Diseases, syndromes, lesions and methods with finder's name, O-S

Diseases, syndromes, lesions and methods with finder's name, beginning with O-S, are summarized: O = 8 disorders, P = 21 disorders, Q = 2 disorders, R = 14 disorders, and S = 27 disorders. Representative figures are illustrated in the respective disorders.

O: 8 disorders, P: 21 disorders, Q: 2 disorders, R: 14 disorders, S: 27 disorders

O: Ogilvie syndrome, Ollier's disease, Olmsted syndrome, Omenn syndrome, Osgood-Schlatter disease, Osler's nodule, Osler-Weber-Rendu disease, Ota's nevus

P: Paget's disease, Paget's disease of bone, Pancoast-type lung cancer, Papanicolaou stain, Pappenheimer body, Parkinson's disease, Patau syndrome, Pautrier's microabscess, Perthes disease, Peutz-Jeghers syndrome, Peyronie's disease, Pick's disease, Pickwickian syndrome, Plummer's disease, Plummer-Vinson syndrome, Pompe's disease, Pott disease, Potter syndrome, Prader-Willi syndrome, Pringle's disease (Bourneville-Pringle's disease), Prinzmetal's angina

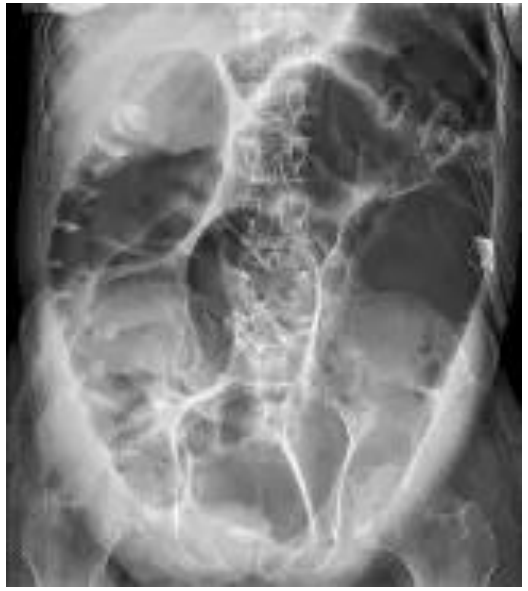
Q: Quayrat's erythroplasia, Quincke's edema

R: Rathke's cyst, Raynoid phenomenon, Reed-Sternberg cell, Refsum disease, Régaud-type lymphoepithelioma, Reinke's crystal, Reiter's syndrome, Reye syndrome, Riedel thyroiditis, Riley-Day syndrome, Rokitansky-Aschoff sinus, Rosai-Dorfman's disease, Rosenthal fiber, Russell body gastritis

S: Sanfilippo syndrome, Schaumann's body, Scheie syndrome, Schiff reaction, Schmidt syndrome, Schmincke-type lymphoepithelioma, Schneiderian papilloma, Schnitzler's metastasis, Sertoli-Leydig cell tumor, Sézary syndrome, Sheehan syndrome, Shy-Drager syndrome, Sipple syndrome, Sjögren's syndrome, Skene's gland cyst, Spiegler-Fendt lymphocytoma benigna cutis, Spitz nevus, Steele-Richardson-Olszewski syndrome, Stein-Leventhal syndrome, Sternheimer stain, Stevens-Johnson syndrome, Stewart-Treves syndrome, Still disease, Sturge-Weber syndrome, Sutton's nevus, Sweet's disease, Swyer-James-MacLeod syndrome

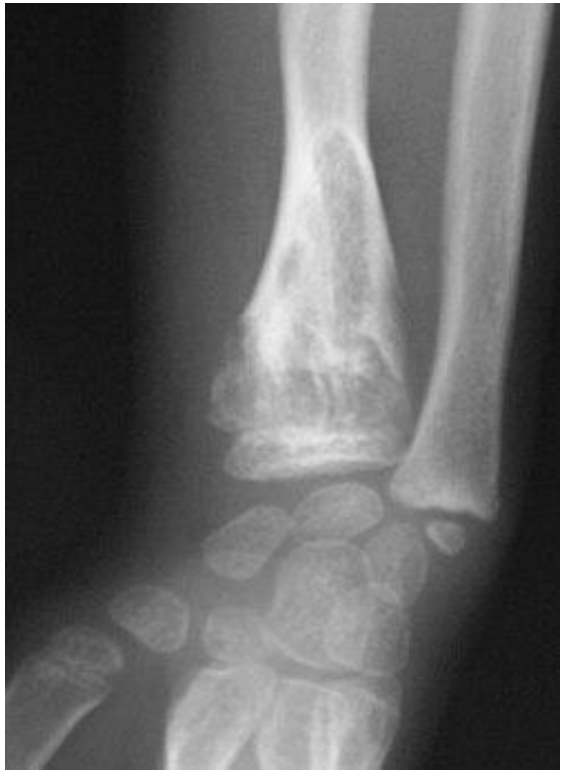
Ogilvie syndrome (acute colonic pseudo-obstruction). GI-327-1-colorectum, GI-333-2-colorectum, GI-336-colorectum, GI-182-small bowel, GI-183-1-small bowel

sudden paralysis and luminal dilatation of the cecum and right colon without physical obstruction. It usually occurs in hospitalized adult patients or in those residing in a long-term care facility, in association with a severe illness or after surgery, and in conjunction with a metabolic imbalance or culprit medication. The etiology includes neuropathic, myopathic or interstitial cells of Cajal abnormalities.



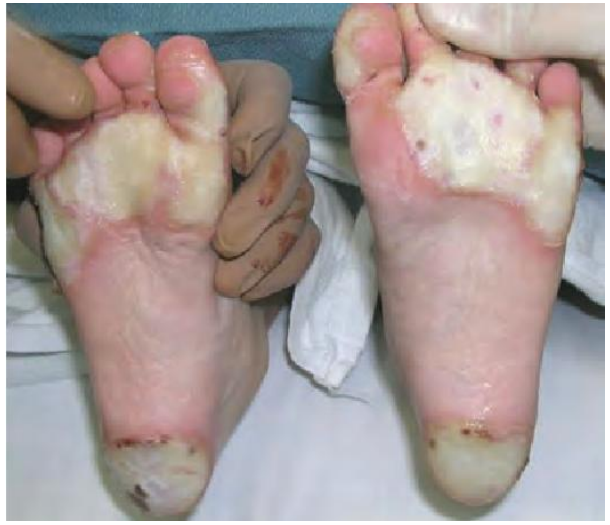
Ollier's disease (enchondromatosis). ConnectT-62-bone

Ollier disease is a sporadic non-hereditary skeletal disorder caused by benign enchondroma developing near the growth plate cartilage. This results in asymmetry and shortening of the limb. Mutations in IDH1, IDH2 and PTH1R genes are involved. The figure borrowed from Wikipedia shows enchondroma localized in the lower part of the radius of a 7-y-o girl.

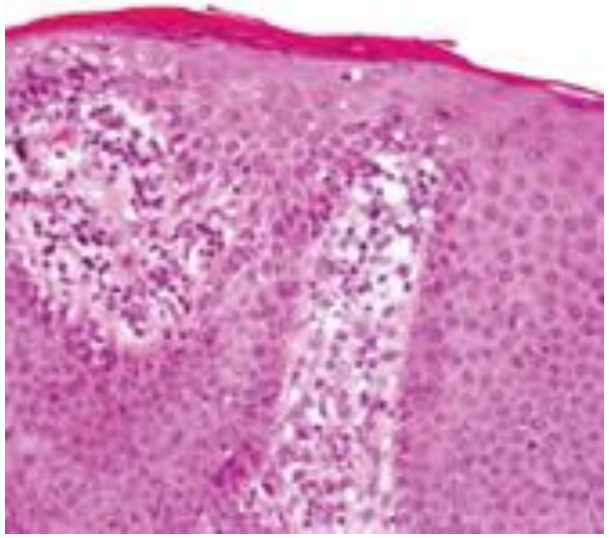


Olmsted syndrome (mutilating congenital palmoplantar and perioral keratoderma)

abnormal thickening of the stratum corneum of the palms and soles, with diffuse, focal or punctate patterns. Flexion deformity of the digits may be associated. The disease with mutations in TRPV3 gene begins in infancy. The figure borrowed from semanticscholar.org is shown.

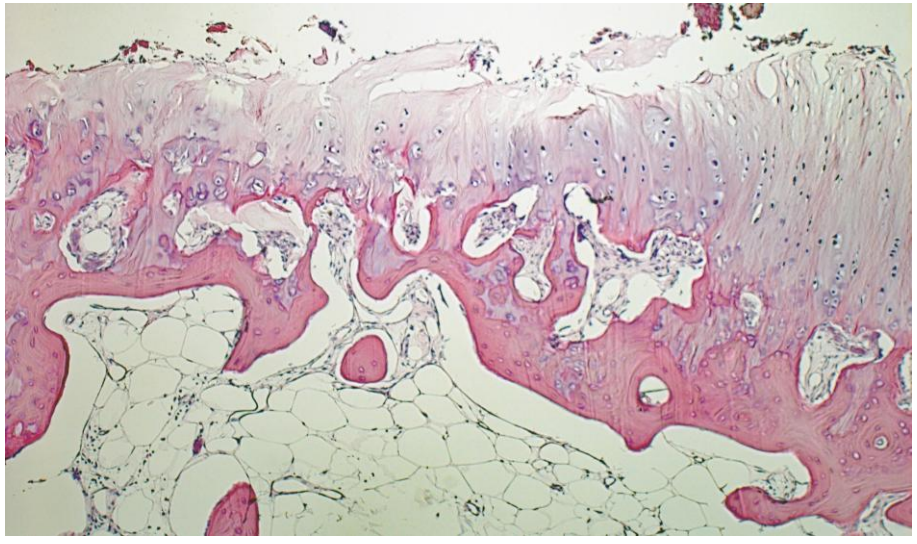


Omenn syndrome (severe combined immunodeficiency)



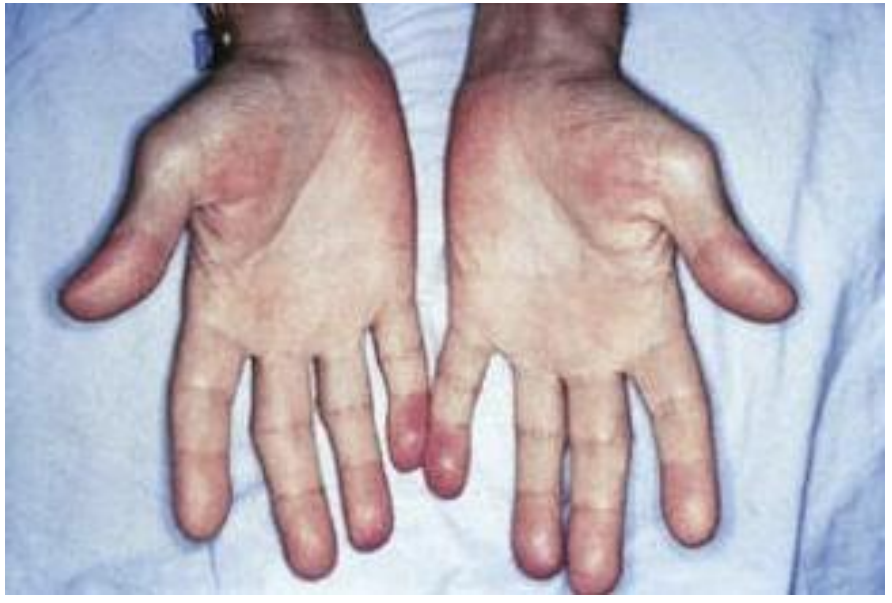
Omen syndrome, an autosomal recessive SCID, is associated with varied missense mutations in immunologically relevant genes of T-cells and B-cells. Symptoms are similar to GVHD. The skin shows early onset erythroderma. The other features include failure to thrive, diarrhea, lymphadenopathy, hepatosplenomegaly, hypogammaglobulinemia, eosinophilia, elevated IgE level, low T-cell count, no B cells, and susceptibility to infection.

Osgood-Schlatter disease (tibial tubercle apophysitis with knee pain in young athletes). ConnectT-36-2-bone



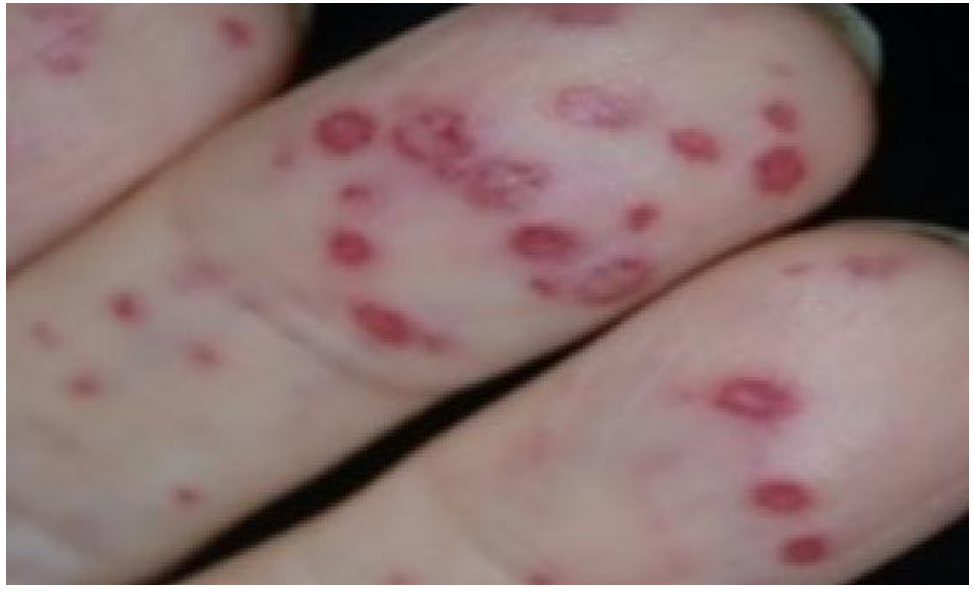
erosion of the surface cartilage of the tibial tubercle

Osler's nodule (septic vasculitis of the skin). Sk-283-Bact



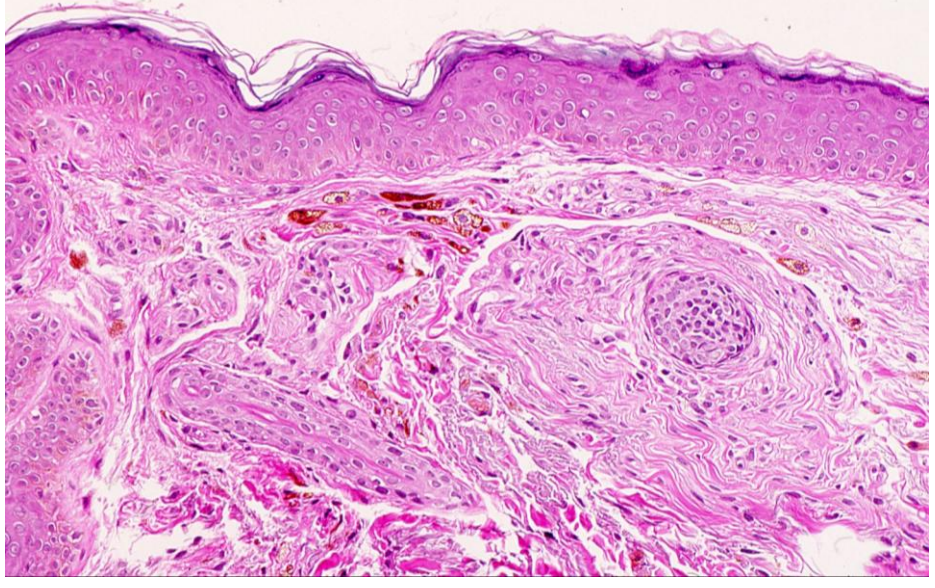
Osler's nodule, a painful, red and raised skin lesion found on the hands and feet, is associated with subacute bacterial endocarditis, and is caused by immune complex deposition. Non-tender skin nodule in SBE is called Janeway nodule.

