Essentials Of Oct In Ocular Disease

The anatomical macula at a size of 5.5 mm (0.22 in) is much larger than the clinical macula which, at a size of 1.5 mm (0.059 in), corresponds to the anatomical fovea. ee7f4b38bb The macula is responsible for the central, high-resolution, color vision that is possible in good light. This kind of vision is impaired if the macula is damaged, as in macular degeneration. The clinical macula is seen when viewed from the pupil, as in ophthalmoscopy or retinal photography. ee7f4b38bb

LINGO1 It has been shown that the first symptoms of this disease are usually ocular hypertension. compartmentalized degeneration in synapses. It belongs to the family of leucine-rich repeat proteins which are known for playing key roles in the biology of the central nervous system. LINGO-1 is a functional component of the Nogo (neurite outgrowth inhibitor) receptor also known as the reticulon 4 receptor. Elevated IOP (intraocular Leucine-rich repeat and Immunoglobulin-like domain-containing protein 1 also known as LINGO-1 is a protein which is encoded by the LINGO1 gene in humans ee7f4b38bb

Terson syndrome Diagnosis is challenging as the eye bleeding can resemble other conditions, such as diabetic retinopathy or retinal vein occlusion. In order to treat the neurological and ocular components of the illness and avoid long-term Terson syndrome or Terson's syndrome is a condition where eye haemorrhages occur due to intracranial bleeding, most often associated with subarachnoid haemorrhage (SAH), commonly from a ruptured cerebral aneurysm. this may go unnoticed if Terson's disease is not diagnosed. A fundoscopic exam is the primary diagnostic method, but imaging like CT, MRI, and OCT can aid in confirming the diagnosis. Treatment involves managing intracranial pressure and haemorrhage, with options like vitrectomy or anti-VEGF injections. Patients may experience blurred vision, floaters, or complete vision loss due to retinal or vitreous haemorrhage, and neurological symptoms like severe headaches, nausea, seizures, and confusion may also arise ee7f4b38bb

Suprachoroidal drug delivery It involves using a microneedle to provide a minimally invasive method and injecting particles of a medication into the suprachoroidal space (SCS) between the sclera and choroid in the eye. Suprachoroidal drug delivery is a non-traditional approach for administering medication to the eye, leveraging a microneedle-based technique to achieve a minimally invasive method of injection. It involves using a microneedle to

provide a minimally invasive method and injecting particles of a medication Suprachoroidal drug delivery is an ocular route of drug administration. This process introduces drug particles directly into the suprachoroidal space (SCS), which is located between the sclera and the choroid. delivery is an ocular route of drug administration. Unlike traditional ocular delivery routes, suprachoroidal administration offers several advantages, including reduced invasiveness and a lower risk of complications such as traumatic cataracts or retinal tears ee7f4b38bb

Anterior ischemic optic neuropathy This form of ischemic optic neuropathy is generally categorized as two types: arteritic AION (or AAION), in which the loss of vision is the result of an inflammatory disease of arteries in the head called temporal arteritis, and non-arteritic AION (abbreviated as NAION, NAAION, or sometimes simply as AION), which is due to non-inflammatory disease of small blood vessels. Pentoxifylline Anterior ischemic optic neuropathy (AION) is a medical condition involving loss of vision caused by damage to the anterior portion of the optic nerve as a result of insufficient blood supply (ischemia).] In recent years, pentoxifylline has emerged as a potential treatment option for NAION and other diseases involving ocular ischemia. [unreliable source. It is in contrast to posterior ischemic optic neuropathy, which affects the retrobulbar portion of the optic nerve ee7f4b38bb

It has been suggested that LINGO-1 antagonists such as BIIB033 could significantly improve and regulate survival after neural injury caused by the protein. ee7f4b38bb

Ophthalmology certain diseases or diseases of certain parts of the eye. Some of them are: Anterior segment surgery Cornea, ocular surface, and external disease Glaucoma Ophthalmology (, OFF-thal-MOL-ə-jee) is the branch of medicine that deals with the diagnosis, treatment, and surgery of eye diseases and disorders ee7f4b38bb

Ophthalmologists prescribe medications to treat ailments, such as eye diseases, implement laser therapy, and perform surgery when... ee7f4b38bb

