

Pain in the eye following intravitreal injections

The current recommended treatment for wet age-related macular degeneration (wet AMD); Diabetic Macular Oedema (DMO) and Retina vein occlusion (RVO) requires injections into the eye (intravitreal injections). Before the injection, the eye is numbed with local anaesthetic and povidone iodine (Betadine) is also used to clean the eye and the eyelids.

Although a true allergic reaction to iodine is rare, some people find that it causes irritation to their eye or skin. If you experience discomfort or pain after injections, tell your specialist or nurse (most injections administered by nurses). They may use a different local anaesthetic, saline or lubricant drops.

If none of these changes help, they may talk to you about using a different antiseptic called chlorhexidine, which doesn't contain iodine. Chlorhexidine kills a smaller range of microbes than Betadine and there's less evidence about how effective it is at preventing infection, so your specialist should make sure you fully understand the possible risks. A drop of Betadine will still be used in the exact point the injection will be given. Saline will be used to wash the eye after the injection.

The effect of the local anaesthetic normally lasts for about half an hour. The injection should therefore be painless. There may be a bit of discomfort when the anaesthetic wears off, but this is usually mild or not noticed by most patients.

The eye can develop significant discomfort or severe pain about one hour or more after the injection. This may be due to one of a few possibilities, including a scratch on the cornea - the clear glassy part of the eye (called corneal abrasion) which

may result in the skin in front of the cornea coming off due to the effect of the anaesthetic as well as dryness of the cornea. The injection can cause the eye to become very 'dry' with a lack of lubrication. This can result in the eyelid sticking to the epithelium layer and when you open your eyes it may cause the layer to be damaged. Dry eye gel can be used to prevent this from happening after future injections, but please check with your eye care professional before using any product.

Excessive rubbing of the eye soon after an injection may predispose to an abrasion as the patient is unaware as to how much rubbing is taking place (as the eye is still frozen).

Patients are advised to call the clinic or return to Eye Casualty immediately if they have any severe eye pain after an injection because treatment is required to reduce the pain and allow the scratch to heal properly, which may take up to 48 hours. The clinic also needs to know that this incident has occurred to avoid a recurrence.

Pain which develops in the eye 24 hours or more after the injection (up to about 1 week) requires immediate action. Pain, accompanied by redness and vision reduction, indicates an infection inside the eye (called endophthalmitis) which requires urgent treatment – contact your macular clinic.

The following activities should be avoided for at least a week:

- Swimming – even with goggles.
- The use of makeup.
- Gardening – unless you wear safety goggles.
- Physical sports which could increase eye pressure.

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You are able to fly immediately after an injection but if complications occur you will not be able to get swift access to your hospital eye unit. Most problems occur within 24 hours so allow a day or two before flying.