Osler-Weber-Rendu disease (hereditary hemorrhagic telangiectasia in the skin, mucosa, lung, liver and brain)



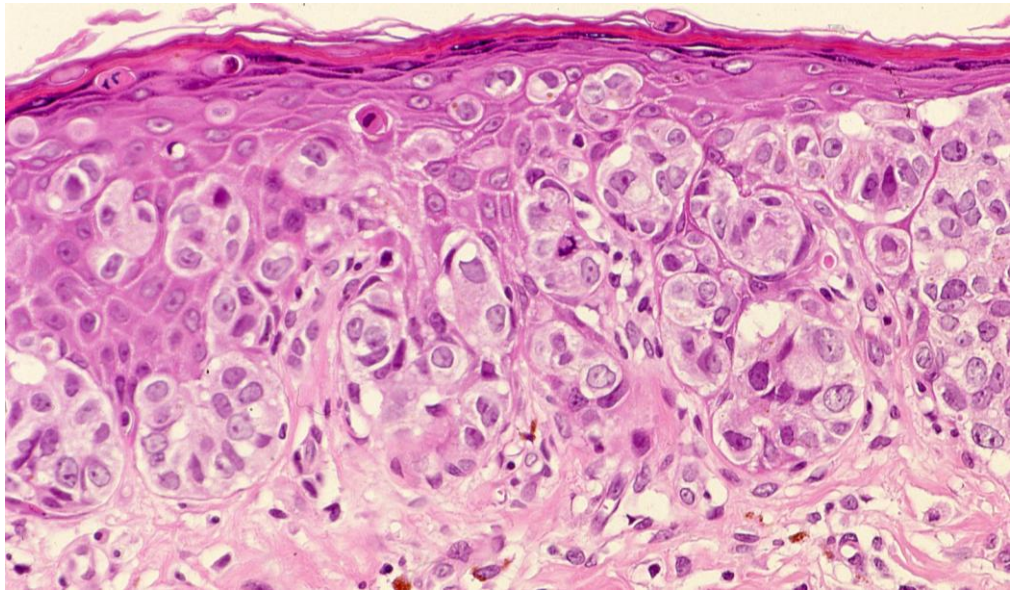
Borrowed from: Fadeenko G, et al. Biomed Res Ther 2021; 8(11): 4682-4688. doi: 10.15419/bmrat.v8i11.704

Ota's nevus (**nevus of Ota**) (melanocytosis in ophthalmic and maxillary skin). Sk-390-Nevus



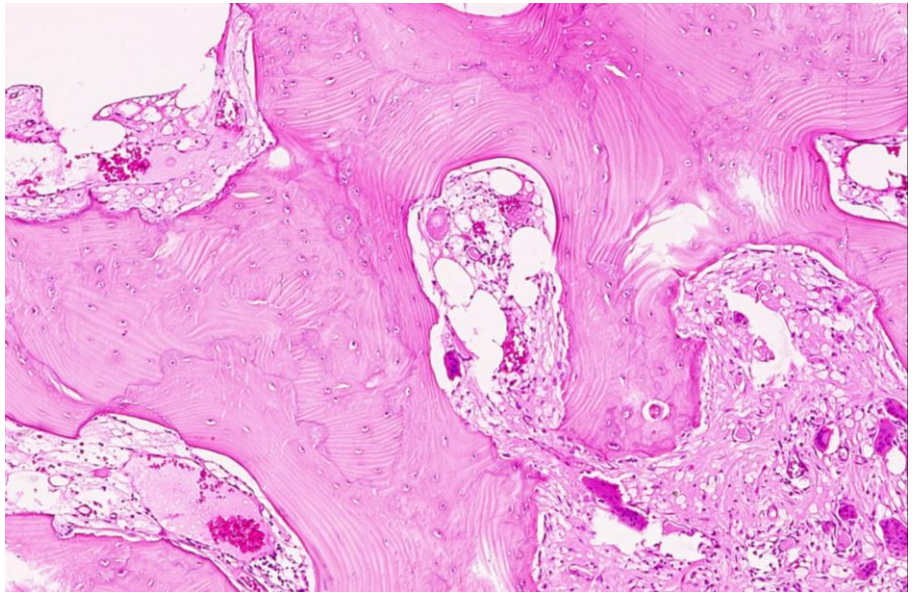
ectopic melano-cytes involving the eye lid

Paget's disease (mammary and extra-mammary types). Sk-445-MENeo through Sk-445-MENeo



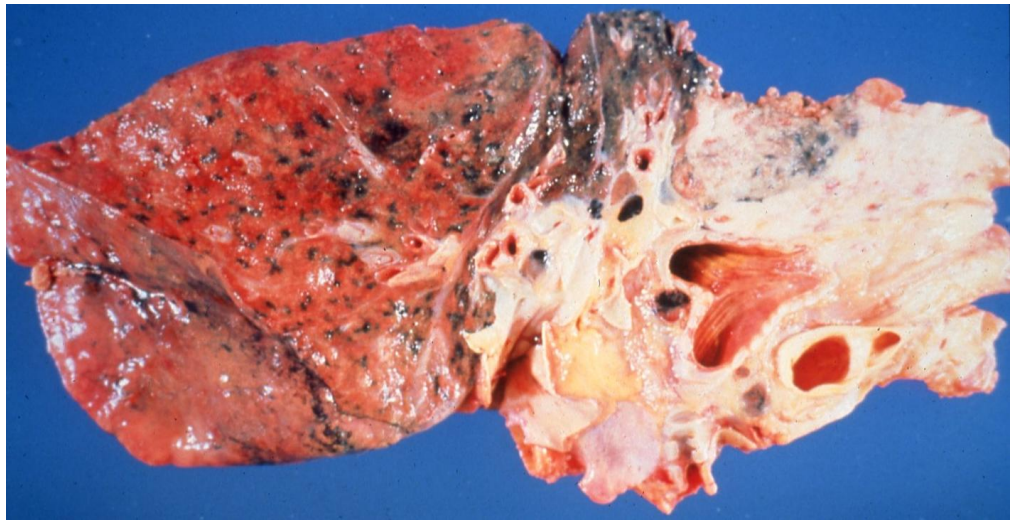
mammary Paget disease: nipple epidermal involvement by adeno-type carcinoma with clear cytoplasm

Paget's disease of bone (osteitis deformans) ConnectT-48-bone



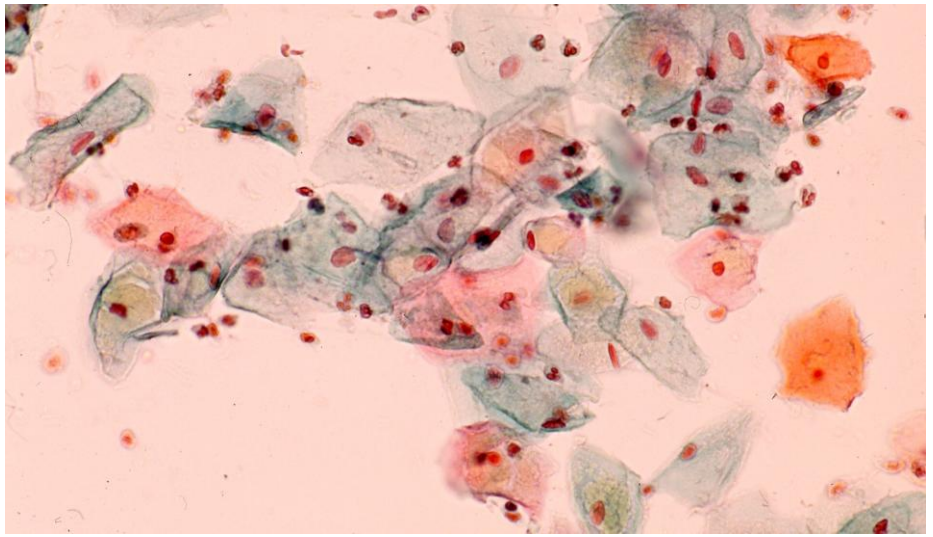
Paget's disease of bone is featured by excessive bone breakdown and regrowth, resulting in bone pain, deformities and fracture. The pelvis, skull, spine and long bones of older adults are affected.

Pancoast-type lung cancer (lung cancer at the apex, involving paravertebral tissues to cause Horner syndrome and thoracic outlet syndrome). Lung-186-malignantT



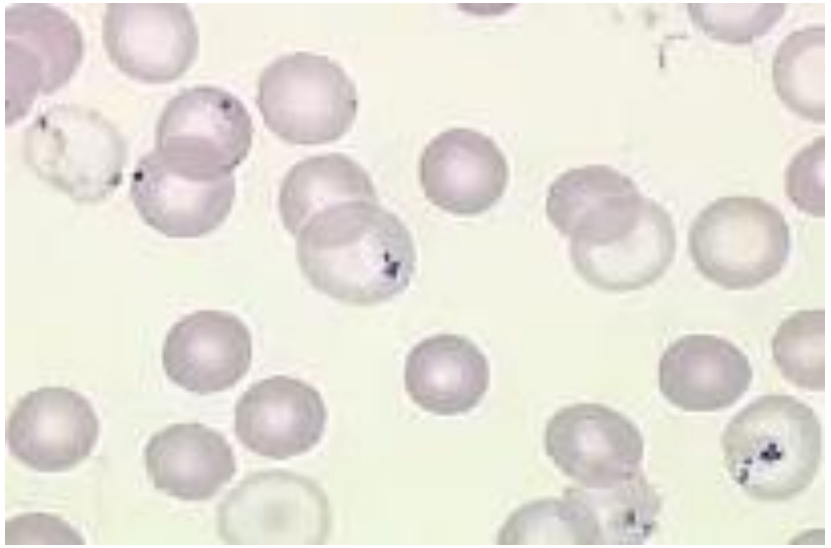
Lung cancer at the superior sulcus invades the thoracic inlet involving the brachial plexus and cervical sympathetic ganglion.

Papanicolaou stain (the main staining for cytology specimens using wet fixation in ethanol) See the cytology series (program 3)



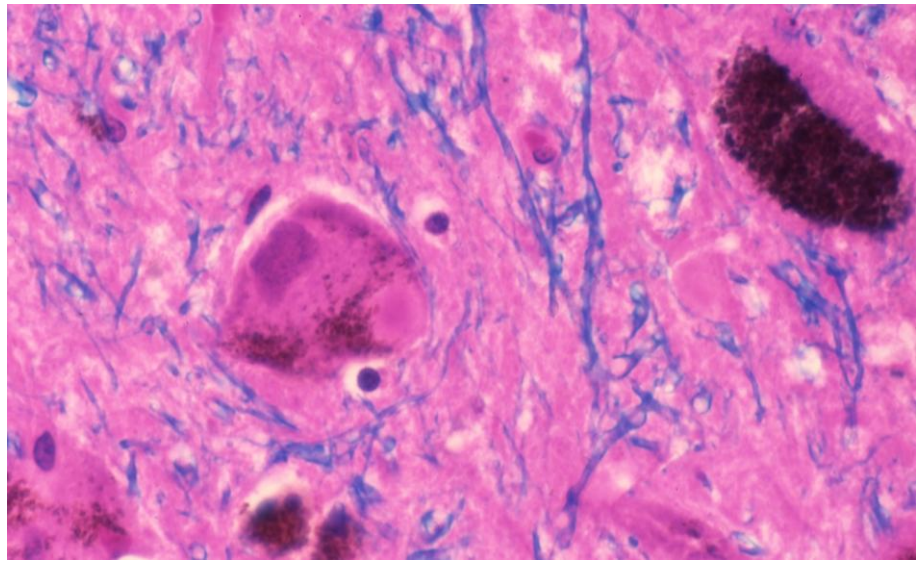
navicular cells in pregnancy (glycogen-rich green-stained squamous cells)

Pappenheimer body: basophilic iron (ferritin) granules in red blood cells (siderocytes). cyto-77-PB



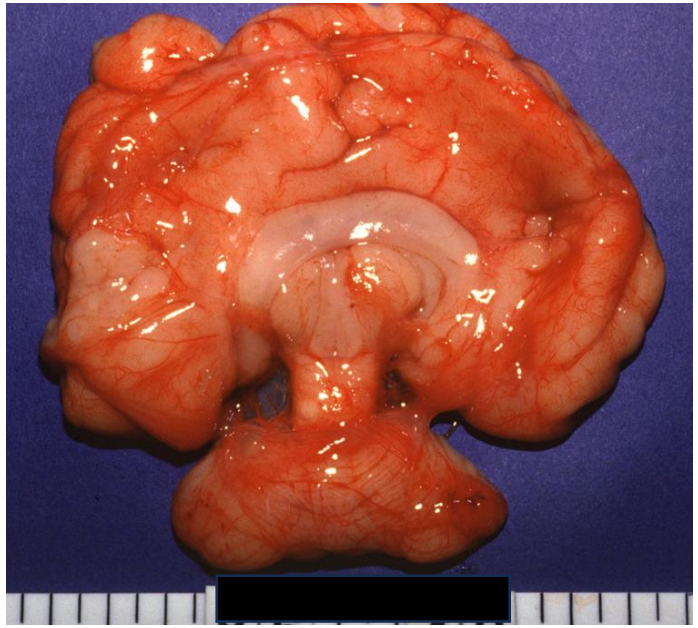
siderocytes with basophilic granules. Borrowed from The Art of Medicine

Parkinson's disease (Lewy bodies in substantia nigra) neuro-18-1-brain and neuro-18-2-brain



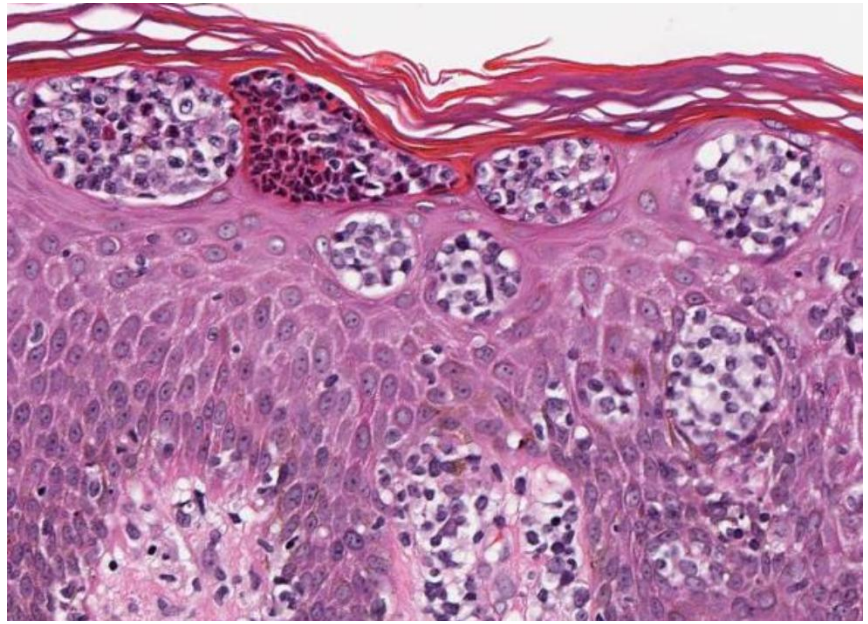
Lewy bodies consist of aggregated α-synuclein, seen in S. nigra, vagal nucleus, sympathetic ganglia and submandibular gland.

Patau syndrome (13 trisomy): severe systemic malformations seen. DPE-General-1



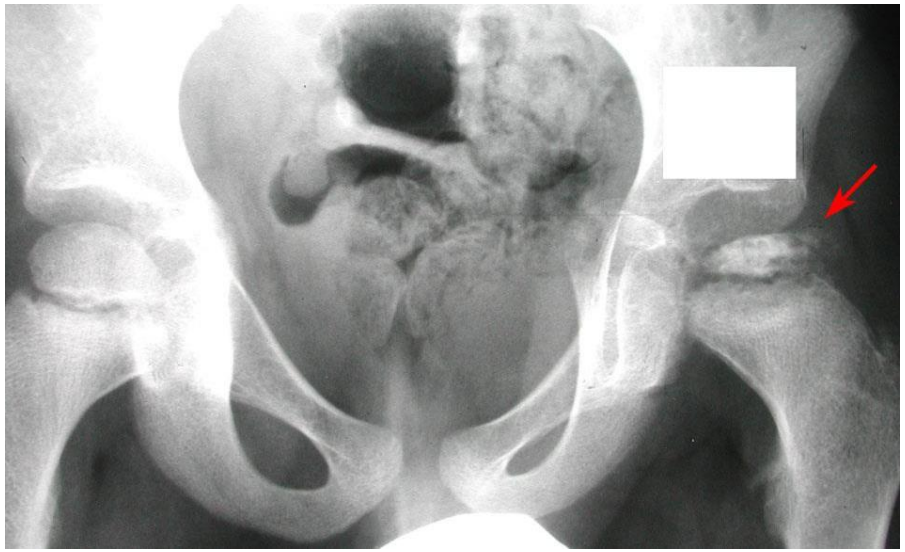
holoprosencephaly: lack of separation of the cerebral hemispheres

Pautrier's microabscesses (seen in mycosis fungoides). Sk-529-LPD through Sk-530-a-LPD



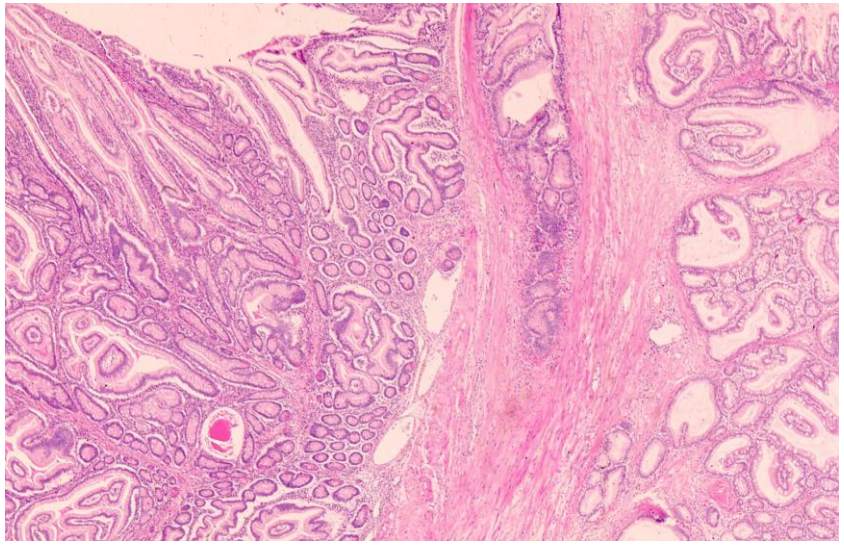
Pautrier microabscess is a microscopic hallmark of mycosis fungoides, an indolent cutaneous T-cell lymphoma with band-like papillary dermal infiltration and epidermotropism. Small to medium-sized, CD4+ T-cells with irregular nuclei are often clustered within the epidermis, including along the dermal-epidermal junction.

