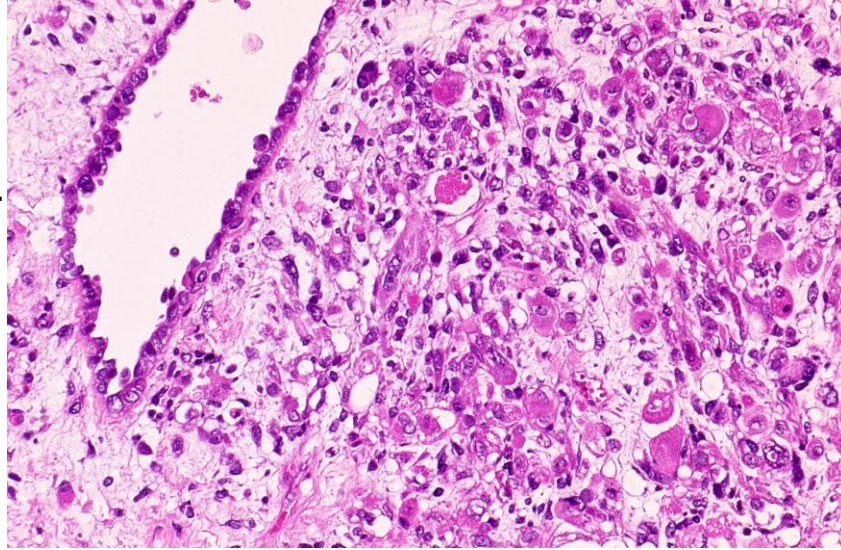
## Müllerian cyst (lined by simple cuboidal/columnar mucinous or ciliated epithelium). Gyne-25-1-vagina, Gyne-25-2-vagina

Müllerian cyst mainly occurs in the vaginal wall (mucous lining+), but may be seen in the retroperitoneum and posterior mediastinum.



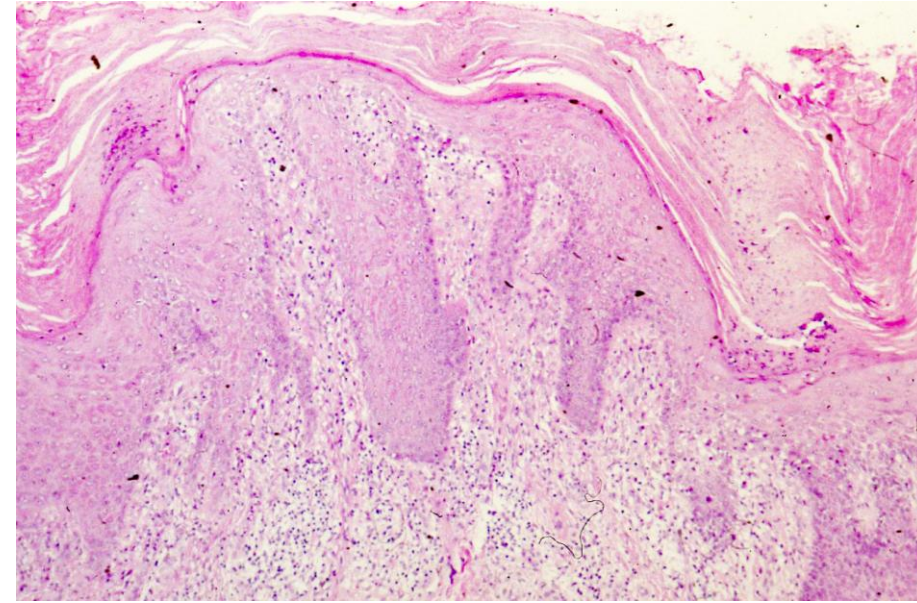
**Müllerian mixed tumor, malignant** (biphasic malignant tumor with carcinoma and sarcoma components: carcinosarcoma). Gyne-138-1-EM through Gyne-138-3-EM

Rhabdomyosarcoma is often associated. MMMT is often seen in the endometrium but also occurs in the uterine cervix and ovary.



