EyeSpace™
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forge
ORTHO-K
Forge Ortho-K Care & Maintenance
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Care & Maintenance

Safety and Hygiene:

Orthokeratology is a safe, reversible and effective vision correction solution.[1,2] However, incorrect care of contact lenses and solutions can increase the risk for eye infections and corneal ulcers. Risk factors for acquiring an eye infection include improper lens cleaning and disinfection, poor hygiene practices and smoking. Following your practitioner's hygiene regime, along with regular reviews, will minimise this risk.

Always thoroughly wash your hands with an antibacterial based hand wash and dry them with a clean lint-free towel before handling, removing or inserting your lenses. Make sure to clean all parts of your hands including between the fingers and dry thoroughly.

- Sit at a table or desk and place a lint-free cloth down to insert and remove lenses. Avoid bathrooms as they often contain more germs than any other room in the home.[3]
- Inspect your lenses for scratches, chips or cracks. Do not wear chipped or cracked lenses as these may cause discomfort and pain. These can provide surfaces for protein and bacteria to grow on that can be difficult to remove. If you are unsure whether your lenses are damaged, ask your optometrist to inspect them.[4,5]

THINGS TO REMEMBER!

- Your lenses should never come into contact with tap water. Water contains microorganisms like Acanthamoeba that can cause sight-threatening eye infections.[6,7]

Removal - Remove lens either manually or with the suction cup

METHOD 1 – SUCTION TOOL (preferred method)

- Using your middle fingers, open the eyelids wider than the lens diameter.
- With the suction tool between your index finger and thumb, align the suction cup so it is positioned in front of and parallel to the lens.
- When the suction cup touches the lens, apply gentle pressure to adhere the lens to the cup and remove the lens from your eye.
- After removal from the eye, carefully slide the lens sideways from the suction cup and it will come off easily.

METHOD 2 – MANUAL REMOVAL

- Using your middle fingers, open the lids wider than the lens diameter
- Apply pressure to the lid margins, pushing in together to move your lids under the lens and lever it out of the eye.

Cleaning:

PEROXIDE CLEANING SYSTEMS

Place lenses in the supplied basket holder and fill the case with the hydrogen peroxide solution. If required, add the neutralising tablet, replace the lid and tighten. It is imperative the lenses are not removed before the solution has had 6 hours to neutralise.

TWO-STEP CLEANER

As directed by your optometrist, some patients require a two-step lens cleaning system. Hold the lens in the palm of your hand and instil one drop of the daily lens cleaner into the back of the lens.[10] Gently rub the lens until the liquid foams like soap. Then rinse off with saline and place the lens into the conditioning solution to store overnight.

INTENSIVE CLEANER

To clean and maintain the wettability of your lenses use intensive cleaner, such as Menicon Progent. Place the lenses into the contact lens case holders. Open vial A and B by twisting the cap and pour the contents into the contact lens case. Replace the lid and tighten. Leave the lenses in the solution for 30 minutes, then remove and rinse thoroughly with saline. Lenses can now be worn or soaked in your daily cleaner (please note that this product may not be available in all countries, ask your practitioner).

Cleaning solution	Hydrogen peroxide solution, such as AOSept/Clear Care with Hydraglyde
Insertion Lubricant	Non-preserved lubricant such as Optive Fusion, Hylo-Fresh, Xailin HA eye drops, Lumecare carmellose, Refresh PF and preservative free saline
Intensive cleaning solutions	Menicon Progent, Boston daily cleaner or Lobob daily cleaner
Removal Tools	DMV Classic or DMV Ultra contact lens remover

PLEASE NOTE: *The above products are an example, please check with your optometrist for the most appropriate product to suit your needs.*

THINGS TO REMEMBER!

The first thing you will notice about your lenses is they have different colours. A green or grey lens for your right eye and blue lens for your left eye will ensure you don't get the lenses confused. A good way to remember this is that the second letter of green/grey is R for right! The second letter of blue is L for left!

Ortho-K lenses are manufactured from a durable gas permeable polymer which resists wear and tear during normal lens wearing circumstances. However, it is still important to handle them carefully.

Habits that may cause a lens to break include;

- Pressure on the lens. If the lens lands on a mirror or flat surface. Gently slide it off to the edge of the surface or use a suction tool to remove it from the surface.
- Pulling the lens too firmly from the suction tool. Slide the lens off the suction point instead.
- Forcing the lens to bend excessively while cleaning. Some friction force is required to clean a rigid lens using your cleaning solution, but not too much. The resistance from your skin surface will be sufficient to clean the lens. If too much force is applied on both sides of a rigid lens, the lens will flex and eventually snap.