Perthes disease (aseptic necrosis of the femoral head seen in children, especially in boys, less than 10 years old. The lesion recovers slowly. ConnectT-45-1-bone, ConnectT-45-2-bone



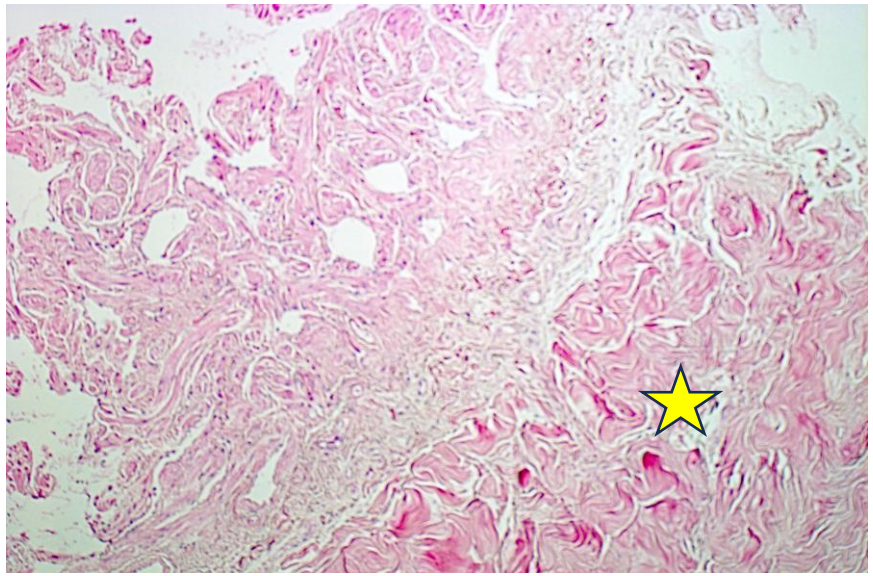
collapse of the left femoral head of a 5 y-o boy (arrow).

Peutz-Jeghers syndrome (hereditary intestinal hamartomatous polyposis with mucocutaneous pigmentation). GI-248-2-small bowel, GI-408-colorectum



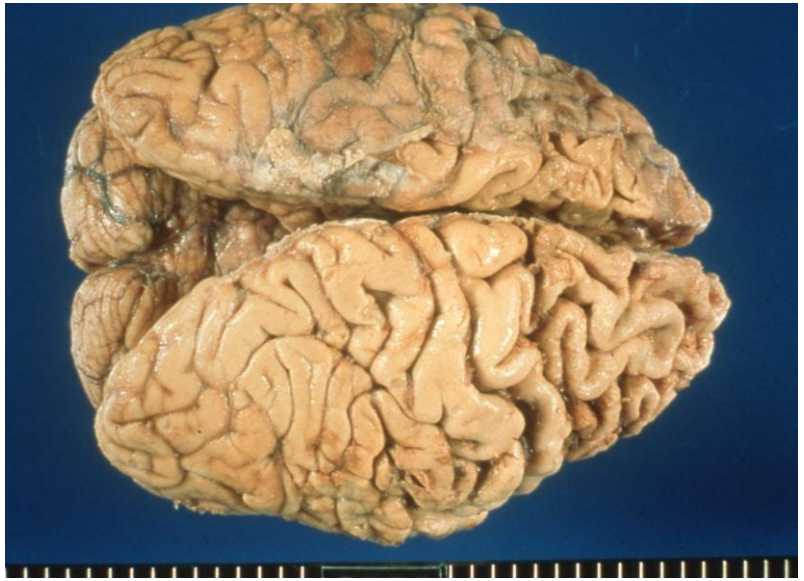
Hamart-omatous polyp of the jejunum

Peyronie's disease (fibromatosis in the tunica albuginea with penile deformity and pain). Uro-214-2-penis



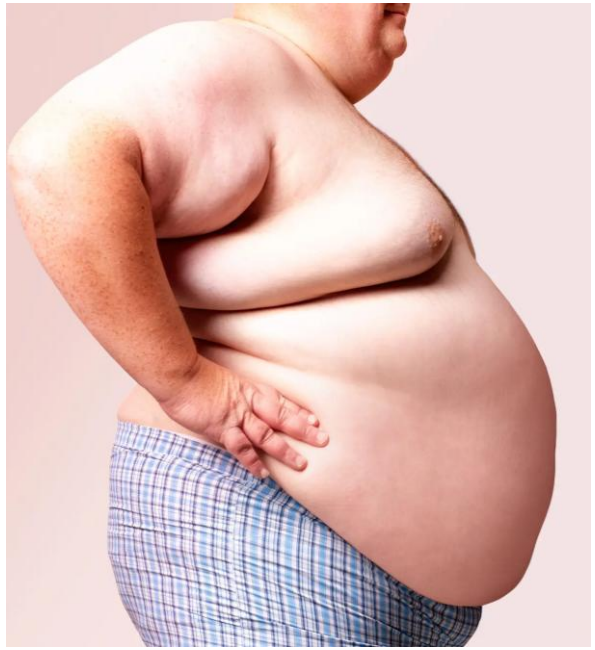
fibromatosis of the tunica albuginea (asterisk), causing deformity of the penis

Pick's disease (frontotemporal dementia as a tauopathy). neuro-12-brain



The frontal lobes are markedly atrophic.

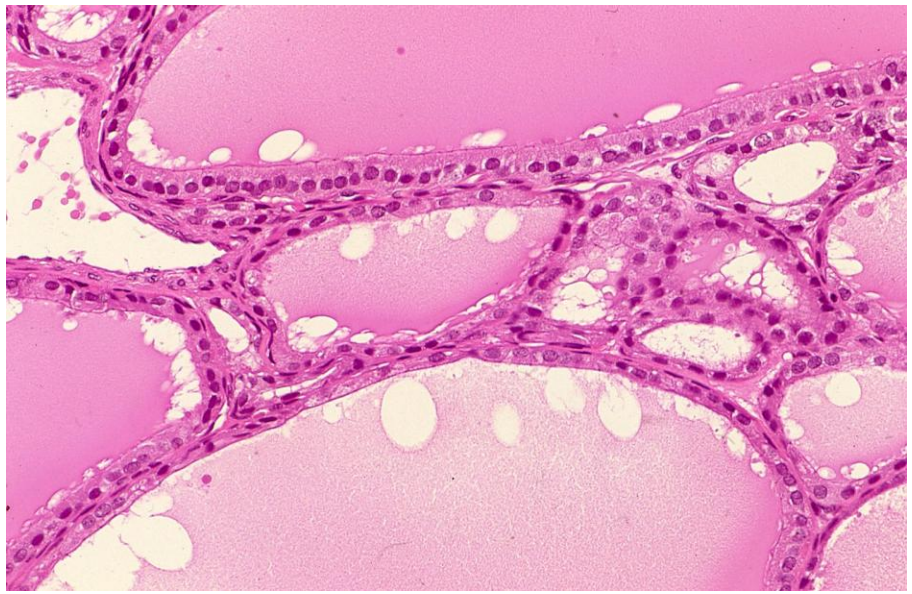
Pickwickian syndrome (obesity hypoventilation syndrome)



Pickwickian syndrome is a breathing disorder affecting obese individuals. It is featured by low oxygen levels and high carbon dioxide levels in the blood. The syndrome is complicated with obstructive sleep apnea, causing periods of absent or reduced breathing during sleep and resulting in partial awakenings at night and excessive daytime sleepiness.

Plummer's disease (functioning thyroid adenoma)

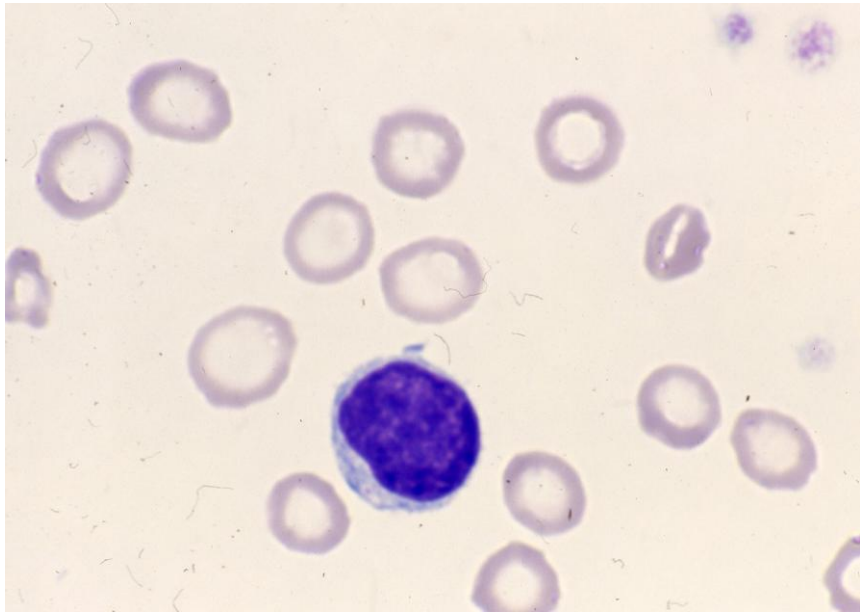
Endo-31-1-Thyroid through Endo-31-3-Thyroid



The follicles are lined by columnar cells with papillary infoldings. Colloid scalloping represents hyperfunctions.

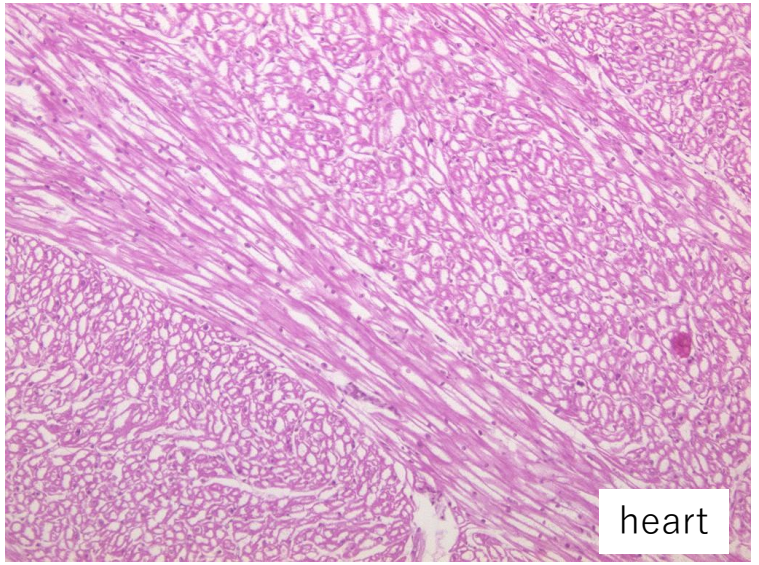
Plummer-Vinson syndrome (iron-deficiency anemia).

Hemato-46-1-BM



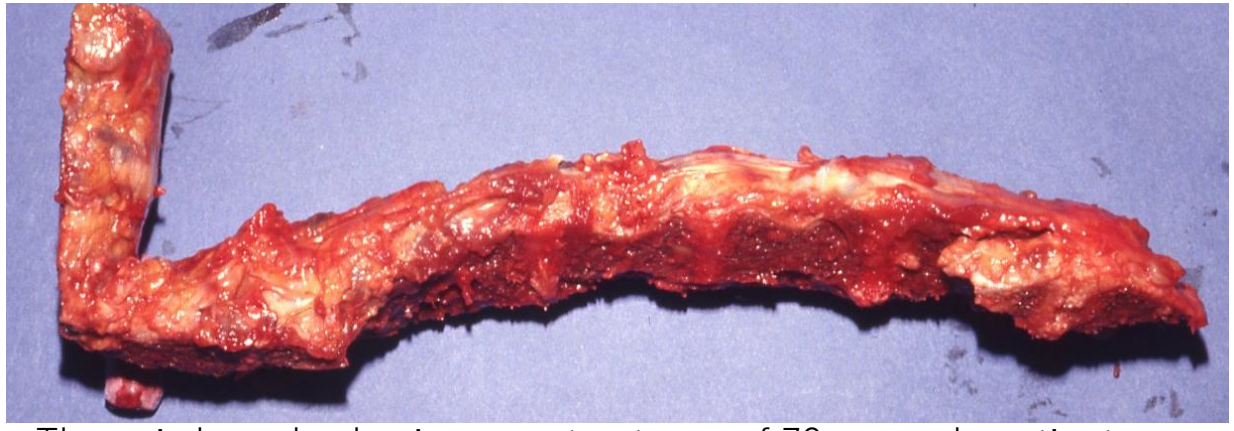
Plummer-Vinson syndrome is characterized by iron-deficiency anemia, dysphagia and atrophic glossitis (as a trias). Angular cheilitis is also common.

Pompe's disease (glycogen storage disease type II/ lysosomal storage disease)



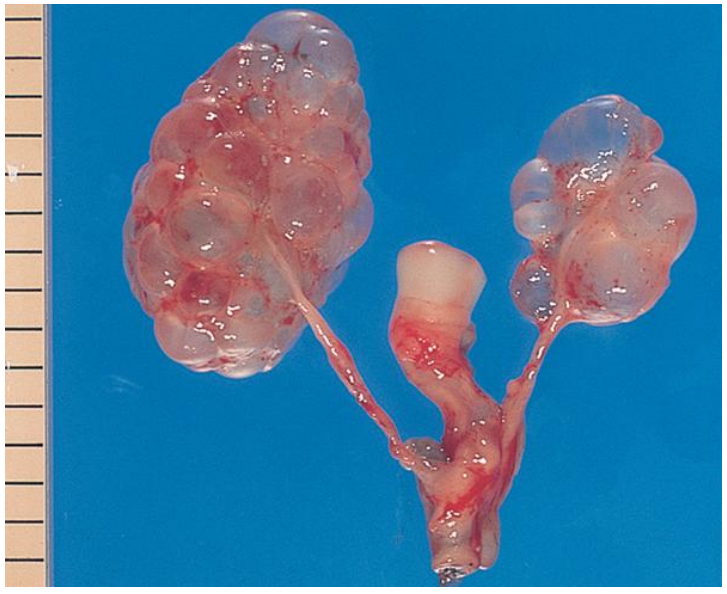
Pompe's disease is caused by the acid alpha-glucosidase deficiency. The accumulation of glycogen in the muscle and nerve cells leads to muscle weakness, hepatomegaly and cardiomyopathy. Without enzyme replacement therapy, the baby dies of heart or respiratory failure before the age of 2 years.

Pott disease (vertebral tuberculosis). ConnectT-38-3-bone



Thoracic hyperkyphosis seen at autopsy of 73 y-o male patient. Marked deformation of the vertebra, namely, wedge-shaped thoracic spine accompanying severe forward curvature, is observed. This severe deformation was caused by vertebral tuberculosis (Pott disease) suffered at the age of 3 years.

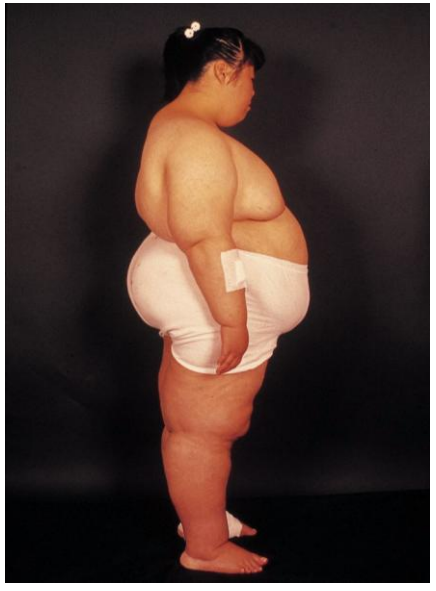
Potter syndrome (bilateral polycystic dysplastic kidneys). Uro-79-3-kidney, Uro-81-kidney



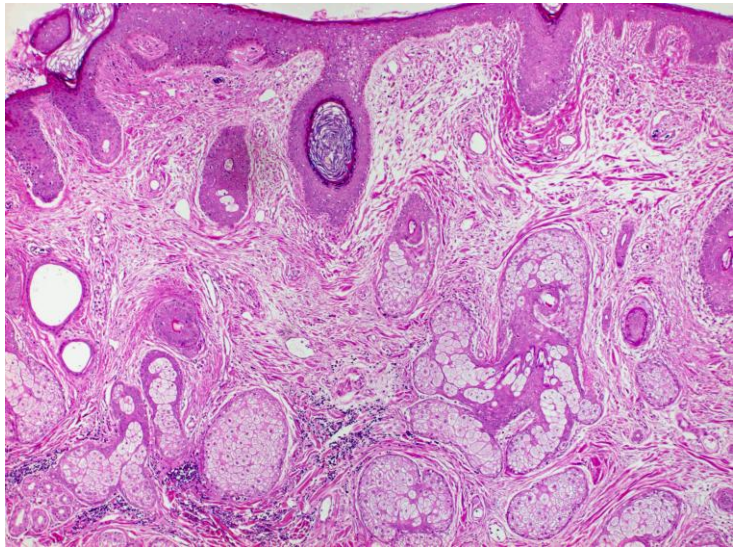
A 20th gestational week-old fetus with bilateral polycystic renal dysplasia, causing oligohydramnios

Prader-Willi syndrome (a genetic imprinting neurobehavioral and metabolic disorder)

The patient children show hypogonadism, cognitive impairment and obesity by hyperphagia. The disease is caused by the lack of expression of genes inherited from the paternal chromosome 15q11-q13 region (usually from paternal 15q11-q13 deletions).



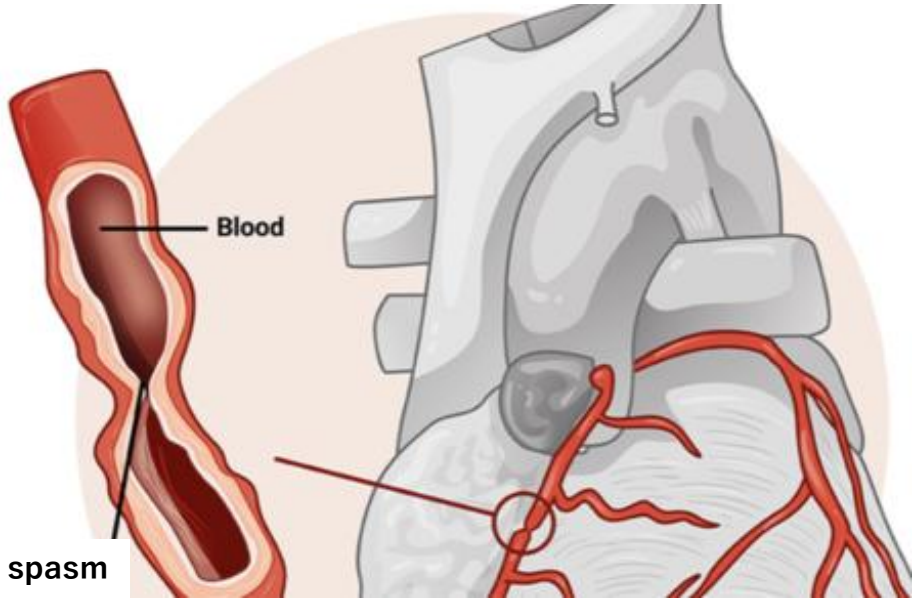
Pringle's disease (**Bourneville-Pringle's disease** or tuberous sclerosis): angiofibromatous plaques seen on the nasolabial fold. Sk-231-Derm



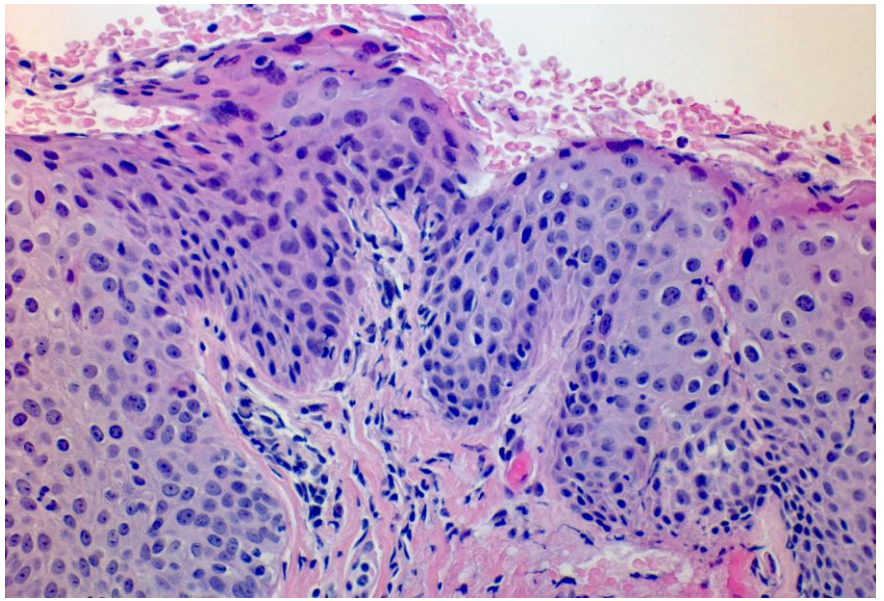
"adenoma sebaceum of Pringle", a hamartomatous (angiofibroma) growth on the facial skin

Prinzmetal's angina (vasospastic/variant angina)

Prinzmeta'sl angina, caused by a coronary vasospasm, happens when a person is resting, between midnight and early morning. The attacks are very painful.

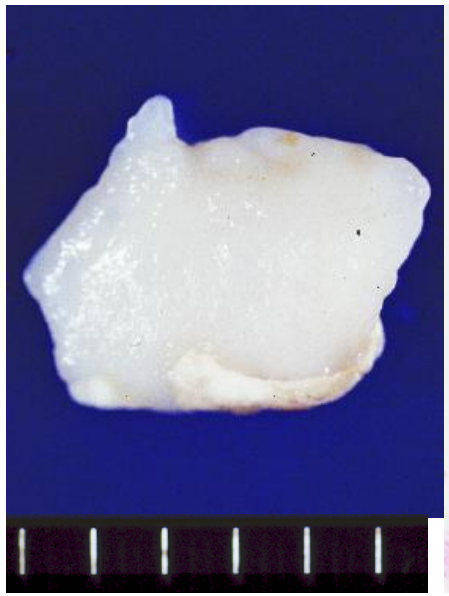


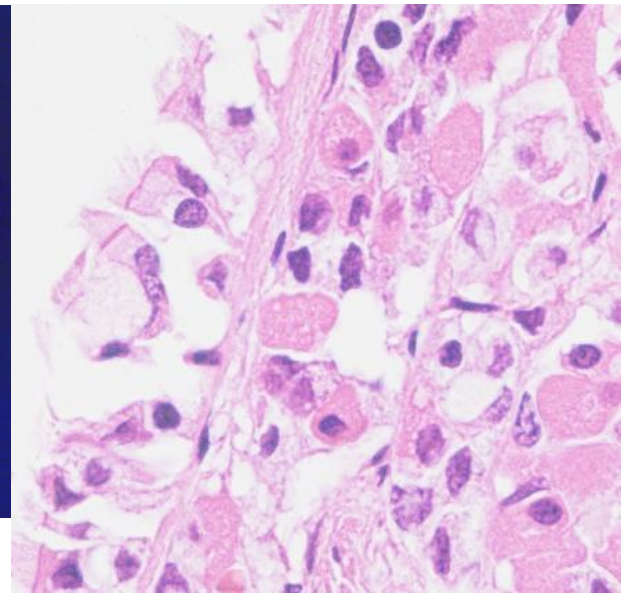
Quayrat's erythroplasia (**erythroplasia of Quayrat**): (Bowen-type penile intraepithelial lesion on the glans penis). Sk-439-MENeo



intraepithelial dysplasia of Bowen type on the glans penis.

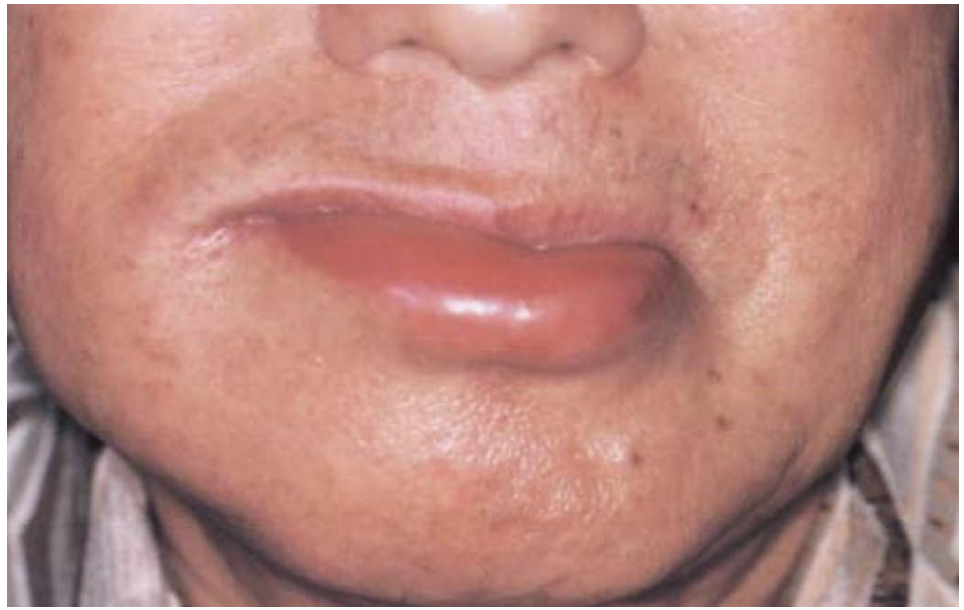
Rathke's cyst (a suprasellar cyst lined by ciliated epithelial cells). Endo-2-Pit





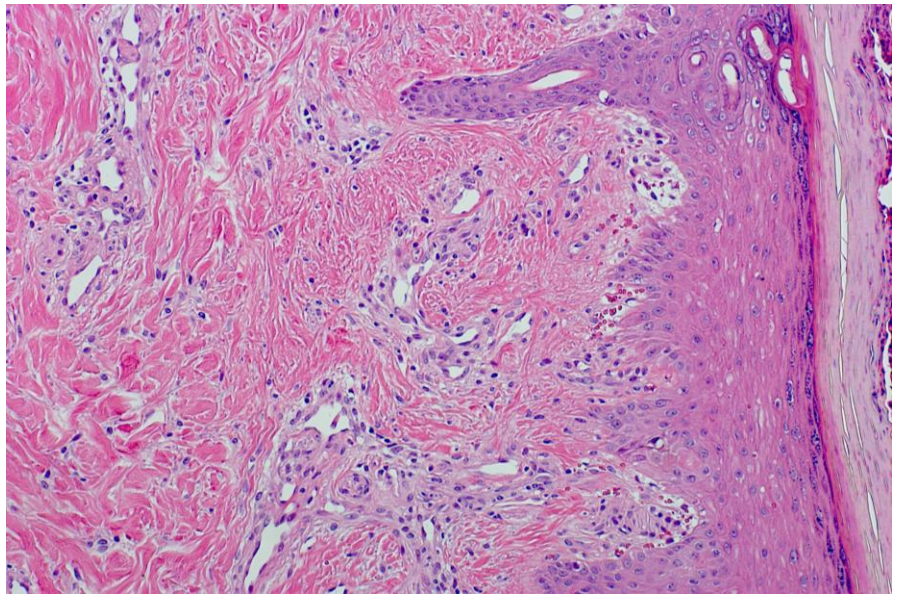
a supra-sellar cyst lined by ciliated epithel-ial cells

Quincke's edema (angioneurotic edema)



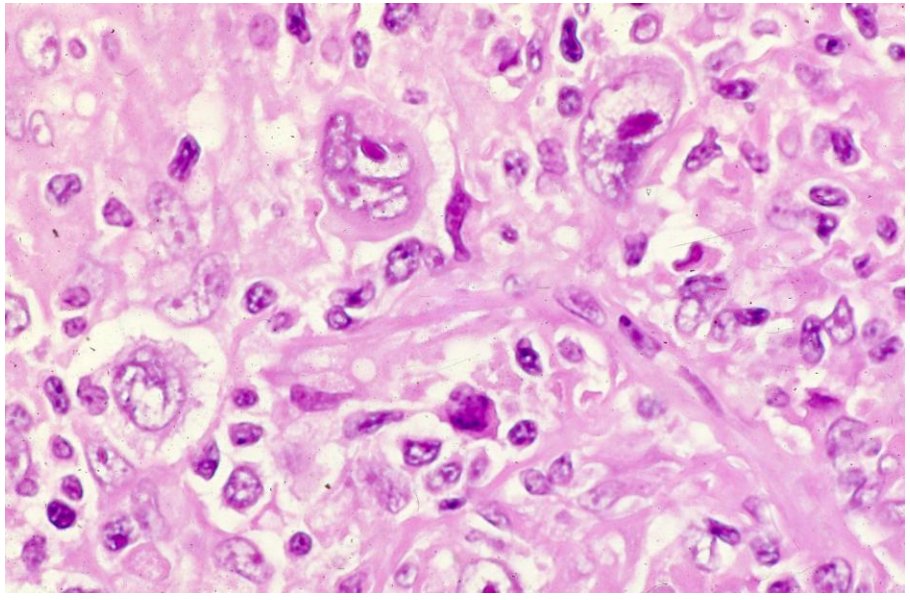
Quincke's edema presents with sudden, localized and usually asymmetrical edema due to Bradykinin-mediated fluid accumulation in the deep layers of the skin and mucous membranes of the head region. Itching is minimal but with painful distension. Swelling of the bronchus, larynx and tongue may be life-threatening.

Raynoid phenomenon (cold exposure-induced vasospastic disease in the fingers and toes). Sk-236-Derm



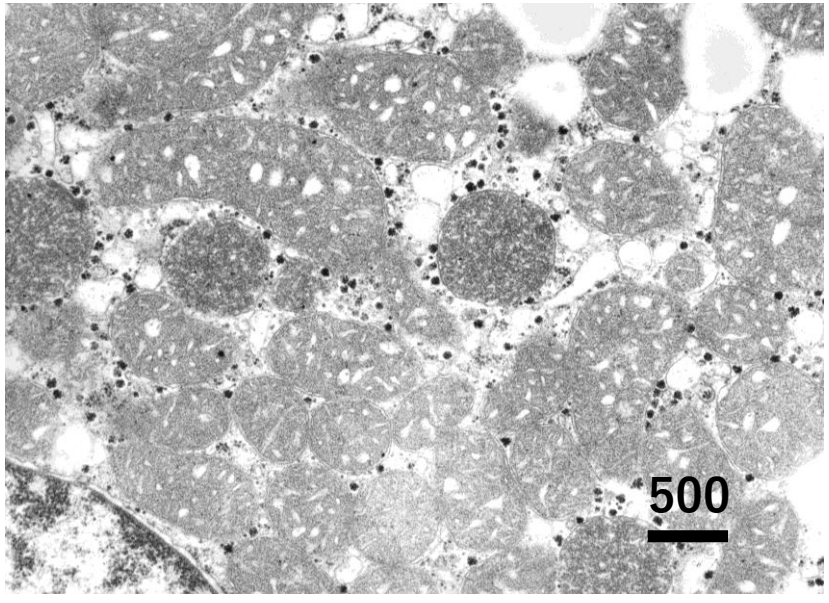
The dermis shows angiectasia in the fibrotic background.

Reed-Sternberg cell (binucleated cells with prominent nucleoli seen in Hodgkin's lymphoma).



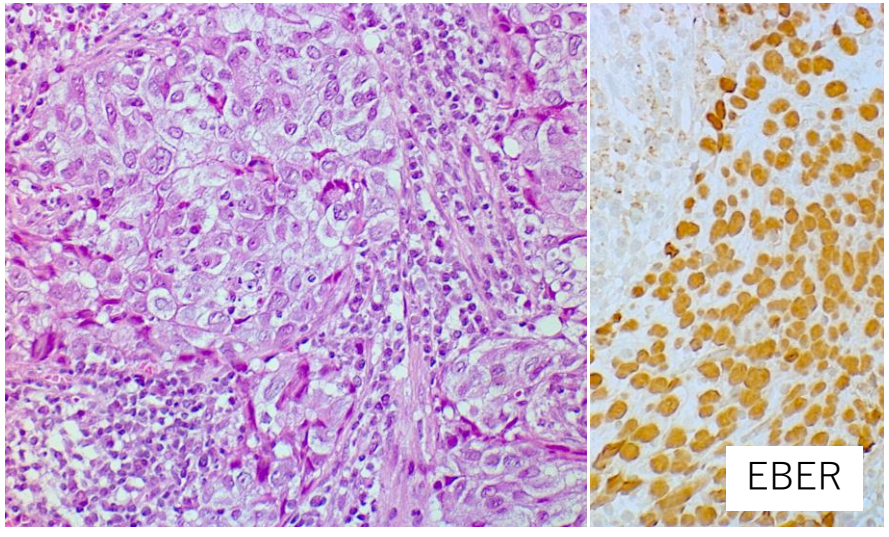
R-S cells are rich in lymphoid depletion type Hodgkin's lymphoma.

