

Instructions for rigid contact lens wearers

Instructions for RGP patients are similar to those for soft lenses. RGP lens insertion is shown in Figure 11.7. The main difference is the method of lens removal as follows.

LENS REMOVAL

Use the stare–pull–blink method to remove the lens:

- Open the eye widely so the lids are further apart than the lens, pull the lids tightly in the direction of the top of the ear, and then blink strongly (Fig. 11.8).
- The released lens can be caught in the other hand, or removed from the lids or face.



Inserting a rigid lens



Removing a rigid lens with a suction holder

- If the lens goes off-centre it should be massaged around the eye and the bottom eyelid used to push the lens back on centre and removed from there (Fig. 11.9).

A suction holder is an alternative for removing a lens (either centred or off-centre):

- Clean and moisten the suction holder as for the lens itself.
- Always check that your vision is clear before attempting lens removal, i.e. that the lens is in place.
- Press gently against the lens centre and remove (Fig. 11.10).
- If this does not work then either:

- the lens has come out or been displaced (Fig. 11.11).
- the suction holder is slightly tilted, i.e. it is at an angle to the lens surface.

Additional instructions for extended or continuous wear

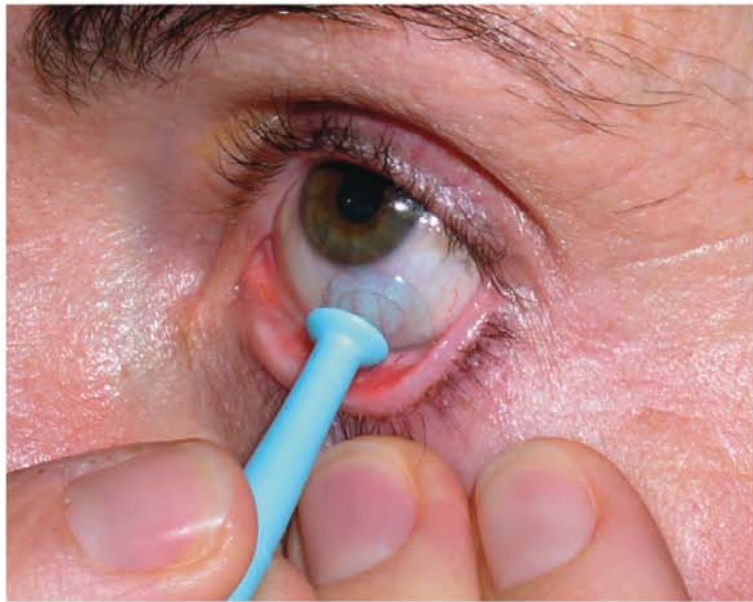
Wearers of these lens types should, in addition to the above, be warned of:



(a) Removal of a rigid lens; (b) just coming off the eye; (c) tumbling onto the face



Moving the lens in the eye using the lower lid (a); recentring a rigid lens using (b) two fingers and (c) one finger



Removing an off-centre rigid lens with a suction

holder

- The need for additional after-care visits.
- To cease lens wear if there is any sign of redness, foggy vision, discomfort or discharge from the eye.
- The need to report for immediate care if any of the former persists for more than an hour or two.
- The initial possible need for ocular lubricant drops before sleep and on waking.
- The need to drop back to daily wear if they are less than 100% physically well.
- In the case of RGP extended wear, to ensure that the lenses move on or shortly after waking.

Informed consent for extended wear of silicone hydrogel lenses

Silicone hydrogel is a relatively new contact lens material which has taken many years of research and several hundred million dollars to develop. It transmits several hundred per cent more oxygen through to the cornea than conventional soft lenses. The US Food and Drug Administration (FDA) has approved these materials as being safe to wear 24 hours a day over a 30-day period.

The new material still has some water in it but not as much as the older hydrogel materials. It does not dry as much, for example, in aircraft or on waking after sleeping.

