QUEENSLAND OCULAR ONCOLOGY SERVICE

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EYE PLAQUE THERAPY

About eye plaque therapy

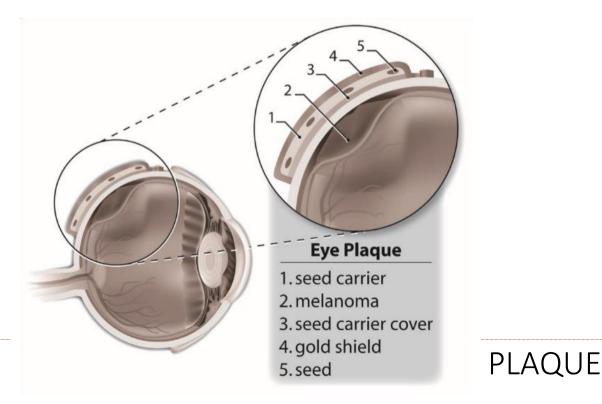
What is eye plaque therapy?

Radioactive plaque therapy (also known as brachytherapy) allows your doctor to treat your eye tumour without needing to remove the eye. A small disc-shaped plaque is placed on the outer surface of the eye, directly over the tumour. The plaque is left in place for a period of time determined by radiation specialists based on tumour dimensions and features (usually between 2 and 5 days).

How does eye plaque therapy work?

The plaque contains radioactive iodine seeds which deliver a localised dose of radiation to damage and kill the tumour. This radiation treatment is continuous whilst the plaque remains in place.

The seeds are covered by a gold sheet, blocking radiation and acting as a shield to protect the surrounding areas of the eye and head.



Why has this treatment been chosen for me?

lodine plaque treatment is often chosen over other types of radiation therapy or surgery because it tends to have fewer side effects and therefore causes less damage to your vision. It is a treatment which is used in cases where:

- The tumour is in a position where it can be covered with a plaque
- The tumour is relatively small

For 90-95% of patients, this treatment successfully destroys the tumour in the eye.

About the procedure

What is involved in receiving the treatment?

Treatment involves two procedures– one to apply the plaque, and another to remove the plaque. Each procedure will be performed under anesthetic.

The first procedure, the insertion of the plaque takes place in an operating theatre. It involves an incision in the conjunctiva (the thin membrane covering the outside of the eye) and stitching the radioactive plaque to the outside of the eye over the tumour. With your consent and if possible, depending on the tumour size and position, we endeavour to obtain a tumour sample to microscopically analyse the cell type under to ascertain the diagnosis.

After the plaque is inserted you will be transferred to a private hospital room, you will be required to stay in this room until the plaque is removed. This is an isolation room as you are considered radioactive whilst the plaque is in place. The number of visitors and length of each visit will be restricted. However, you will be able to conduct most other everyday activities whilst you remain in the room, for example reading, watching TV. During treatment most people only notice a small amount of discomfort for which adequate pain relief will be provided.

Once the plaque has delivered adequate radiation to the tumour, you will be returned to the operating theatre for plaque removal. The second procedure for removal is a similar process to the insertion. You will be allowed to go home once the plaque is removed and you have recovered sufficiently.

Where will this be done?

Your eye plaque is inserted and removed at the Mater Hospital, Brisbane.

After the procedure

How will I feel after the operation?

As the anaesthetic wears off, you may feel some nausea and pain. You may also find that your eye feels sore and bruised. This will usually take a few weeks to resolve, you can use ice packs whilst in hospital and at home to help with this. Your eye may feel itchy or like there is something in it for 2-3 weeks after surgery. You may feel quite tired for 2-3 months after surgery.

EYE PLAQUE THERAPY

When do I see the doctor after treatment?

You are required to attend a check-up appointment with your eye doctor after your plaque is removed. Following this post-procedure consultation your doctor will advise you of your next follow-up appointment.

What are the procedures' potential complications?

The surgeries may require detaching an eye muscle, which is re-attached at the end of the procedure. In a small number of cases this can lead to short-term double vision (diplopia) that may require surgical treatment to fix.

There is a small risk of infection, bleeding in or around the eye, retinal detachment, pressure problems and a small risk (<1%) of tumour seeding if a biopsy is performed.

How do I care for my eye?

To help your eye heal:

- Gently wash the outside of your eyelid with a warm clean soft washcloth. Gently move the cloth from the inner corner of your eye (close to your nose) to the outer part of your eye with a single stroke.
- Use the prescribed eye drops religiously and as per the instructions given to you.
- Do not let any discharge build up and form a crust on your eyelids.
- Do not rub your eye for the first 2 weeks after surgery.
- Do not put any creams or makeup on your eye for the first 2 weeks after surgery.
- You can return to activities you need to do every day (such as grocery shopping, shovelling, mowing the lawn or exercising including heavy lifting) 2 to 4 weeks after the eye plaque is removed.

Following your treatment, the hospital will provide you with an eye drop regime sheet upon your discharge.

How quickly will my tumour go away after plaque radiation?

The goal of this treatment is for the tumour to gradually shrink or stop growing over time. You will have a visit every few months after the treatment to measure the tumour. Review intervals will elongate as the tumour regresses.

Most tumours shrink in relation to their original size. Your tumour may still be controlled even if it does not shrink. There will always be a scar or residual tumour mass that requires life-long follow up after the treatment.

EYE PLAQUE THERAPY

What are the long-term risks of the treatment?

For lesions at the front of the eye:

- May lead to dryness and irritation (which can be treated with eye drops)
- May cause the development of a cataract (cloudy lens) which can be removed and replaced with a clear lens

For lesions more towards the back of the eye:

- Risk of damage to the retina (radiation retinopathy)
- Risk of damage to the nerve (radiation optic neuropathy)
- Vitreous haemorrhage leading to floaters and blurred vision

These conditions may lead to loss of vision and may require treatment such as laser or injections into the eye.

Rarely, (5% of cases) the eye may still need to be removed if the tumour continues to grow or secondary high pressure in the eye occurs.

The radiation does not affect the vision in your other eye. Your eye specialist can give you more information that is specific to you.