Refsum disease (autosomal recessive peroxisome disorder with impaired alpha-oxidation of branched chain fatty acids). HBP-102-2-liver



Normal peroxisomes in the hepatocyte are shown. The lack of peroxisomes is difficult to prove ultrastructurally. The peroxisome dysfunction in Refsum disease results in the build-up of a lipid called phytanic acid in the blood plasma and tissues.

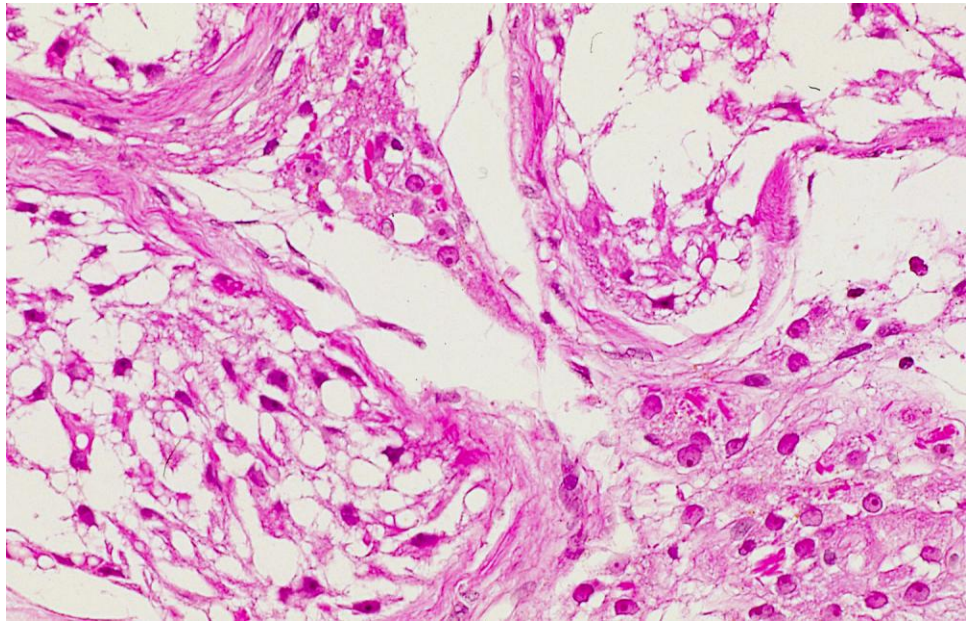
Régaud-type lymphoepithelioma (marked nuclear atypia with EBER positivity and mild lymphoid stroma). HN-186-1-pharynx, HN-186-2-pharynx



Poorly differen-tiated squamous cell carcinoma with EBER positivity

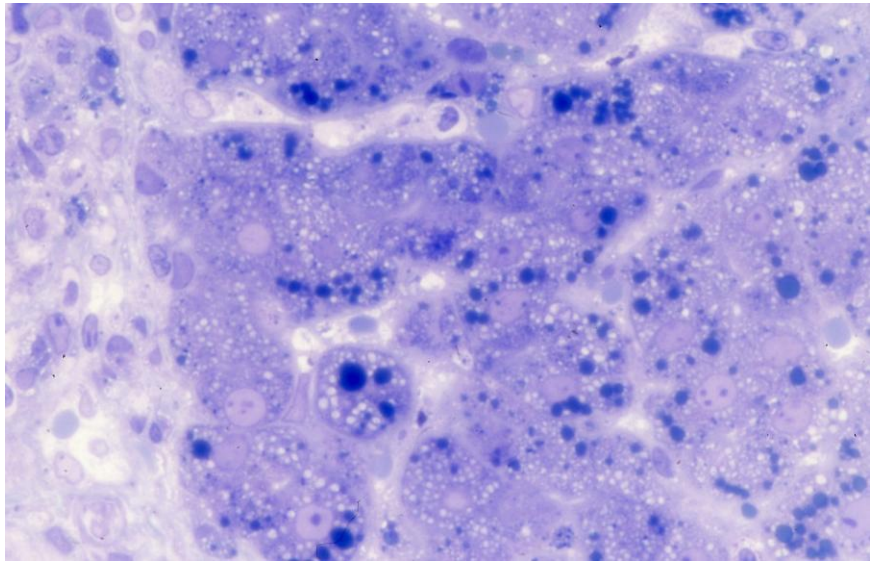
Reinke's crystal (rod-like cytoplasmic inclusions)

Rod-like cytoplasmic inclusions are seen in Leydig cells of the testis. Here, Leidig cells hyperplastic in atrophic testis show crystallization.



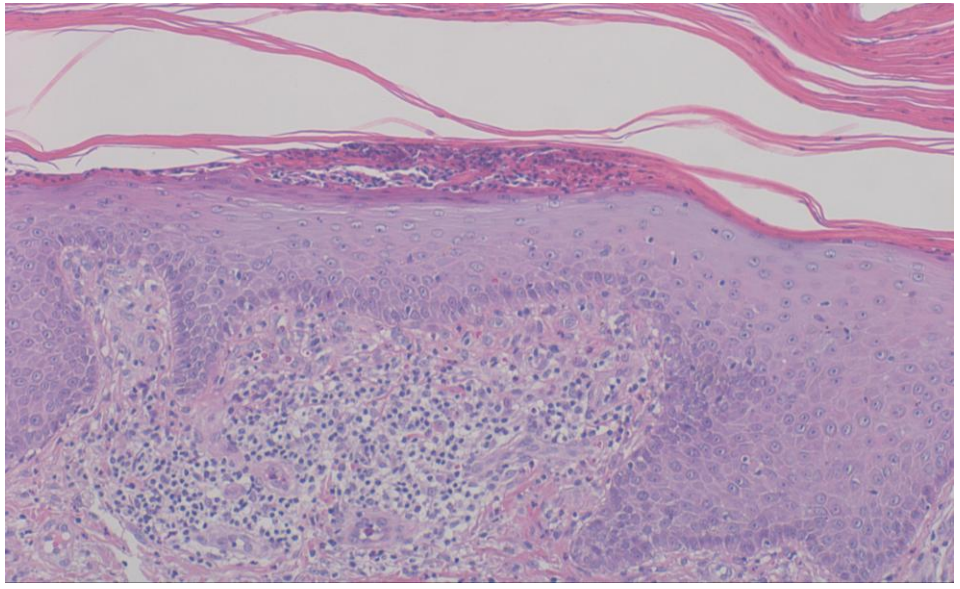
Reye syndrome (aspirin-induced encepharopathy/ hepatic mitochondriopathy). HBP-18-1-liver, HBP-18-2-liver, neuro-60-brain

microvesicular steatosis and swollen mitochondria seen in the hepatocytes (toluidine blue in thick section for EM)

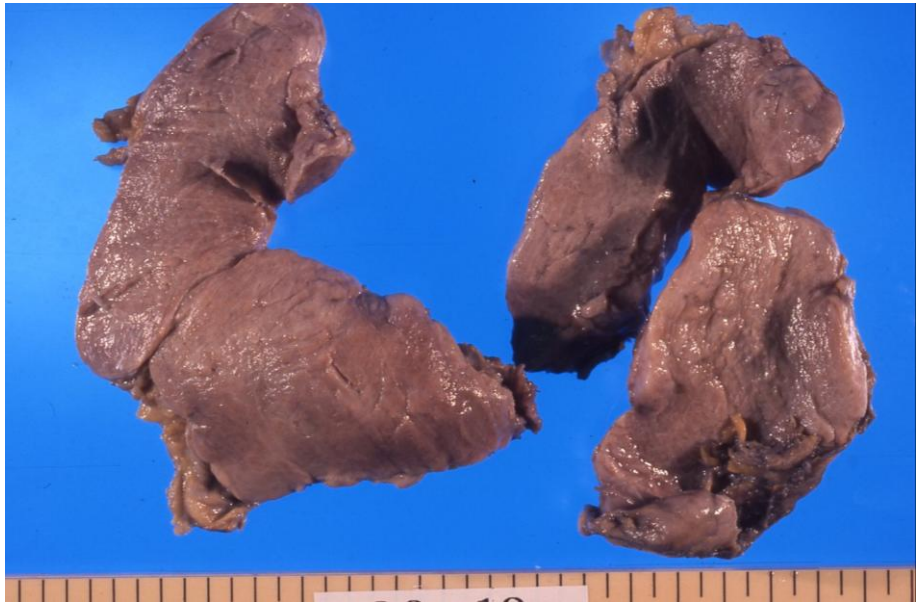


Reiter's syndrome (reactive arthropathic dermatosis: arthritis, non-gonococcal urethritis and conjunctivitis). Sk-23-Pso

The skin lesion of Reiter's syndrome resembles pustular psoriasis.



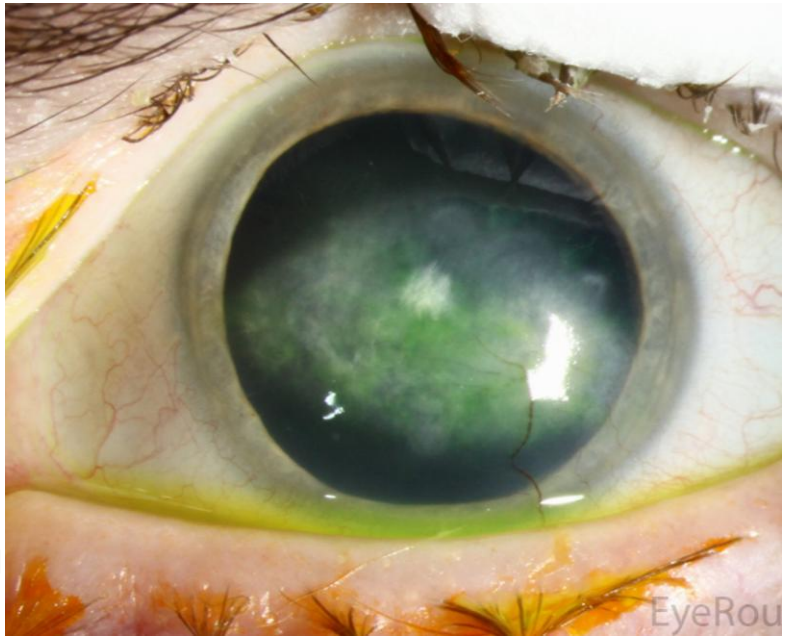
Riedel thyroiditis (IgG4-related disease with extensive fibrosis). Endo-28-Thyroid



fibrotic but enlarged thyroid weighing 160 g (70 y-o woman).

Riley-Day syndrome (familial dysautonomia)

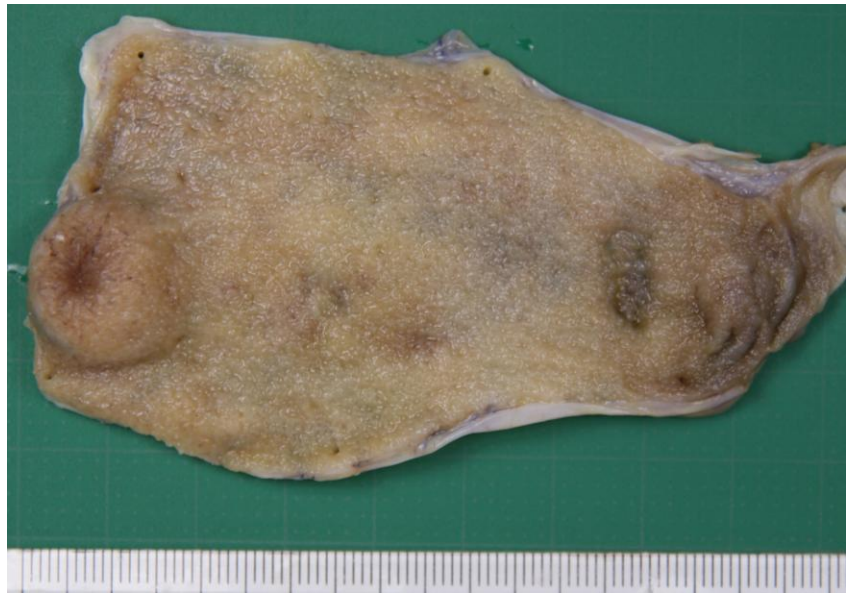
Riley–Day syndrome is an autosomal recessive genetic disorder affecting sensory, sympathetic and some parasympathetic neurons. Mutations in the IKBKAP gene are detected. Symptoms include insensitivity to pain and taste, lack of tear secretion, difficult swallowing, aspiration pneumonia, gastrointestinal dysmotility and labile blood pressure. Alacrima leads to dry eyes and corneal abrasions.



Rokitansky-Aschoff sinus (extension of benign gallbladder epithelia into the subserosa)

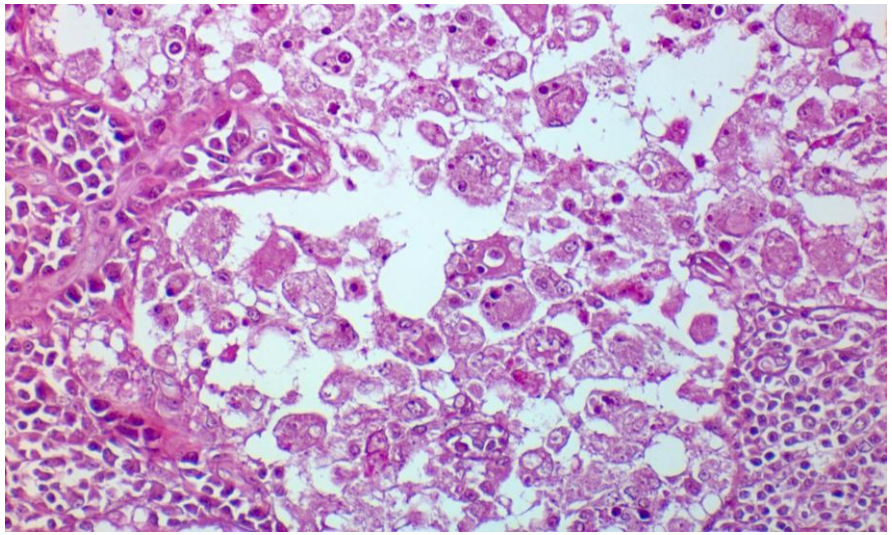
HBP-169-3-GB, HBP-170-GB

Clustered R-A sunuses in the subserosal layer form a tumorous nodule at the fundus (adenomyosis).



Rosai-Dorfman's disease (sinus histiocytosis with massive lymphadenopathy). Hemato-118-LN, Sk-524-LPD, neuro-144-1-meninges through neuro-144-3-meninges

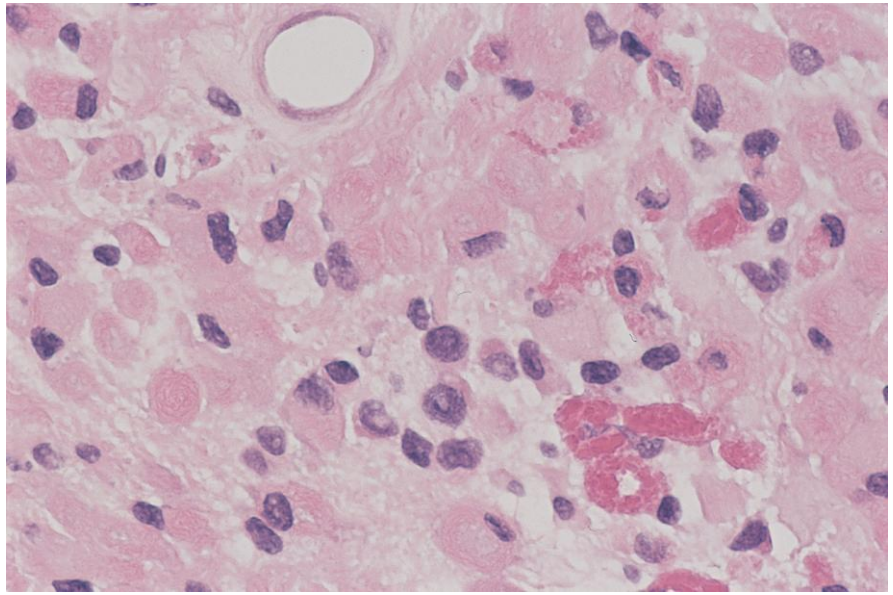
The enlarged histiocytes in the sinus show emperipolesis (engulfing intact inflammatory cells). This is a IgG4-related disorder.



