

Guidelines for monitoring of active wet AMD and treatment with Anti-VEGF by non-medical practitioners

This guideline is produced for use by Allied Health professionals, Nurses and Optometrists working alongside an ophthalmologist in the Eye Department at Singleton Hospital. Patients may be seen face to face or virtually. These guidelines must be used in conjunction with the treat and extend algorithm⁵ and discharge guidelines.

Anti-VEGF intra-vitreous injections are recommended as a treatment option for wet age-related macular degeneration if the best corrected acuity is better than 1.2 logMAR, and there is no permanent structural damage to the central fovea (NICE guidelines). Patients are diagnosed with wet AMD by the consultant following fluorescein angiography and receive an initial 3 loading doses of anti-VEGF (Lucentis/Eylea). The patients will then be seen in clinic for a LogMAR vision assessment, OCT scan and slit lamp examination/retinal photography. If these tests show the AMD is active, further Anti-VEGF injections will be offered. Patients may be on PRN or Treat and Extend treatment plans.

Vision

It is important to record the vision and note any change from the previous visits. A loss of 5 letters or more may be an indication the AMD is active and may need re-treatment^{3,4}. It is also useful to ask the patient if they have noticed any change in their vision.

OCT scan

The OCT scans for both eyes should be carefully examined and any evidence of intra-retinal fluid (IRF) and sub-retinal fluid (SRF) noted. These are both indications the wet AMD is active^{3,4} and injection should be considered if on PRN and review period altered if on Treat and Extend⁵

Presence of drusen, atrophy, pigment epithelial detachments (PED), epiretinal membranes and scarring should be noted. These are not indications for treatment but should be recorded and monitored.

If vision in the eye is very good, despite small amounts of fluid being present, the practitioner should weigh up the risks versus the benefits of having an injection (1 in 2000 result in complications) if on PRN basis.

Macula examination

Any new macular haemorrhage on slit lamp or photos is to be considered a sign of activity of disease^{3,4} and is an indication for treatment if on PRN and indication of activity on Treat and Extend.

Reasons to discuss with the Ophthalmologist:

- Patients can be booked in to a Monday PM z20d or DJE if they wish to discuss surgery for cataracts, it is worth noting the presence of cataracts, as these may be responsible for some of the vision loss.
- If there are other retinal abnormalities, or co-pathologies e.g glaucoma, suspicious nevus.

- When there is a history of serious complications following previous injections, seek advice before recommending further Anti-VEGF treatment e.g. endophthalmitis/Retinal detachment/CVA or MI.
- A discussion should be had with regards to stopping treatment if the eye shows “persistent deterioration in visual acuity and there are anatomical changes in the retina that indicate inadequate response to therapy”¹ in the absence of other ocular pathologies which may be contributing.

Support

- Offer certification of visual impairment to all people with AMD as soon as they
- Become eligible, even if they are still receiving active treatment¹.
- Referral to the low vision clinic and ECLO should be made if you feel this would be beneficial.

Treatment

If and when treatment is indicated, it may be necessary to liaise with the supervising Ophthalmologist and request a signed and dated prescription for each episode of treatment if on PRN. If the patient is on treat and extend the referral to pathway form should be signed by the consultant to authorise 12 visits and this authorises repeat injections.

If patient has had a CVA/MI in the last 3 months – they will not be offered further anti-veg for 3 months after the event.

Treatment regimens:

1. Pro re nata (PRN or “as needed”): An injection is given when there is any evidence of activity such as Intra-retinal fluid or sub retinal fluid +/- new macula haemorrhage. These patients are reviewed every 4/52 for activity.
2. Treat and extend regimen- patients have an injection every visit and the review intervals are adjusted according to presence of fluid and or macula haemorrhage. See Treat and Extend algorithm⁵

Discharge of stable patients

Patients may be discharged in accordance with the Discharge policy².

References:

1-Nice.org.uk. (2019). *Overview | Age-related macular degeneration | Guidance | NICE*. [online] Available at: <https://www.nice.org.uk/guidance/ng82>.

2- Discharge policy – Swansea Bay health board.

3- Fung AE, Lalwani GA, Rosenfeld PJ, et al. An optical coherence tomography-guided, variable dosing regimen with intravitreal ranibizumab (Lucentis) for neovascular age-related macular degeneration. *Am J Ophthalmol* 2007;143:566–83

4- Martin DF, Maguire MG, Fine SL, et al. Ranibizumab and Bevacizumab for treatment of neovascular age-related macular degeneration: two-year results. *Ophthalmology* 2012;119:1388–98

5- Treat and Extend Algorithm –Swansea Bay health board