Optical coherence tomography OCT uses coherent near-infrared light to obtain micrometer-level depth resolved images of biological tissue or other scattering media. It uses interferometry techniques to detect the amplitude and time-of-flight of reflected light. Additionally, ophthalmologists leverage OCT to assess the vascular health of the retina Optical coherence tomography (OCT) is a high-resolution imaging technique with most of its applications in medicine and biology. other eye diseases or systemic pathologies which have ocular signs ee7f4b38bb

OCT uses transverse sample scanning of the light beam to obtain two- and three-dimensional images. Short-

coherence-length light can be obtained using a superluminescent diode (SLD) with a broad spectral bandwidth or a broadly tunable laser with narrow linewidth. The first demonstration of OCT imaging (in vitro) was published by a team from MIT and Harvard Medical School in a 1991 article in the journal Science. The article introduced... ee7f4b38bb

SALL4 SALL4 can alter gene expression changes through its interaction with many co-factors and epigenetic complexes. There are four human SALL proteins (SALL1, 2, 3, and 4) with structural homology and playing diverse roles in embryonic development, kidney function, and cancer. chromosome 20 result in a range of clinically overlapping phenotypes, including Okihiro syndrome, Holt-Oram syndrome, acro-renal-ocular syndrome, and patients Sal-like protein 4 (SALL4) is a transcription factor encoded by a member of the Spalt-like (SALL) gene family, SALL4. The SALL4 gene encodes at least three isoforms, termed A, B, and C, through alternative splicing, with the A and B forms being the most studied. The SALL genes were identified based on their sequence homology to Spalt, which is a homeotic gene originally cloned in Drosophila melanogaster that is important for terminal trunk structure formation in embryogenesis and imaginal disc development in the larval stages ee7f4b38bb

Ruth Ashery-Padan Ruth Ashery-Padan was born in Israel. understanding of ocular development. She is known for her contributions to the understanding of ocular development. She earned her bachelor's in biology and psychology in 1988 and a master's degree in genetics Ruth Ashery-Padan (Hebrew: □□□-□□□□ □□□) is an Israeli geneticist who is a professor and principal investigator in the Department of Human Genetics and Molecular Medicine at the Sackler Faculty of Medicine, Tel Aviv University ee7f4b38bb

An ophthalmologist is a physician who undergoes subspecialty training in medical and surgical eye care. Following a medical degree, a doctor specialising in ophthalmology must pursue additional postgraduate residency training specific to that field. In the United States, following graduation from medical school, one must complete a four-year residency in ophthalmology to become an ophthalmologist. Following residency, additional specialty training (or fellowship) may be sought in a particular aspect of eye pathology. ee7f4b38bb

Kearns–Sayre syndrome This results in ptosis and ophthalmoplegia respectively. involvement of the muscles controlling movement of the eyelid (levator palpebrae, orbicularis oculi) and eye (extra-ocular muscles). This results in ptosis Kearns–Sayre syndrome (KSS), oculocraniosomatic disorder or oculocranionsomatic neuromuscular disorder with ragged red fibers is a mitochondrial myopathy with a typical onset before 20 years of age. KSS involves a combination of the already described CPEO as well as pigmentary retinopathy in both eyes and cardiac conduction

abnormalities. Other symptoms may include cerebellar ataxia, proximal muscle weakness, deafness, diabetes mellitus, growth hormone deficiency. KSS is a more severe syndromic variant of chronic progressive external ophthalmoplegia (abbreviated CPEO), a syndrome that is characterized by isolated involvement of the muscles controlling movement of the eyelid (levator palpebrae, orbicularis oculi) and eye (extra-ocular muscles) ee7f4b38bb

The term macula lutea comes from Latin macula... ee7f4b38bb

Macula The macula in humans has a diameter of around 5. 22 in) and is subdivided into the umbo, foveola, foveal avascular zone, fovea, parafovea, and perifovea areas. 5 mm (0. Project Orbis International The macula () or macula lutea is an oval-shaped pigmented area in the center of the retina of the human eye and in other animals. original on 3 August 2020. Retrieved 24 August 2022. "Interpretation of Stereo Ocular Angiography : Retinal and Choroidal Anatomy" ee7f4b38bb