Rosenthal fiber (thick, elongated, eosinophilic bundles of ubiquitinated GFAP around glial cells).

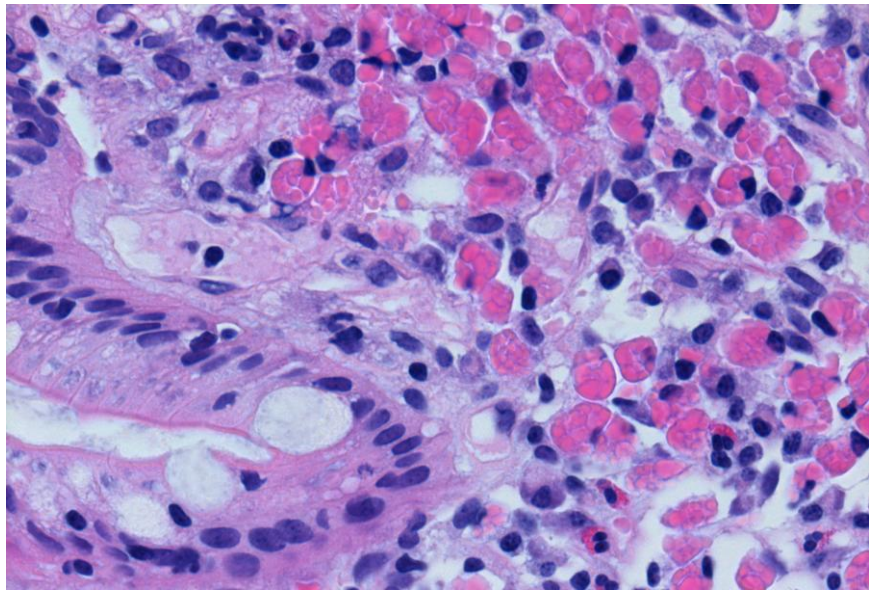
neuro-78-1-brain

Rosenthal fibers formed in low-grade astrocytoma

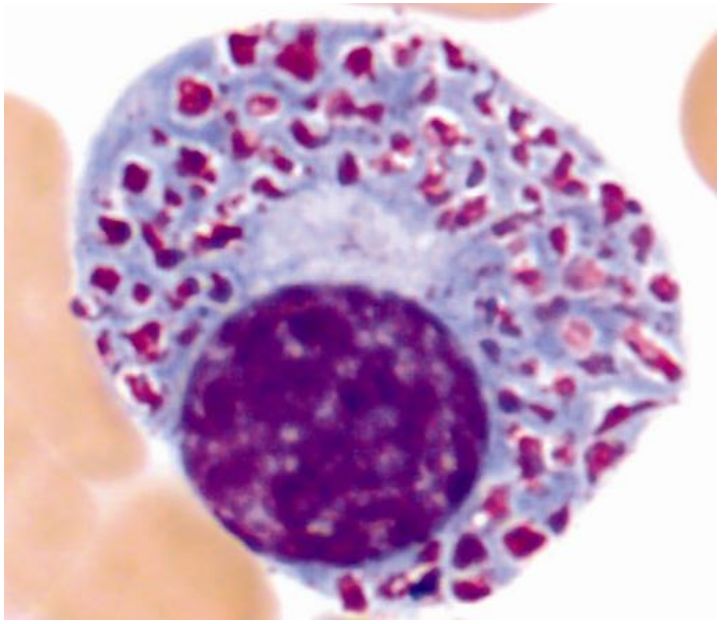


Russell body gastritis (eosinophilic immunoglobulin inclusion in the cytoplasm of plasma cells). GI-95-1-stomach, GI-95-2-stomach

Russell body gastritis is featured by accumulation of Russell body-containing mature plasma cells (Mott's cells).



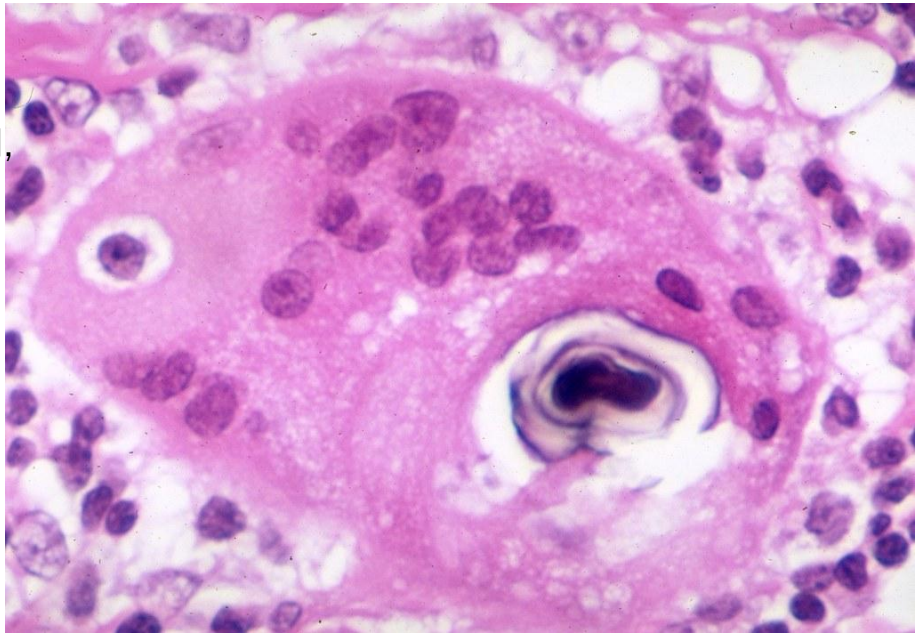
Sanfilippo syndrome (mucopolysaccharidosis type III)



Sanfilippo syndrome, an autosomal recessive hereditary disorder, primarily affects the central nervous system. Accumulation of heparan sulfate, a type of glycosaminoglycans, leads to developmental delays, intellectual disability, and joint and bone deformities. The patients' life expectancy averages between 17 and 19 years old. Azurophilic inclusions are seen in cytoplasm of lymphocytes and plasma cells. Borrowed from onlinelibrary.wiley.com.

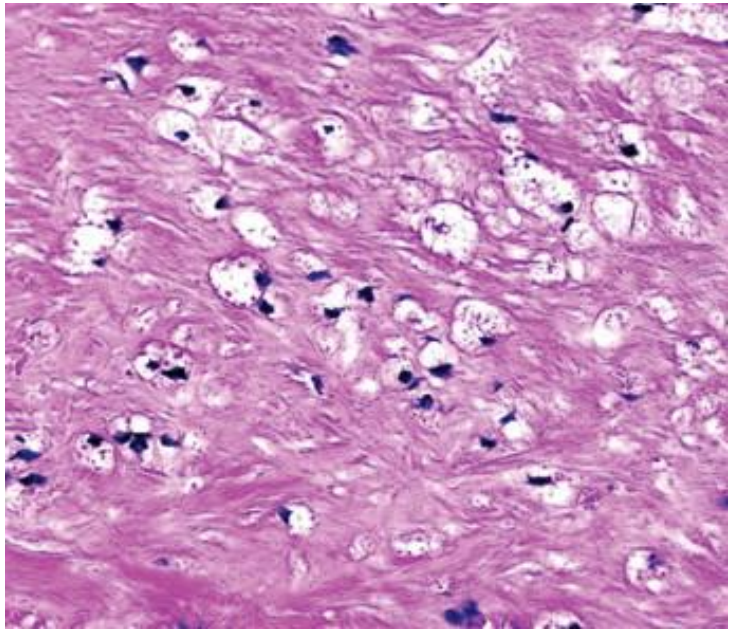
Schaumann's body (inclusion body seen in sarcoidosis)

Schaumann bodies are round, to oval, calcified laminated inclusions found in Langhans giant cells in the granuloma mainly of sarcoidosis (borrowed from: flickr.com).



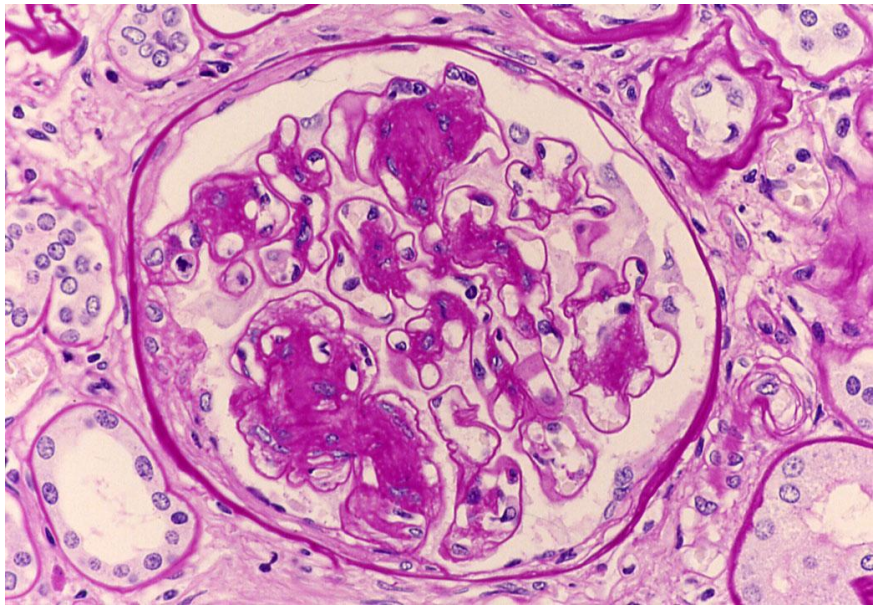
Scheie syndrome (mild type of mucopolysaccharidosis type I)

Scheie syndrome (Hurler-Scheie syndrome) with an autosomal recessive trait is a mild subtype of mucopolysaccharidosis type I (α -l-iduronidase deficiency) with normal height, normal intelligence and mild hepato-splenomegaly. Corneal clouding, retinal degeneration and glaucoma, as well as carpal tunnel syndrome and heart valvular diseases, may be complicated after teen ages. Accumulation of foamy macrophages is seen in the surgically resected stenotic mitral valve.



Schiff's reaction (periodic acid-Schiff = PAS reaction). Student-3-general

Diabetic glomerulo-sclerosis (nodular lesion). PAS reaction detects basement membrane and mesangial matrix in the kidney.

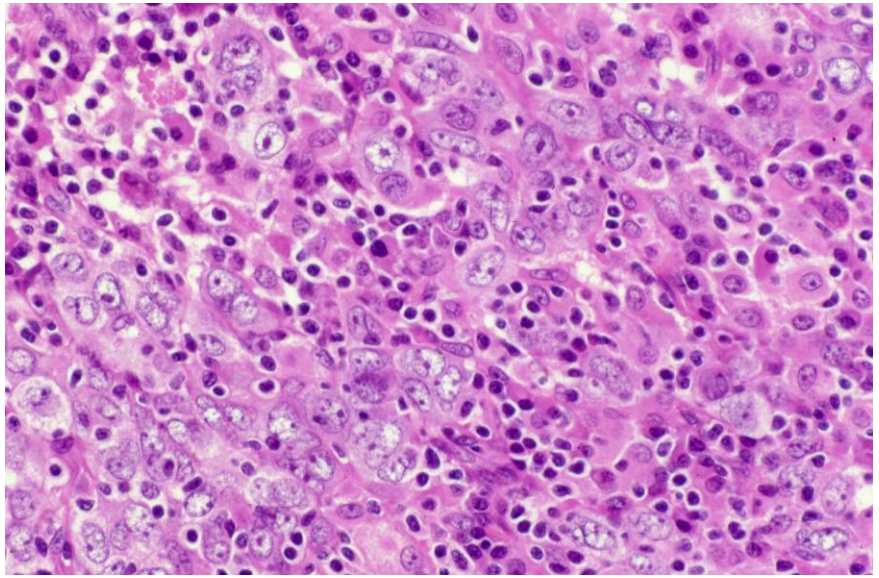


Schmidt syndrome (autoimmune polyendocrine syndrome, type 2)

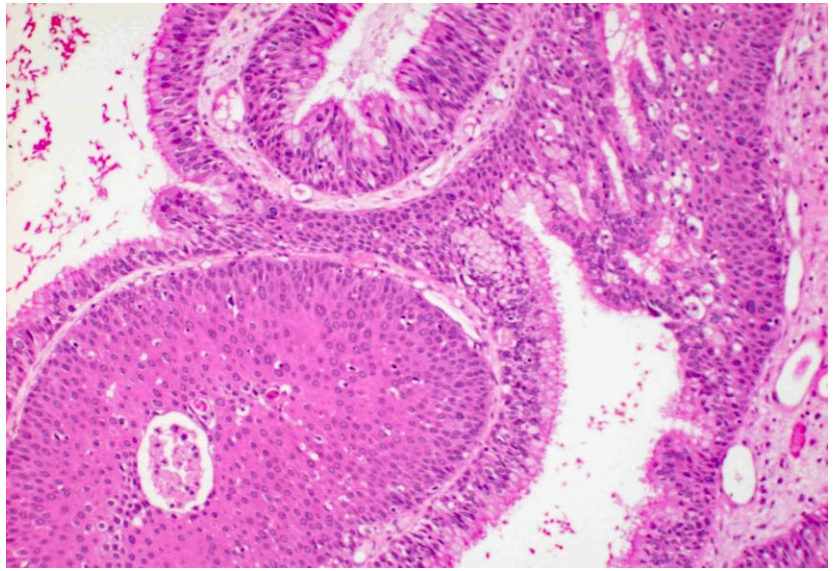
Schmidt syndrome is an autoimmune condition manifesting three diseases: type 1 diabetes, hypothyroidism and adrenal insufficiency, and mainly seen in middle-aged female patients. The cause is unknown. Borrowed from: ncbi.nlm.nih.gov

Schmincke-type lymphoepithelioma (spindled cancer cells with marked lymphocytic stroma). HN-187-pharynx

In contrast to Régaud-type, Schmincke-type is EBER-negative. p53 is positive.



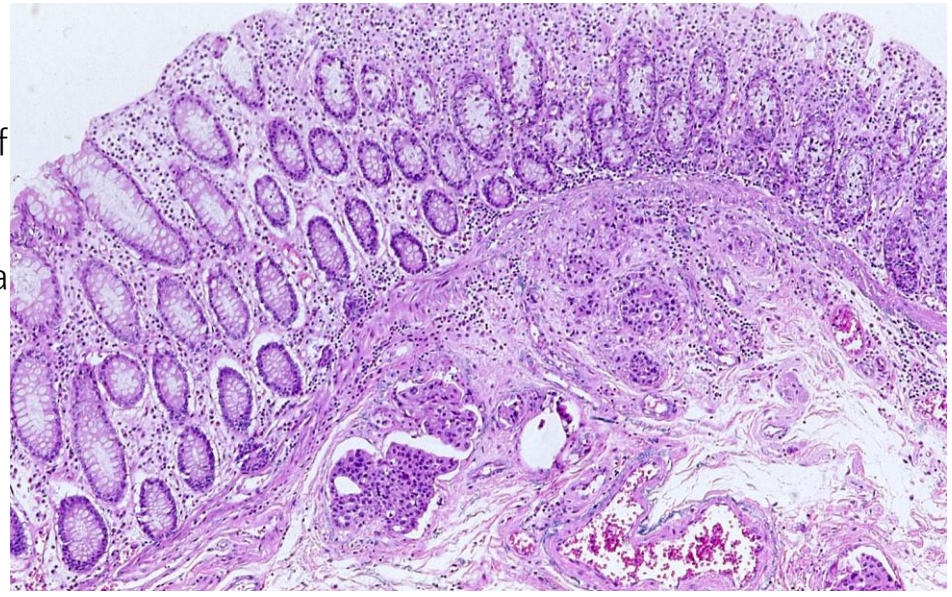
Schneiderian papilloma (sinonasal papilloma). HN-29-nose, HN-30-nose



Schneiderian papilloma is a benign tumor arising from the Schneiderian epithelium of the nasal cavity and paranasal sinuses. It has a potential for recurrence.