Previous materials did not always allow sufficient oxygen through to maintain the eye in a completely normal state for those who slept in their lenses regularly. This resulted in an increased risk of eye infection of 20 in 10,000 people wearing them overnight compared with 4 in 10,000 wearing them only while awake. Silicone hydrogels have been used worldwide for several years now, and the risk factor for infection has been found to be very low and only slightly more than that for daily wear hydrogel lenses. Nevertheless, it is vital to maintain normal

hygiene, to report back for after-care visits as advised, and to cease lens wear and seek help if there are any abnormal signs.

There are alternative forms of treatment to consider. These are refractive surgery, daily wear conventional hydrogel materials and orthokeratology. Refractive surgery is the process whereby the shape of the front of the eye is changed surgically, but this is not a reversible process. Refractive surgery is expensive, there is a risk of permanent eyesight loss, and a number of people suffer from regression where their sight goes back towards the original refraction. Daily wear, conventional hydrogel materials are safe but lenses need to be taken in and out every day which may be inconvenient. Orthokeratology is the reshaping of the eye's surface using rigid gas-permeable lenses worn overnight. This gives clear vision during the day without any form of correction but does not work for everyone and generally only for lower focusing errors.

ADVERSE EFFECTS

There are some possible risks from wearing contact lenses overnight:

- Irritation or discomfort.
- Dry eyes.
- An allergic eye response.
- Reduced comfort or tolerance, or inability to wear overnight.
- Chances of abrasions or changes to the cornea (the front of the eye).
- Infection, which, if severe, could lead to permanent loss of vision.

Most adverse effects are rare and can be minimized or avoided by following your practitioner's instructions carefully.

RISK FACTORS

Some people are more at risk of having problems or an eye infection. These include:

- Smokers.
- People who swim without goggles.
- Those with persistent dry eyes or chronic lid or eye infections, or blepharitis.
- Young men.
- People with poor personal hygiene.

THE CONTACT LENS WEARER/PATIENT AGREES TO

- Check/look at their eyes daily.
- Remove lenses if the eyes are red or persistently uncomfortable.
- Seek help within 24 hours if problems persist.
- Discard the lenses every calendar month.
- Have checkups when advised to do so.

THE OPTOMETRIST/CONTACT LENS PRACTITIONER AGREES TO PROVIDE

- Appointments as necessary to supervise safe wearing of the lenses.
- Checks and care in an emergency and speedy referral to medical care where necessary.

- Continuing care and supervision of overnight wear.
- A system of continuous care so that in their absence from work there will be someone else available to provide care or advice.

RED EYES

Redness is a sign of inflammation, which is potentially serious. It can also be due to irritation, dry eyes, and dirty or old lenses. Every day, look at your eyes in the mirror, cover one eye and then the other, and ask yourself:

- Do my eyes look good?
- Do my eyes feel good?
- Do I see well?

WHAT TO DO IF PROBLEMS ARISE

- If your vision is blurred, try rewetting the lenses. If that does not help, remove them, clean them and put them back in.
- Use wetting/comfort drops if your eyes are uncomfortable or a bit red.
- If your eyes stay red, take the lenses out, clean them and leave them out overnight before wearing them again.
- If your eyes remain red and sore for more than 12 hours, stop wearing the lenses and contact us straight away.

- *Normal rules for hygiene apply even if the lenses are worn overnight.*
- Hand-washing and reasonable personal hygiene will reduce the risk of problems with your lenses.
- *If you are unwell*, the risk of getting an eye infection is increased
 - only wear the lenses while you are awake.
 - if you are ill enough to go to bed, leave your lenses out.

If you do have problems do not hesitate to contact us and come and see us. We have short times available every day for urgent appointments.

A list of contact phone numbers is given below. If no-one is available, attend the Accident or Emergency Department of the nearest hospital if you suspect an infection or damage to the eye(s).

Office numbers:
 Other contact numbers: