

Information for Patients

Use of Povidone-Iodine before eye injections

At Manchester Royal eye hospital, we carry out around 4000 intra-vitreous (into the vitreous of the eye) injections per month across 4 sites. As with any procedure involving injections, there is a risk of introducing infection. An infection inside the eye is called Endophthalmitis and can be sight-threatening.

To prevent infections, we use an antiseptic (cleaning) agent called Povidone-iodine. Here is some information about why we use Povidone-iodine, if you have further queries then please do not hesitate to discuss with your eye clinician during your consultation or Clinical Nurse Specialist (CNS).



Why is Povidone-iodine used before my eye injection?

At Manchester Royal Eye Hospital (MREH), we practice evidence-based medicine. Before your injection, we clean the surrounding area of your eye, eyelids and the surface of your eye with an antiseptic agent called Povidone-iodine. Povidone-iodine is also used for patients undergoing any type of eye surgery or procedure (as shown in photo above). This is because there is strong evidence that using Povidone-iodine before an intravitreal injection minimises the risk of infection. Our audit shows the risk of eye infection is approximately 1 in 5,000 cases.

Povidone-iodine use has been extensively researched in ophthalmology, as well as in other medical specialties, as a means of reducing the risk of infection. It has been proven to work well and cause very few problems. It has been used in eye surgery for over 150 years.

If I experience sensitivity to Povidone-iodine does that mean I'm allergic?

All antiseptic agents/drops are known to cause mild to moderate irritation or some redness, but that does not mean that you are allergic to them. Some patients may consider themselves "allergic to iodine", but their reaction is more likely an irritation of their skin or mucous membranes (such as the conjunctiva). True iodine allergy is extremely rare, as iodine is an essential element that is naturally present within all animal species.

If you have any known allergy to Povidone-iodine, please tell your eye doctor during your consultation when you attend the Macular treatment clinic appointment.

What does it feel like to have a sensitivity to iodine?

Iodine is a similar chemical to chlorine (used as an antiseptic in swimming pools) and so it is likely that you will have a similar reaction to the eye irritation you may get from extended swimming.

Is there anything I can do to reduce iodine sensitivity?

Iodine sensitivity is common, so we make sure to wash out the Povidone-iodine at the end of each injection to keep the irritation low. However, we advise you use ocular lubricants before coming for your injections to reduce this even more. Ocular lubricants are also given to you after each injection, and we recommend you use them at least 3 times a day, which should help with eye irritation.

Can an alternative be used?

For patients with 'true iodine allergy' we can use another antiseptic agent, such as Chlorhexidine gluconate. Chlorhexidine is a good alternative; however, it is not as effective as Povidone-iodine. Research shows you are 10x more likely to have an infection when using chlorhexidine instead of Povidone-iodine. Therefore, to prevent the risk of serious infection, our policy is to use Povidone-iodine as a first choice, rather than Chlorhexidine.

Contact details:

Macular Treatment Centre (0161) 276 5575/3341 Monday – Friday 8.00am - 6.00pm

Trafford Macular Centre (0161) 746 2626 Monday – Thursday 8.00am -5.30pm Friday 8.00am -1.30pm

Specialist Eye Clinic (Civic Centre, Wythenshawe)

(0161) 507 3765 Monday - Thursday, 8.00 - 5.30pm Friday 8.00 -1.30 pm

Specialist Eye Clinic (Cheetham Hill) (0161) 934 8334

Monday, Tuesday, Thursday 8.00am – 5.30pm Wednesday & Friday 8.00am – 1.30pm

If your problem is urgent and the above departments are closed, please contact **Emergency Eye Department** (0161) 701 4999 8.00am – 8.00pm Monday -Sunday

Ward 55 (0161) 276 5622 24hours everyday

References:

Durani P, Leaper D. Povidone-iodine: use in hand disinfection, skin preparation and antiseptic irrigation. Int Wound J. 2008 Jun;5(3):376-87

Wulf NR, Schmitz J, Choi A, Kapusnik-Uner J. Iodine allergy: Common misperceptions. Am J Health Syst Pharm. 2021 Apr 22;78(9):781-793

Modjtahedi BS, van Zyl T, Pandya HK, Leonard RE 2nd, Elliott D. Endophthalmitis After Intravitreal Injections in Patients With Self-reported Iodine Allergy. Am J Ophthalmol. 2016 Oct; 170:68-74.

Authors:

Romi Chhabra (Lead Clinician, Macular Service), Reeta Rayavarapu (Macular Treatment Centre Unit Manager), Glory Essien (Clinical Nurse Specialist), Haaris Shiwani (Specialist Registrar).