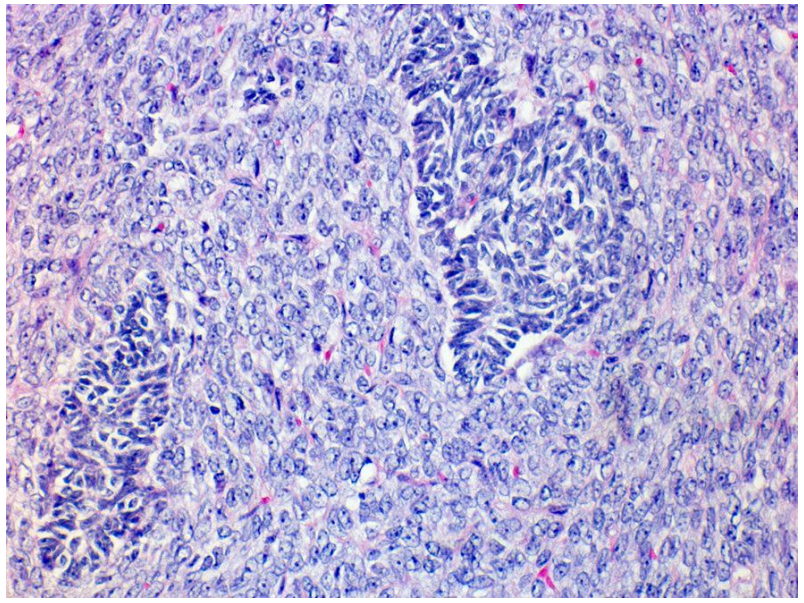
Schnitzler's metastasis (rectal metastasis from gastric cancer). GI-459-2-colorectum

Peritoneal dissemination of poorly differentiated adenocarcinoma or signet ring cell carcinoma may form rectal stenosis. Lymphatic spread is seen.



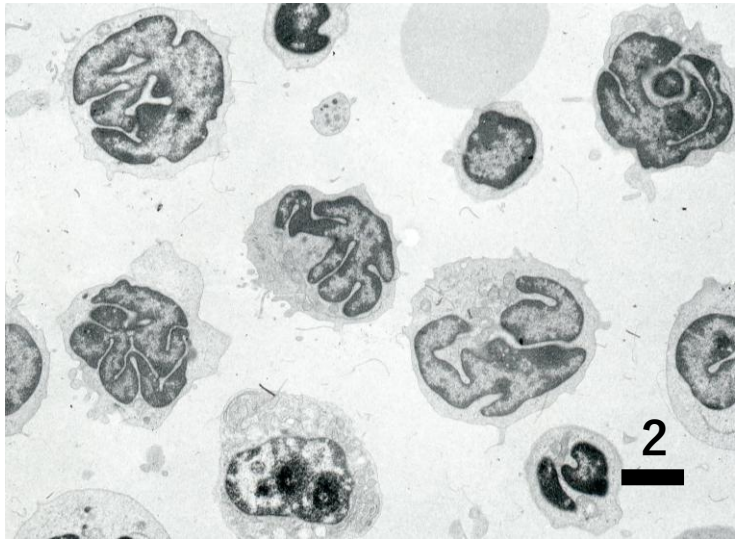
Sertoli-Leydig cell tumor (androgen-secreting sex cord stromal tumor: androblastoma/arrhenoblastoma). Gyne-195-1-ovary through Gyne-195-4-ovary

The tumor consists of both sex cord (Sertoli cells) and stromal (Leydig cells) elements.

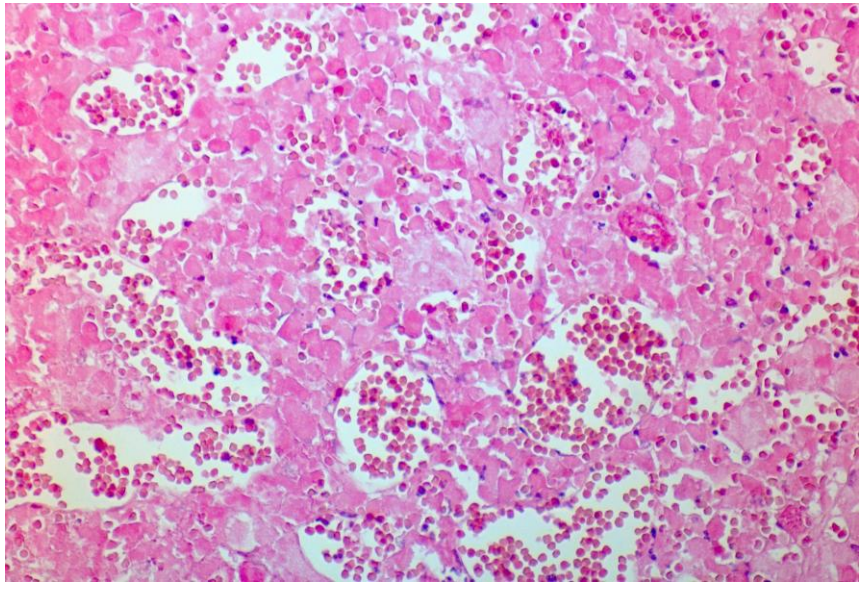


Sézary syndrome (an aggressive form of CD4+ cutaneous T-cell lymphoma involving the peripheral blood and LNs). Hemato-147-2-LN, Sk-534-1-LPD, Sk-534-2-LPD

Ultrastructure of in Sézary cells in the buffy coat. containing cerebriform (convoluted) nuclei.



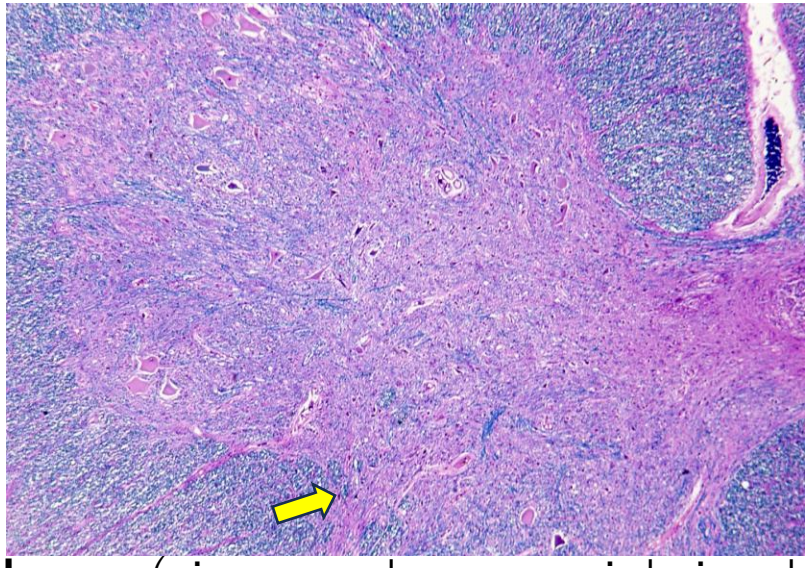
Sheehan syndrome (pituitary necrosis caused by post-partum hypovolemic shock). Endo-7-Pit, Endo-8-Pit



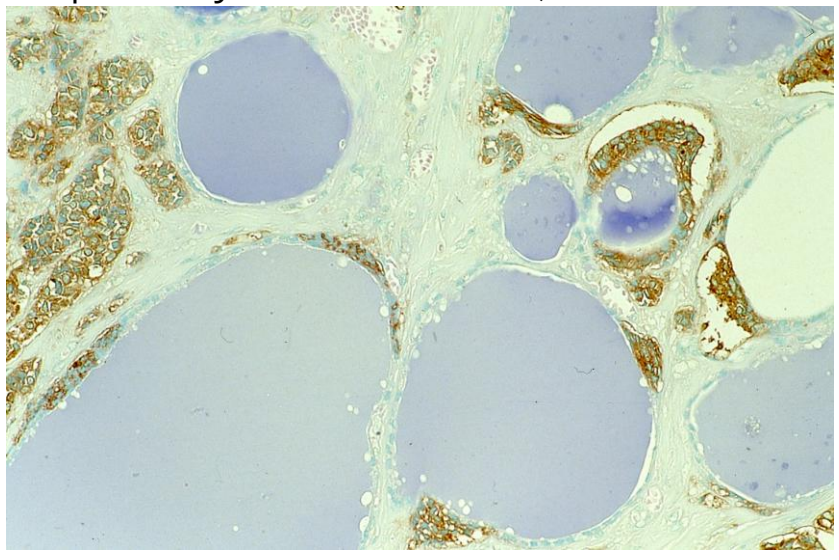
post-partum coagulation necrosis of the anterior pituitary gland

Shy-Drager syndrome (multiple system atrophy predominantly affecting autonomic nervous system). neuro-121-1-spinalC through neuro-121-3-spinalC

gliosis in the intermedio-lateral nucleus in the lateral horn of the thoracic spinal cord (arrow) (LFB-HE)



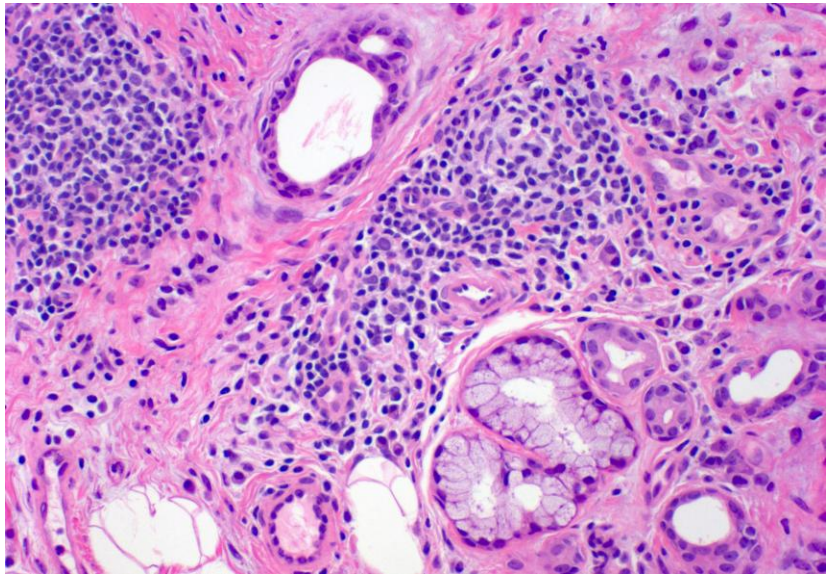
Sipple syndrome (multiple endocrine neoplasia, type II: medullary thyroid carcinoma, pheochromocytoma and parathyroid adenoma). Endo-49-5-Thyroid



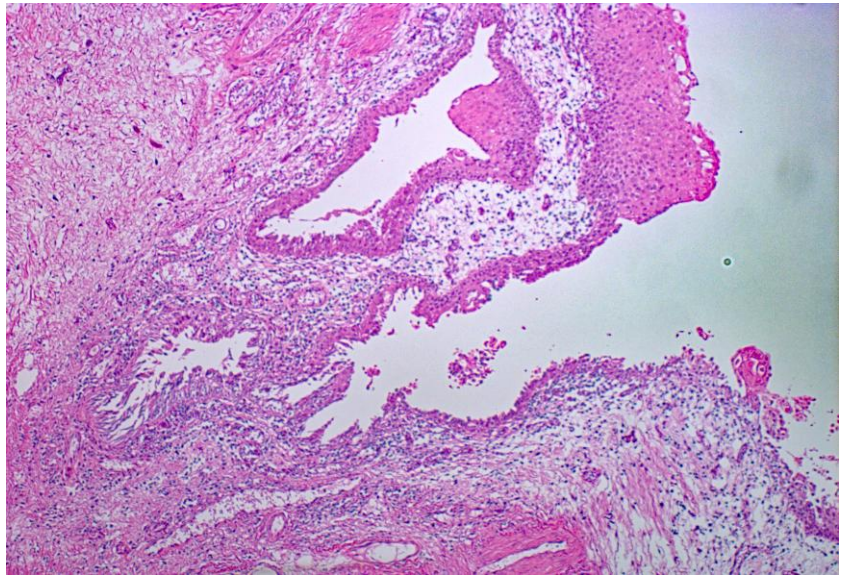
medullary thyroid carcinoma multifocally expressing CEA

Sjögren's syndrome (sicca syndrome, mainly involving the salivary and lacrimal glands). HN-66-2-OC

Biopsied lip minor salivary gland shows periductal lymphoplasm-acytic infiltration and acinar atrophy.

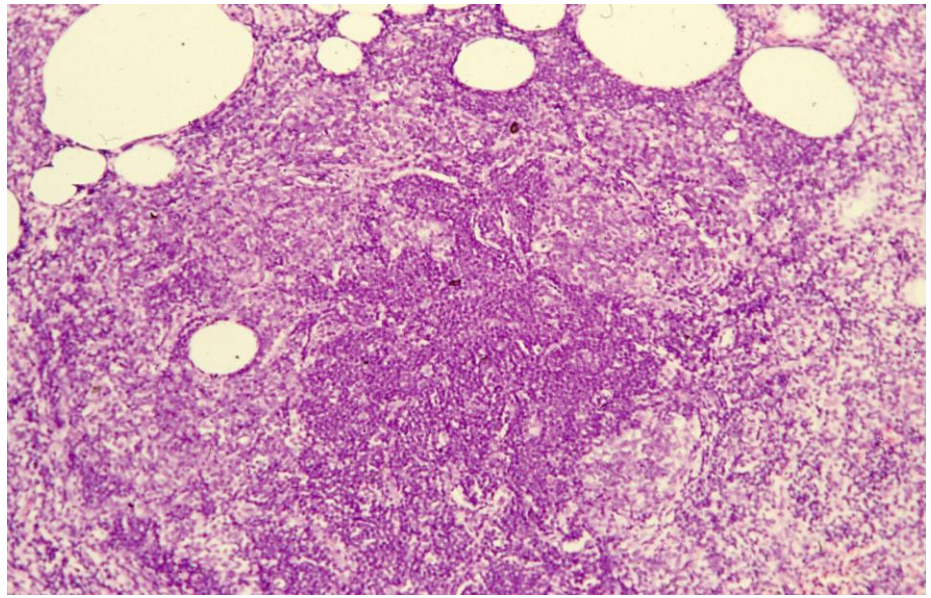


Skene's gland cyst (cyst of paraurethral gland origin). Gyne-3-1-vulva



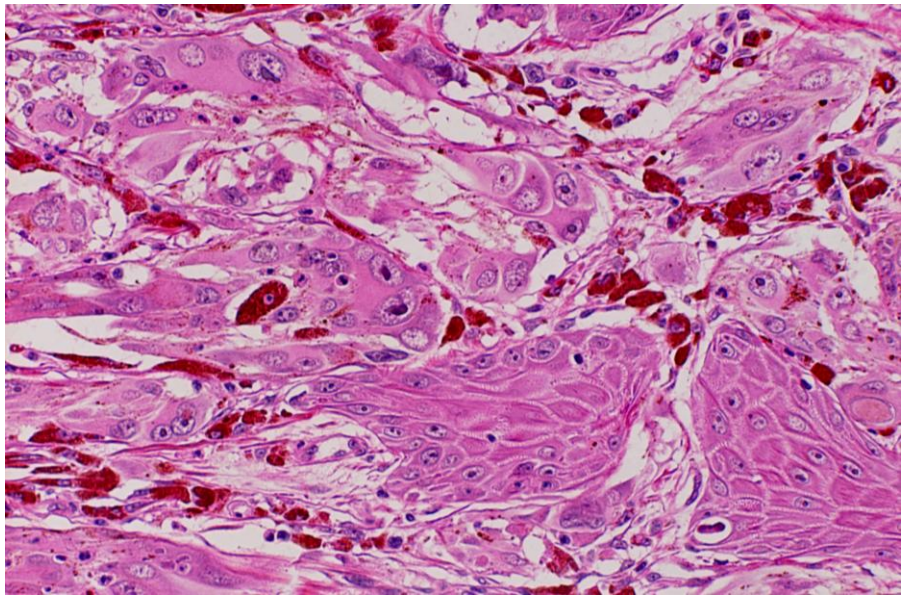
Skene's gland is called female prostate secreting PSA and PAcP.

