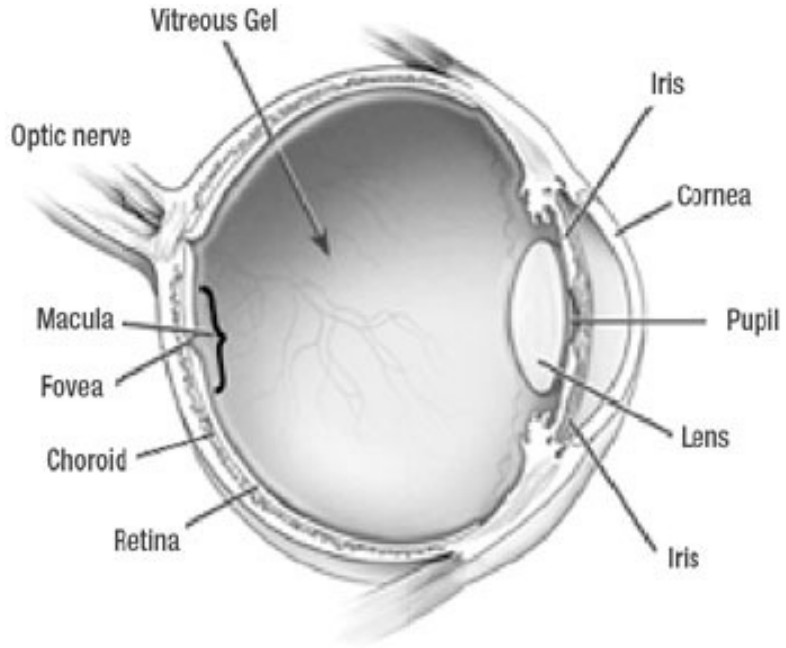
Swindon and Marlborough NHS

NHS Trust

Patient Information

‘WET’ AGE RELATED MACULAR DEGENERATION (ARMD) AND NEW TREATMENTS



At the back of the eye is a layer of **light sensitive tissue** called the **retina**. The **macula** is found at the centre of the retina and is responsible for the vision needed for detailed activities such as reading and writing and our ability to see colour.

Sometimes the delicate cells of the macula become damaged and stop working. We do not know why this is, although it tends to happen as people get older and is referred to as **age-related macular degeneration (AMD)**. AMD is the most common cause of poor sight among people over 60 years of age but never leads to complete sight loss as peripheral or side vision will remain undamaged.

There are two different types of AMD:

Dry AMD: Around 90 per cent of people diagnosed with AMD have the dry type. It occurs when the cells of the macula become old and start to waste away meaning that these cells can no longer function properly.

Wet AMD: this is less common (10 per cent of cases) and occurs when tiny new blood vessels grow into the retina. These blood vessels leak and bleed as they grow, causing scarring of the macula and irreversible visual loss.

Dry AMD may change to wet AMD.

In recent years a group of drugs called **anti-VEGF** have been developed for the treatment of wet AMD. VEGF stands for 'Vascular Endothelial Growth Factor' this is a chemical that is involved in the formation of new blood vessels beneath the retina (described above). Blocking the action of this chemical prevents the formation of these abnormal vessels.

Anti-VEGF drugs include **ranibizumab** (Lucentis), **pegaptanib** (Macugen), and **bevacizumab** (Avastin). Avastin has not been licensed for use in the eye so far but has been used extensively for this purpose worldwide. These drugs are injected directly into the eye by a fine needle under clean conditions. Injections are needed every few weeks for up to 2 years. These work reasonably well for all types of wet ARMD. Studies have shown that the **treatment stabilised visual loss** in around 9 in 10 people, and improved vision in about a third.

The **potential side effects** (1-2 in a 1,000) as a result of injection in the eye are infection, haemorrhage, retinal detachment, cataract, raised eye pressure and inflammation in the eye. However, the treatment benefit outweighs the risks in most patients.