

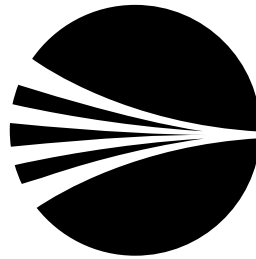
Schedule an eye examination

It's important to remember that many people do not know they have eye disease because there are often no warning signs or symptoms, or they assume that poor sight is a natural part of growing older. Early detection and treatment of eye problems is the best way to keep your healthy vision throughout your life. In many cases, blindness and vision loss are preventable.

Adults with no signs or risk factors for eye disease get a baseline eye disease screening at age 40. For individuals at any age with symptoms of or at risk for eye disease, should see their ophthalmologist to determine how frequently their eye should be examined.

Compliments of
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A Closer Look at Choroidal Neovascularization (CNV)

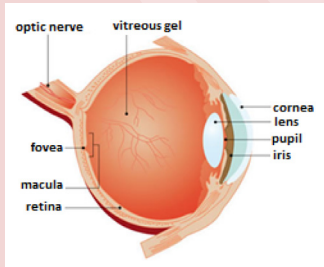


Patient Education

What is CNV?

CNV or Choroidal Neovascularization is the growth of abnormal blood vessels beneath the retina

Choroidal neovascularization (CNV) involves the growth of new blood vessels that originate from the choroid through a break in the Bruch membrane into the sub-retinal pigment epithelium (sub-RPE) or subretinal space. CNV is a major cause of visual loss.



Signs and Symptoms

- Painless loss of vision
- Metamorphopsia (Visual distortion. Wavy lines or distortion in the center of the field vision).
- Paracentral or central scotoma (A partial loss of vision or a blind spot in an otherwise normal visual field).
- Apparent change in image size.
- Color disturbances.
- Hemorrhaging of the new blood vessels can accelerate the onset of symptoms of CNV.

Causes

CNV can occur rapidly in individuals with defects in Bruch's membrane, the innermost layer of the Choroid. It is also associated with excessive amounts of vascular

endothelial growth factor (VEGF). As well as in the wet macular degeneration, CNV can also occur frequently with the rare genetic disease pseudoxanthoma elasticum and rarely with the more common optic disc drusen. CNV has also been associated with extreme Myopic or Malignant Myopic degeneration, where in Choroidal Neovascularization occurs primarily in the presence of cracks within the retinal (Specifically) macular tissue known as lacquer cracks.

How is CNV treated?

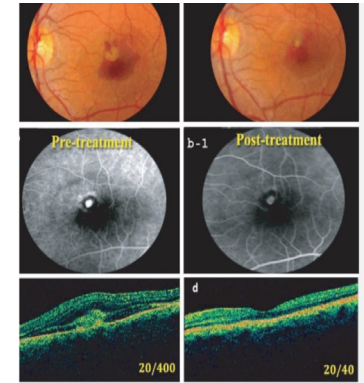
- The primary treatment for CNV is injection of medications into the eye's vitreous cavity. These medications are called anti-VEGF, because they block the activity of a substance in the body called Vascular Endothelial Growth Factor (VEGF), shown to be the common factor contributing to CNV. Patients frequently require multiple anti-VEGF injections, usually given at four week interval.
- Laser photocoagulation.
- Surgical excision of subfoveal CNV via pars plana vitrectomy.
- Surgical translocation of the fovea, for subfoveal CNV; the resulting juxtafoveal or extrafoveal CNV can then be treated with standard laser photocoagulation or PDT.



Diagnosis

Imaging studies include the following:

- Fluorescein angiography (FA) – The imaging modality of choice.
- Indocyanine green Angiography (ICG)
- Optical Coherence Tomography (OCT)



How are your eyes examined?

When your eyes are examined, they will be dilated using eye drops. During this examination, which is painless, your eye doctor will observe if there are any changes to your eye including the retina and vitreous.

Coexisting pathologies and differential diagnosis for Myopic CNV

Differential diagnosis for Myopic Choroidal Neovascularisation (CNV): (A and B) Haemorrhage due to lacquer cracks: (C) dome-shape macular with serous retinal detachment, and (D and E) macular fluid due to staphyloma.