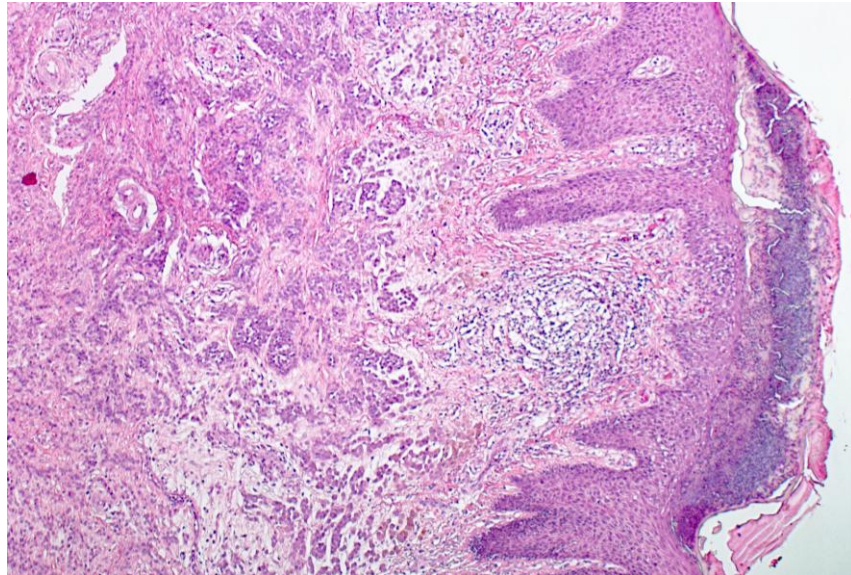
**Munro's microabscess** (seen in psoriasis vulgaris). Sk-21-Pso

Munro's microabscess is a significant histologic feature of psoriasis vulgaris, featured by neutrophils accumulating in the parakeratotic area of the stratum corneum.



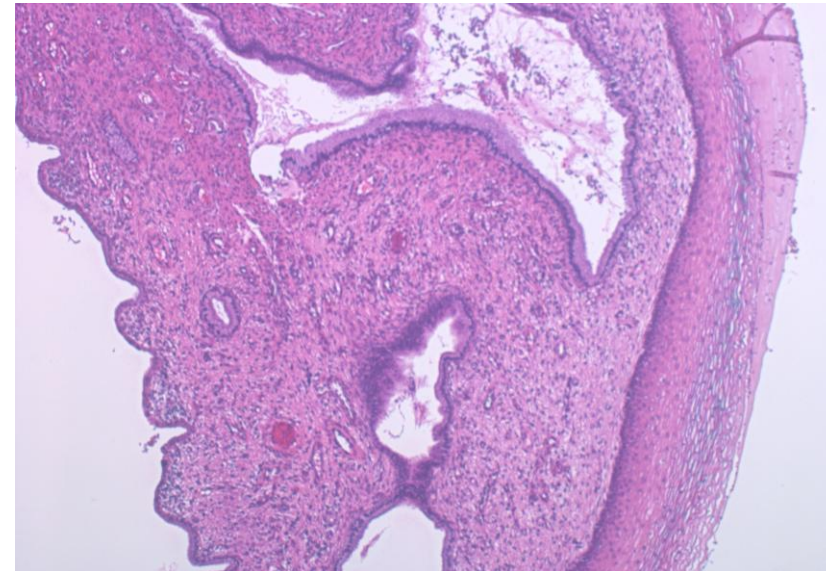
**Myerson's nevus** (melanocytic nevus surrounded by pruritic eczematous halo). Sk-404-Nevus

Subacute spongiotic dermatitis is associated with melanocytic nevus.

