

# Age Related Macular Degeneration

There are two types of macular degeneration - Wet and Dry.

The wet form of macular degeneration is the more sinister type and can cause rapid loss of your central vision (reading, TV, recognising faces, driving and colour vision), but fortunately it only rarely causes loss of peripheral vision. Without treatment most patients will lose vision to the level of legal blindness in that eye (unable to see any letters on the vision test chart). Unfortunately many people go on to have both eyes affected (about 12-14% chance per year or 50-75% chance by 5 years). You will have been given some information separately regarding things you can do (diet, stop smoking, sunglasses, vitamin supplements, monitoring with Amsler grid, magnifiers). You will not harm your eyes by using them or put any extra strain on your good eye.

Fortunately the treatments for wet macular degeneration (or leaky blood vessels) are getting better all the time. Fluorescein angiograms (photographs taken after a special yellow dye is injected into your vein) are how we confirm whether you have wet macular degeneration and also show us what subtype of leaky blood vessel you have. Another special photograph called an OCT is essential for monitoring how your treatment is going. Medicare covers most of your fluorescein angiogram cost however there is currently no rebate from Medicare for the OCT, but the OCT means you will need fewer fluorescein angiograms.

The subtype will determine the best treatment for your leaky blood vessel. 10 years ago not much could be done at all.

Only an occasional leaky blood vessel could be treated with laser coagulation (hot laser) and this is still the best treatment for some types of wet macular degeneration.

Since 2000 photodynamic therapy with Verteporforin has been available in Australia. Unfortunately it is not suitable for all types of wet macular degeneration, and furthermore is only funded in Australia for very specific subtypes (irrespective of whether you have private health insurance, DVA, or Medicare). The fluorescein angiogram will determine whether your leaky blood vessel is suitable for PDT. If it is suitable but won't be funded, then should you decide to have this treatment you will need to self-fund it (at cost of \$2000 for the Visudyne dye, subsidised by the company after 2 treatments or \$4000). You will be given more information about PDT if relevant to you, but as Visudyne is light sensitive you will need to stay indoors and keep covered for 2-3 days to prevent sunburn. PDT treatment is given every 3 months if needed and patients on average require 3 treatments in the first year and 2 treatments in the second year or treatment.

In the last 6 months some exciting new treatments have become available.

Retaane is a medication that is given around the eye and controls the leaky blood vessel about as well as PDT. It needs to be given every 6 months and typically for at least 2 years. It is not yet funded in Australia and will cost you about \$2000 for the medication each time.

Lucentis is a different medication (called an anti-VEGF agent) that works particularly well to make the leaky blood vessel less leaky. It is given as an injection into the eye every month for up to 2 years. Studies of Lucentis indicate it is more effective than any other treatment we have for macular degeneration and it works in all subtypes. It seems to hold things stable in 90-95% and may even improve vision in 30-40%. Unfortunately it also is not yet funded and will cost you \$2000 for the medication with each injection (after 3 treatments or \$6000 the company is currently subsidising ongoing medication costs).

Finally Avastin is a related medication to Lucentis which is also an anti-VEGF agent. It is a medication approved for use in Australia for bowel cancer so its use in the eye is what is called 'off-label'. It is also an injection into the eye and is given on average every 6-8 weeks for up to 2 years. Because the dose in the eye is much smaller than the bowel cancer treatment, the ampoule can be divided up into many eye doses so that the medication only costs about \$100. In the last 18 months around the world and 6 months in Australia its use has suggested it works as effectively as Lucentis (working to hold things stable in 90-95% and may even improve vision in 30-40%).

The best treatment for your macular degeneration may be a combination of the above treatments and in most people will require regular repeated treatments for up to 2 years. You will likely be checked every 6 weeks and have fluorescein angiograms about every 3 months. Fortunately we now have much more we can do for wet macular degeneration so that there is hope is retaining some vision in a condition which without treatment typically leads to severe vision loss.