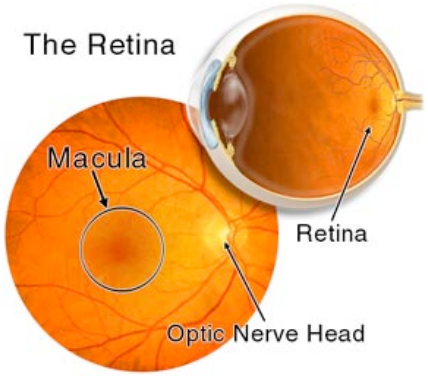
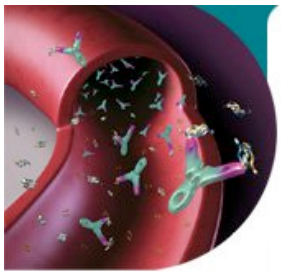
AntiVEGf injections for retinal disease

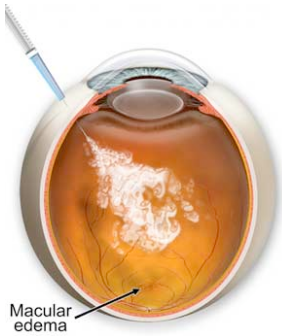


The **retina** is the delicate sensory tissue which forms the inner lining of the eye. It provides us with the sensation of vision and is also one of the most metabolically active structures in the body. It therefore has a very rich blood supply and is highly dependent on this for its proper functioning. The most critical area for visual function is served by a region at the very centre of the retina called **macula**.

Damage to retinal blood vessels from disease like **diabetes, hypertension, blocked retinal veins, inflammation** and **macular degeneration** can alter the blood supply to the retina. This is usually from leaks and blocks in the blood vessels, ultimately causing the retina to be starved of nourishment. The resulting damage incites the production of a potent cocktail of substances aimed at increasing the blood supply by increasing the blood flow and formation of new vessels. The chief amongst these substances is **VEGf** (vasculoendothelial growth factor). However these changes lead to an abnormal accumulation of fluid and blood in the macula called **macular oedema**. The fluid alters the structure and function of the retina leading to reduced vision in the centre of the visual field.

The mainstay of treatment has been LASER treatment which aims to block the leaks from the damaged blood vessels. LASER is useful in limited conditions. The advent of **antiVEGF drugs** has given us further options in treating macular oedema. These drugs are injected into the eye through a fine needle under local anaesthesia where they go and block the actions of VEGf. This has been demonstrated through large clinical trials to be effective in reducing and even getting rid of macular oedema. **Lucentis** is the antiVEGf drug that is licensed for use within the eye. **Avastin** is a similar drug that has been used successfully though it is not licensed for treating the eye. These drugs are effective for around a month and treatment may require multiple injections.





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