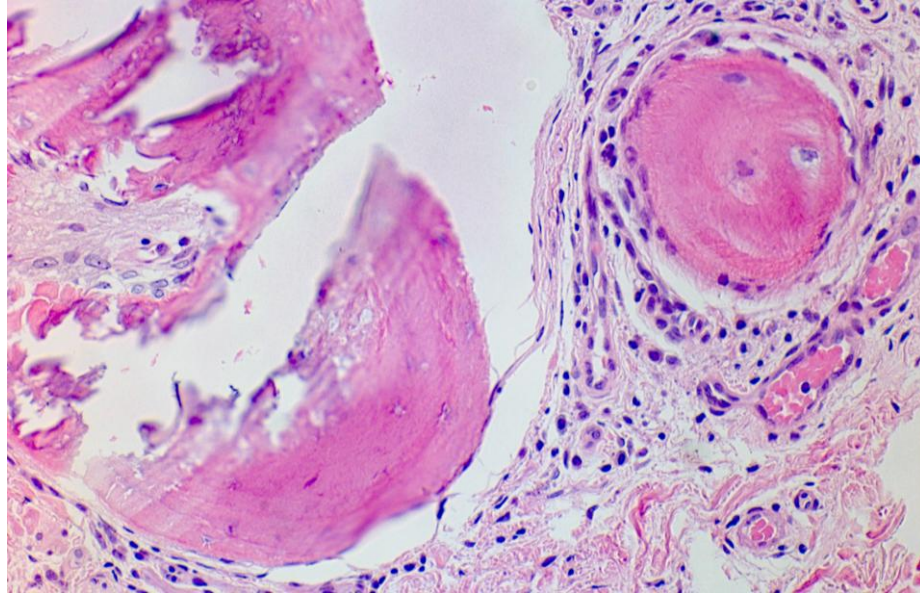


**Nabothian follicle** (mucus-filled cysts in the uterine cervix, a physiological phenomenon). Gyne-47-cervix

Cystic dilatation of the mucous gland lumen is seen. Squamous metaplasia may block the outlet of the cervical mucous gland ducts.

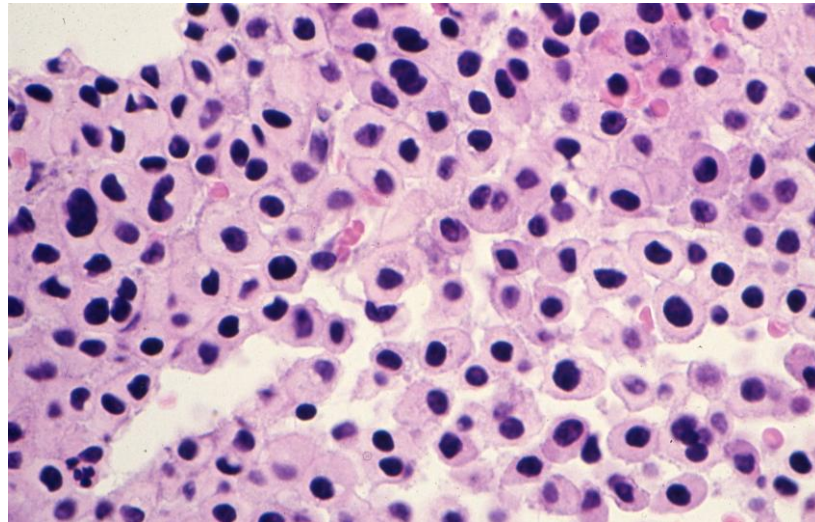


**Nanta nevus** (osteonevus: a secondary change in nevi). Sk-405-Nevus



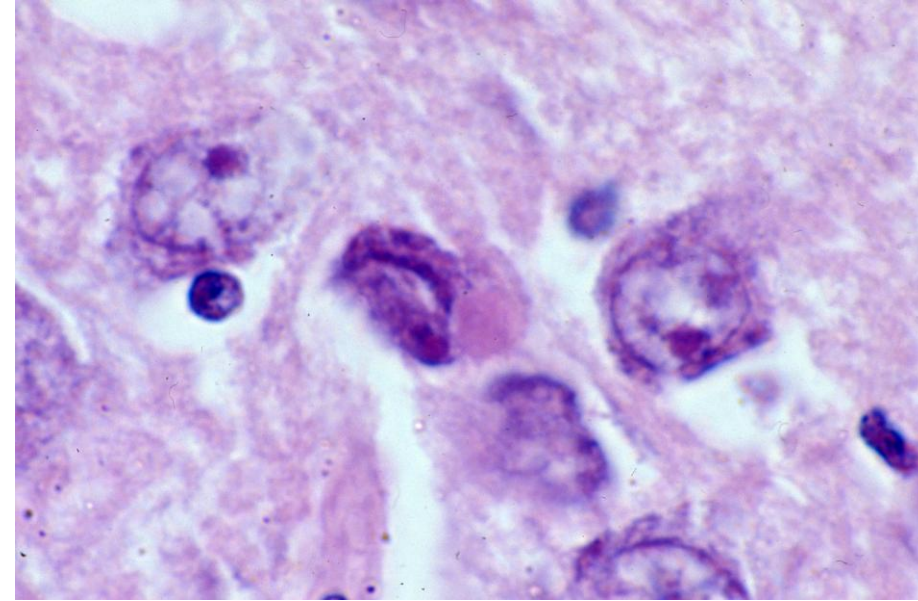
Osseous metaplasia is seen in intradermal nevus.

