

Information for Patients

The IRay Radiotherapy System For Wet Age-Related Macular Degeneration (AMD)

Background

Wet Age-Related Macular Degeneration (AMD) is characterised by abnormally fragile and leaky blood vessels growing behind the macula (central part of the back of the eye). The swelling and bleeding that happens at the macula can lead to scarring and irreversible loss of central vision.

The mainstay of treatment for wet AMD is injections in the eye with a medication belonging to the family of anti-vascular endothelial growth factor agents (Anti-VEGF). Anti-VEGF treatments are a group of medicines which reduce new blood vessel growth or oedema (swelling). They can be used to treat a number of eye conditions which cause new blood vessel growth or swelling under the macula area of your retina.

This treatment requires repeated monthly or bi-monthly visits to the hospital as well as repeated injections in the eye for an undetermined period of time.

What is the IRay Radiotherapy System?

The IRay Radiotherapy System offers a new adjunctive treatment option for wet AMD. This is a one-off procedure lasting approximately 30-40 minutes. The aim of the treatment is to maintain or improve vision while reducing the number of eye injections needed and the frequency of visits to the eye hospital.

The IRay Radiotherapy System is a device that sends X-rays to the macula to treat wet AMD. IRay uses highly focused, narrow-beam, low energy X-rays and a special software to:

- Target the diseased macula.
- Track the eye and keep the position of the X-ray stable.
- Treat a tiny area of the macula – the size of a grain of rice.

This is a one-off procedure that is offered on top of the common treatment with repeated injections for wet AMD. For a selected group of patients this additional treatment can reduce the number of injections needed to control the disease.

Is this procedure suitable for everyone?

The IRay Radiotherapy System is not suitable for all patients or for all types of wet AMD. The suitability of this particular treatment for your type of wet AMD will be discussed with you by your eye specialist and any alternative treatments will be explained.

What are the main advantages of this particular procedure?

The IRay Radiotherapy System has been shown to reduce the need for injections while maintaining vision for patients with certain types of wet AMD. However, intraocular injections will still be needed to control the disease.

Before your treatment

No particular preparation for this procedure is required. Please bring with you an up to date list of your current medications and a brief summary of your medical history, available from your general practitioner (GP) if you are unsure.

During the procedure

On the day of your procedure, you will be fitted with a contact lens and asked to sit on a chair with your chin on a chin rest. Your head will be firmly positioned for the treatment and some patients may find this uncomfortable. Eye drops are given to numb the front surface of your eye and to help with eye positioning. The procedure takes about 30-40 minutes and is painless. You will go home after the procedure is complete.

Post-treatment visits

Routine follow-up visits will continue on a monthly basis as usual and an injection will be offered on each visit if needed. It is very important that you attend all your clinic appointments.

Are there any complications?

The most common side-effects include redness of the eye and a dry eye sensation, which goes away within a few days. The IRay Radiotherapy System delivers a low dose of radiation to the back of the eye. 10% of treated patients may develop minor changes at the back of the eye associated with radiation exposure. This is benign, does not affect your vision and requires no treatment. 1% of treated patients may have an adverse effect on vision from radiation-related changes.

FAQs

Q: Who will perform the procedure and are they experienced?

A: An eye specialist who has been fully trained on the IRay Radiotherapy System will perform the procedure.

Q: How large is the IRay Radiotherapy System X-ray dose?

A: The effective radiation dose to the whole body is small, equivalent to the level of exposure a person would experience naturally over a 2 month period.

Q: When will I be able to resume normal activities?

A: Your normal activities will not be limited after treatment. Your doctor may give you more specific advice.

Contact Details:

If you have any concerns, please discuss these with the doctor. You can change your mind about your treatment at any time.

If you require further advice or do not understand anything contained in this leaflet or are having problems following your treatment please contact the Macular Treatment Centre on (0161) 276 3341/5572; Monday, Wednesday, Thursday 8.00 am – 8.30 pm. Tuesday, Friday 8.00 am - 6.00 pm; Saturday 8.00 am - 2.30 pm.

If your problem is urgent you may also contact the Emergency Eye Department on (0161) 276 5597 available every day from 8.00 am – 8.00 pm including public holidays or Ward 55 (open 24 hours) every day through the hospital switchboard (0161) 276 1234.