Spiegler-Fendt lymphocytoma benigna cutis (pseudolymph-omatous hyperplasia of B-lymphocytes). Sk-35-Lymph



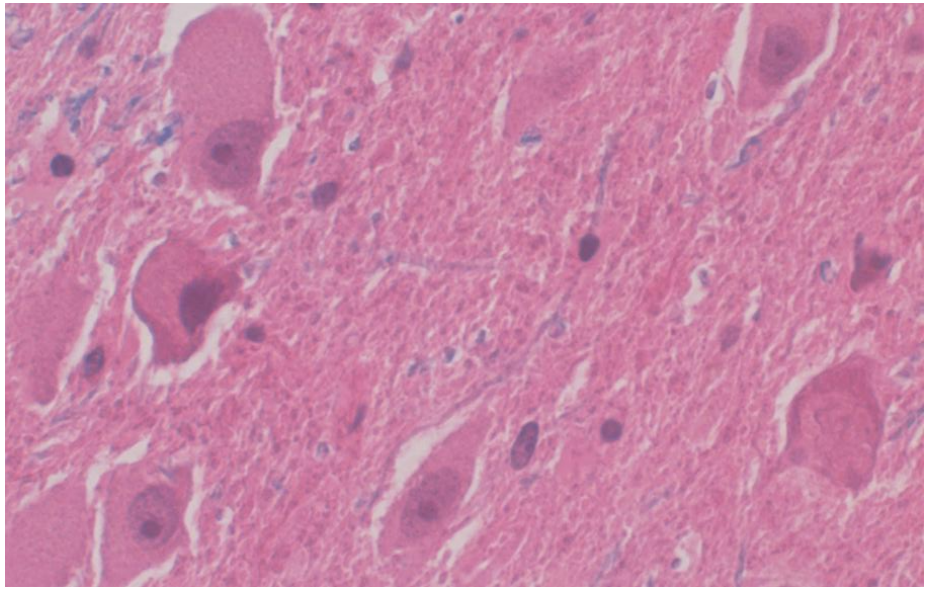
a facial skin lesion of a 54 y-o male patient

Spitz nevus (previously called as benign juvenile melanoma). Sk-408-Nevus, Sk-409-Nevus



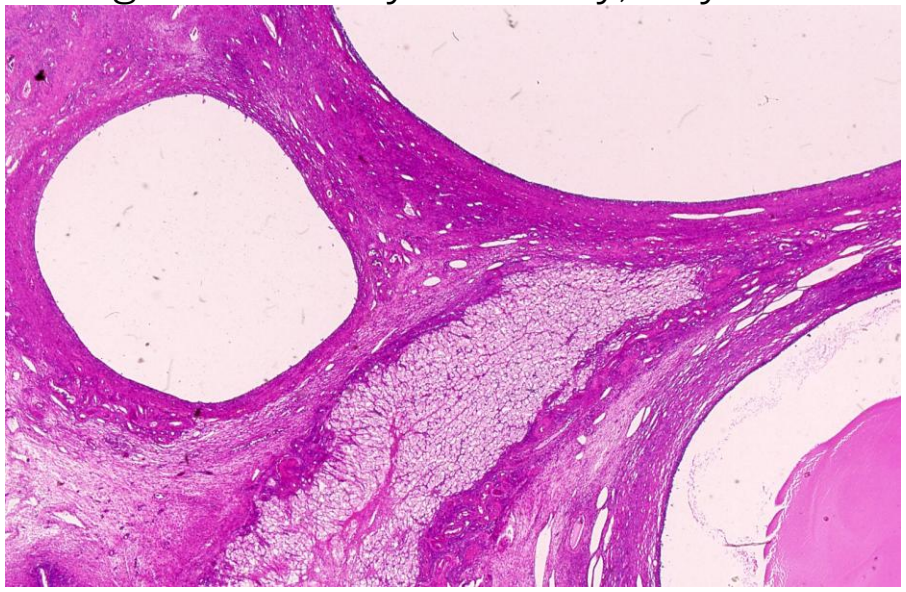
Spitz nevus, compound type, on the forearm of 10 y-o boy. Large-sized nevus cells with prominent nucleoli.

Steele-Richardson-Olszewski syndrome (progressive supranuclear palsy). neuro-20-brain



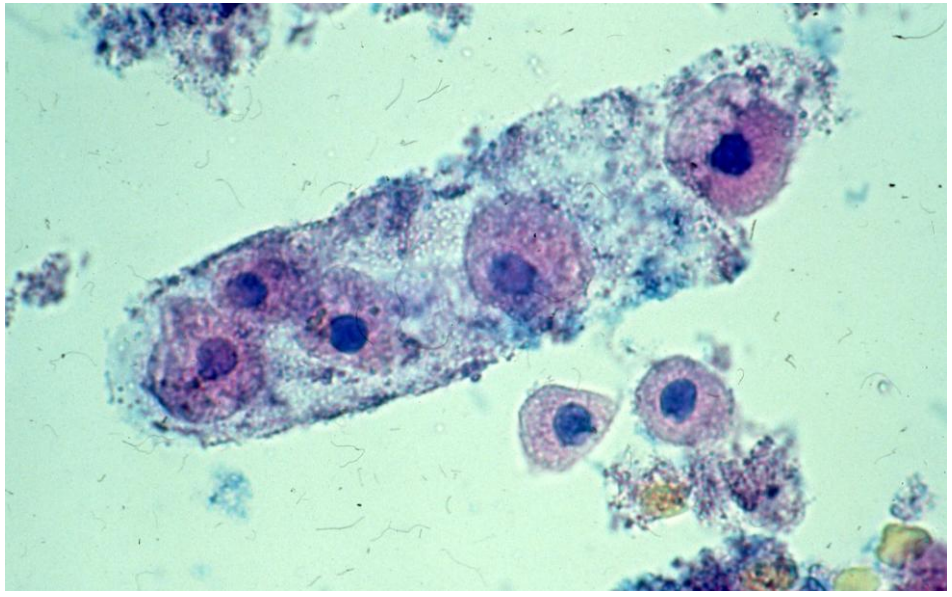
neurofibrillary tangles in neurons of olivary nucleus of the cerebellum (a 70 y-o male patient with S-R-O syndrome).

Stein-Leventhal syndrome (polycystic ovary disease causing anovulatory infertility). Gyne-182-ovary



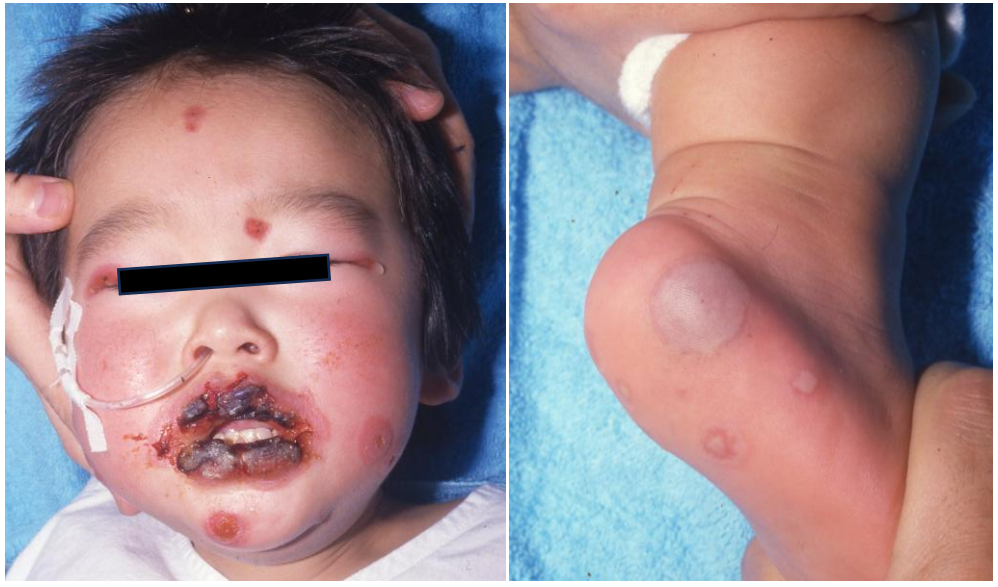
The enlarged ovary contains multiple cystic follicles and theca lutein hyperplasia

Sternheimer stain (supravital stain for examining urinary deposits). Uro-84-2-kidney



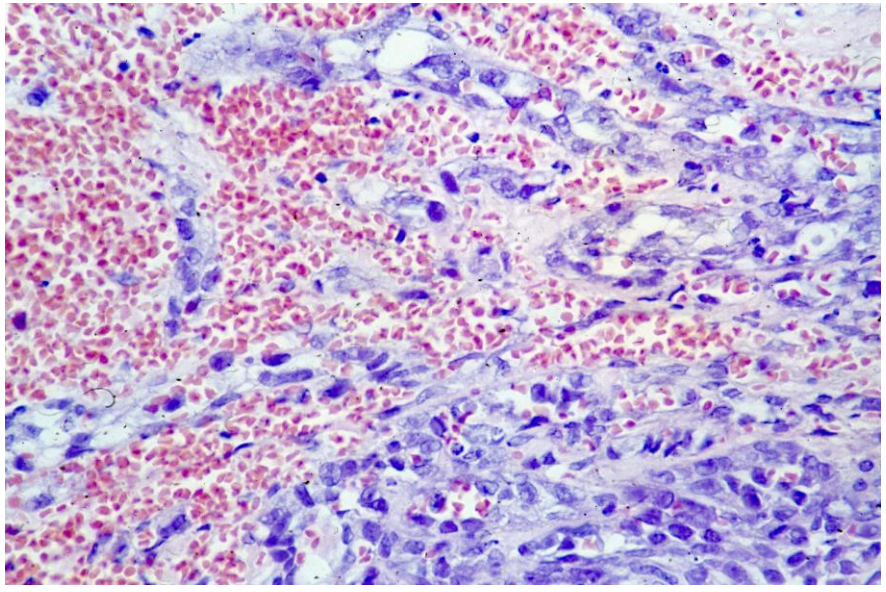
an epithelial cast stained with Sternhheimer's method.

Stevens-Johnson syndrome (a severe form of erythema multiforme). Sk-27-EM



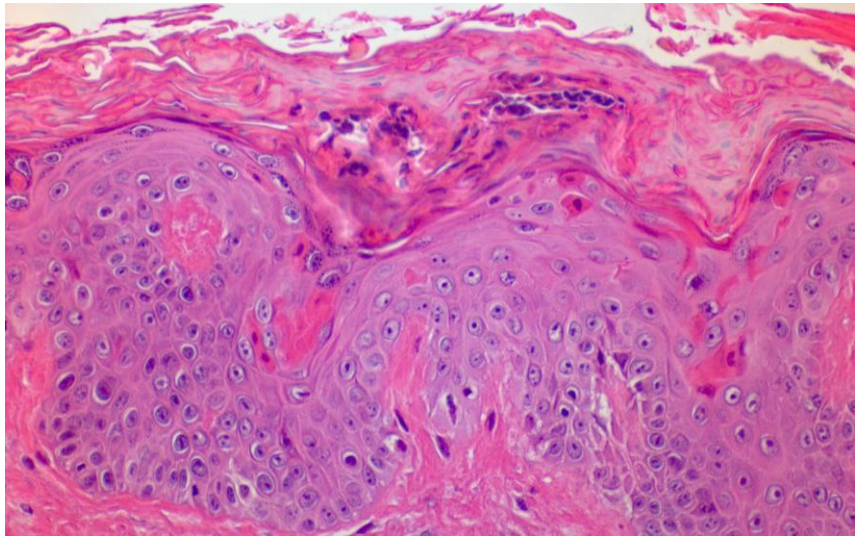
acute vesiculo-bullous reactions on the skin and mucosa of the eye, oral cavity and genitals.

Stewart-Treves syndrome (lymphangiosarcoma caused by chronic lymphedema). Sk-630-MNENeo



post-mastectomy lymphangio-sarcoma of the arm (a 55 y-o female patient)

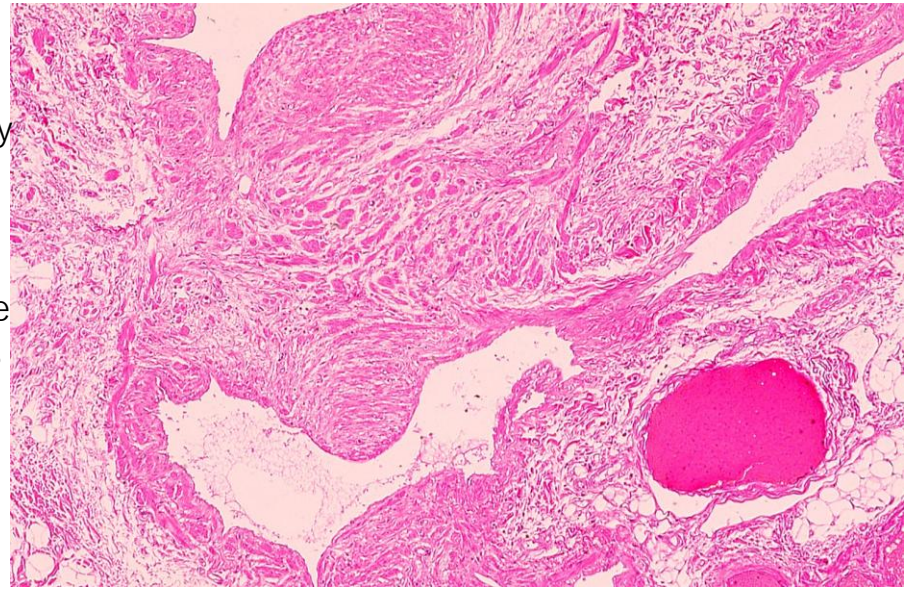
Still disease, adult type (inflammatory arthritis with fever, lymphadenopathy, joint pain and salmon-colored rash). Sk-41-Neutro



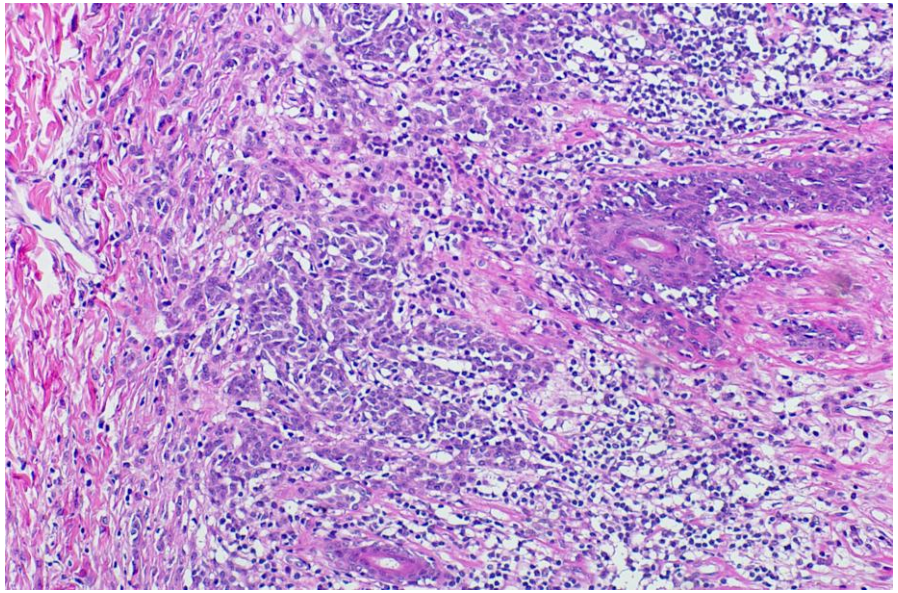
dyskeratotic keratinocytes in the epidermis and stratum corneum with acute inflammatory infiltrate

Sturge-Weber syndrome (encephalotrigeminal angiomatosis). Sk-592-BNENeo

vascular abnormality of in areas supplied by the ophthalmic branch of the trigeminal nerve: the facial subcutaneous tissue, lepto-meninges and the ocular choroid membrane



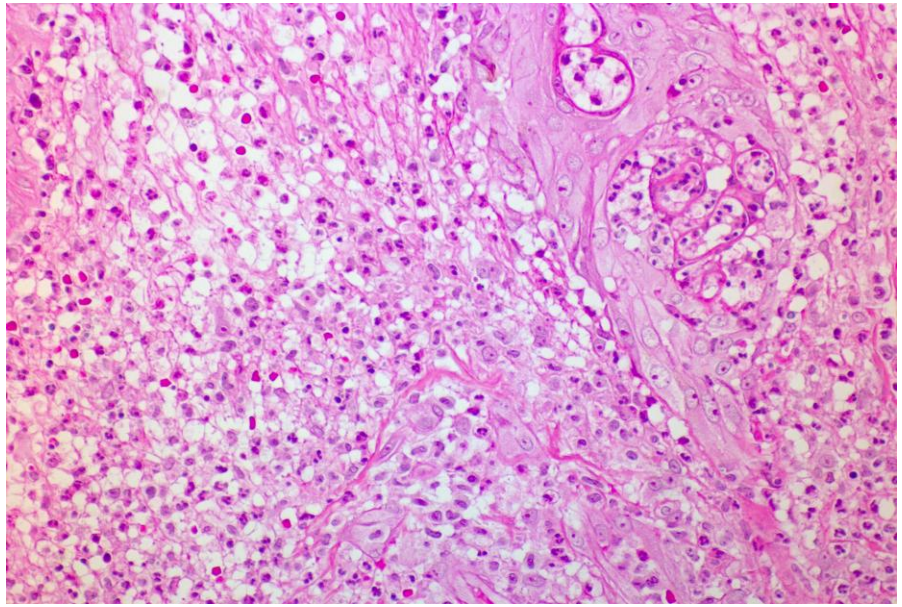
Sutton's nevus (halo nevus of Sutton: depigmented halo around melanocytic nevus). Sk-403-Nevus



dense infiltration of lymphocytes seen around the depigmented nevus cells of compound type

Sweet's disease (acute febrile neutrophilic dermatosis) Sk-46-Neutro

A tender erythematous nodule on the limb with dense infiltration of neutrophils in the dermis and hair follicle



Swyer-James-MacLeod syndrome (reduction in the pulmonary vasculature and alveolar hyperdistension). Lung-27-1-bulla, Lung-27-2-bulla

Alveolar hyperdisten-sion is seen (EVG).