**Nelson syndrome** (accelerated growth of ACTH-producing functioning pituitary adenoma after bilateral adrenalectomy. Endo-13-1-Pit



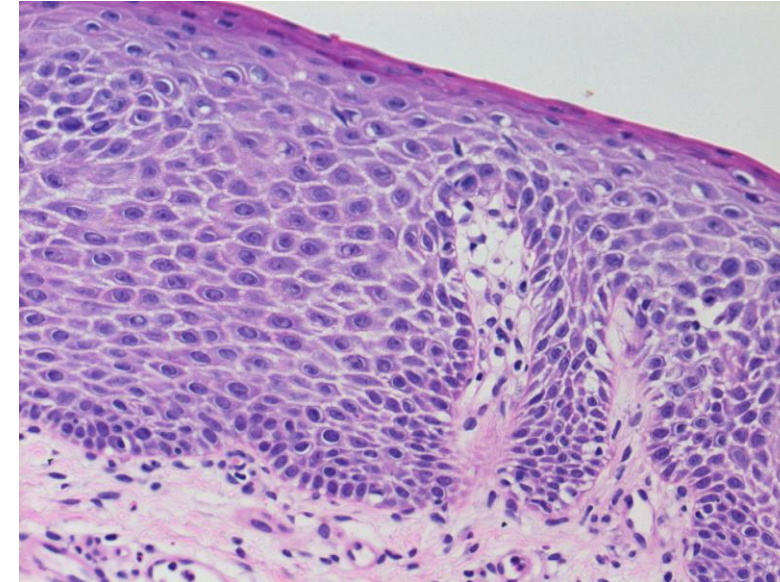
After bilateral adrenalectomy, the basophilic pituitary adenoma rapidly grows with worsened visual field defects

**Negri body** in rabies (eosinophilic globular cytoplasmic inclusions). Inf-350-virus



A hippocampal neuron has a Negri body, an eosinophilic cytoplasmic inclusion.

**Netherton syndrome** (a primary immunodeficiency syndrome). Sk-147-c-Epid



Netherton syndrome, an autosomal recessive hereditary disorder, is featured by ichthyosis-like chronic skin lesions, universal pruritus, severe dehydration and stunted growth. The pediatric patients may have a hair shaft defect or “bamboo hair”.

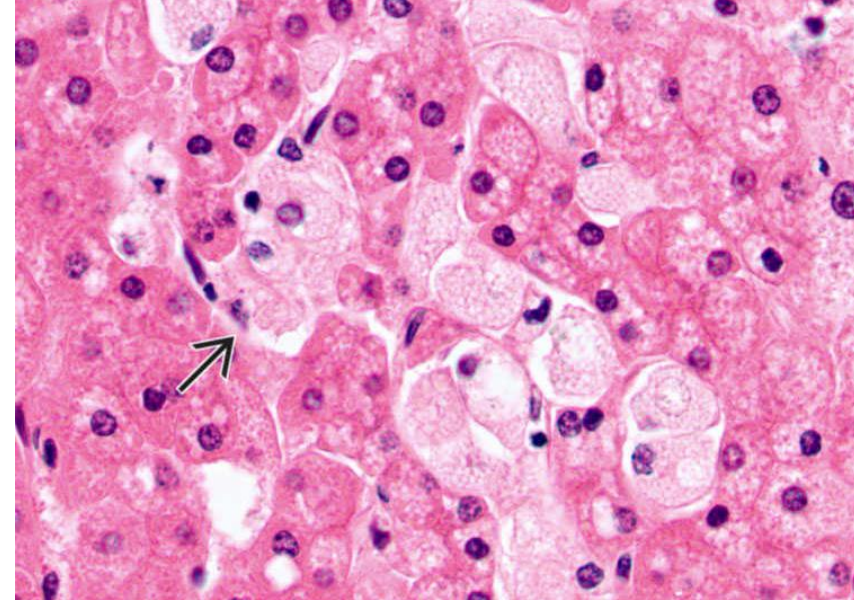
## Nicolsky phenomenon (easy peeling of the skin).

Sk-28-EM, Sk-67-1-Bull, Sk-258-Bact



Sheet-like separation of the epidermis by gentle traction with a thumb or a finger in the peri-lesional skin, affected skin or normal skin. The phenomenon is seen in pemphigus, toxic epidermal necrolysis, and staphylococcal scalded skin syndrome.

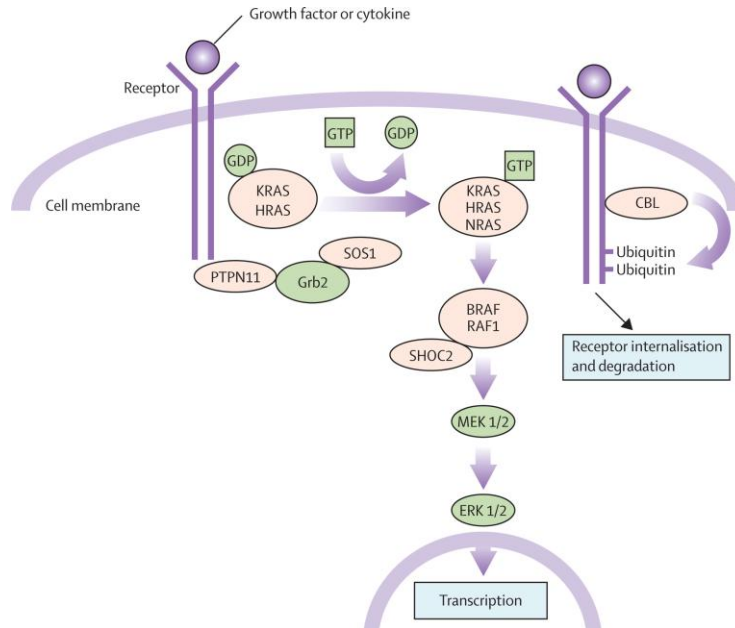
## Niemann-Pick's disease (lysosomal disorder with accumulation of sphingomyelin). Lung-77-a-IP



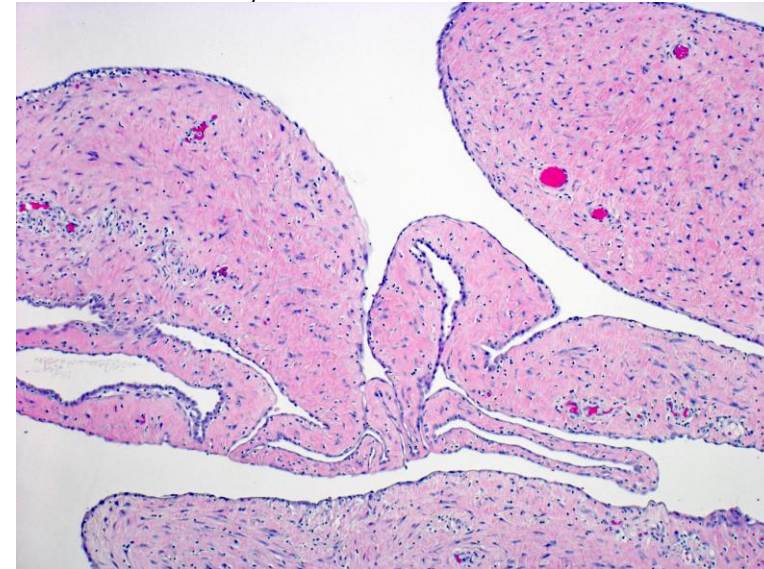
Foamy change is seen in Kupffer cells in the liver (arrow). Borrowed from [express.adobe.com](https://www.express.adobe.com)

## Noonan syndrome (RAS-related hereditary disorder)

Noonan syndrome, an autosomal dominant disorder with RAS/MARK gene abnormalities, is featured by characteristic face, webbed neck, short stature, congenital heart defect (pulmonary stenosis and hypertrophic cardiomyopathy), cryptorchidism, varied coagulation defects and developmental delay.



## Nuck's cyst (female hydrocele in the inguinal canal). Serosa-3-1, Serosa-3-2



Nuck's cyst, a female equivalent to the male processus vaginalis, is lined by mesothelial cells. Endometriosis may be associated.