Insertion:

STEP 1:

Remove your Ortho-K lenses from the cleaning solution case and rinse with saline. If you are using a hydrogen peroxide solution, you can only remove the lenses after a minimum soaking time of six hours.[8]

STEP 2:

Place 1-2 drops of **lubricating insertion eye drops** into the back of the lens. Place the lens on your index finger and insert directly into the centre (coloured part) of your eye in a face down position. To save confusion, it's a good idea to insert the right lens first.

STEP 3:

If you happen to drop your Ortho-K lens, use saline solution to rinse the lens clean. To do this place the lens in the palm of your hand and thoroughly rinse for five seconds.[9]

STEP 4:

Dry and wipe out your lens case with a tissue. Leave the case lid off to air dry while wearing your lenses.

THINGS TO REMEMBER!

Normal occurrences on insertion:

On rare occasions, a lens may become dislodged from the centre of the eye and move to the side. This may be uncomfortable but won't do any harm.

- Look in a mirror to establish where the lens has moved to.
- Move your eyes in a direction away from where the lens is located. For example, if the lens is on the white of your eye nearest to your nose, look towards your ear.
- Gently nudge the lens back to the centre of your eye using your eyelids. Avoid directly pushing the lens with your fingers as this can damage the surface of your eye.
- Alternatively, remove the lens using your suction tool and reinsert correctly.

Abnormal occurrences on insertion:

If on insertion you experience stinging, burning or pain, remove the lens, rinse and re-insert. If problems persist, remove the lens and see your optometrist at your earliest convenience.

THINGS TO REMEMBER!

Normal occurrences include:

- Foreign body sensation and slight discomfort while wearing the lenses.
- Mild dryness and slight crusting in the corners of your eyes on waking.
- Blurred vision during the first week of Ortho-K lens wear. Take note of the changes in your vision and to report to your optometrist.
- Glare and halos at night especially during the first few months of Ortho-K lens wear. The process where this clears up is called neuroadaptation. In some cases as with myopia control, some glare can persist. However, due to the lifestyle of younger patients, these rarely bother them.

Abnormal symptoms (contact your optometrist immediately) include:

- Pain, light sensitivity, burning, stinging, and excessive watering on lens insertion. Remove the lens, rinse with preservative free saline and re-insert if this occurs.
- A persistent redness, pain or light sensitivity of the eyes which doesn't resolve after lens removal.
- Feeling like the lens is suctioned onto the eye and experiencing difficulty removing the lens in the morning.

THINGS TO REMEMBER!

- Do not modify the recommended cleaning routine or solutions without consulting your optometrist. Other solutions may not be compatible with your eyes and lenses, and may cause discomfort or allergic reactions.
- Do not heat solutions.
- Shortcuts with cleaning solutions may appear to save money but can result in ineffective lens cleaning and disinfection. Incorrect cleaning solutions may damage your lenses or lead to an eye infection which can result in vision loss.
- Never clean or store your rigid lens with soft contact lens solutions. These products work in a different way to the rigid lens solutions and will not clean and condition your rigid lenses.
- Replace the contact lens case every time you start a new bottle of lens cleaner to avoid microbial contamination.
- To avoid contamination do not touch the tips of solution bottles. Replace caps after use.
- If your eyes are very painful after hours, consult your local hospital or emergency eye clinic.
- If you notice scratches and chips or misplace a lens, these can cause discomfort, we advise that you contact your optometrist for a replacement.

Contraindications:

Do not use your Forge Ortho-K contact lenses in the following cases:

- Acute inflammation or infection of the anterior chamber of the eye
- Any eye disease, injury, or abnormality that affects the cornea, conjunctiva or eyelids
- Severe insufficiency of tears or inflammatory dry eye
- Corneal hypoesthesia (reduced corneal sensitivity)
- Any systemic disease which may affect the eye or be exacerbated by wearing contact lenses
- Allergic reactions to ocular surfaces or adnexa which may be induced or exaggerated by wearing contact lenses or use of contact lens solutions
- Allergy to any ingredient, such as peroxide and hydraglyde in a recommended cleaning solution
- Any active corneal infection (bacterial, fungal or viral).
- Red or irritated eyes.
- Remember your eye must:
  - Look good (no red eyes)
  - Feel good (no pain, discomfort or light sensitivity)
  - See good (no persistent blurry vision)
  - **If in doubt, take them out and call your optometrist**

[1]The Safety of Orthokeratology--A Systematic Review. 2016 Jan;42(1):35–42.

[2]Efficacy, Safety and Acceptability of Orthokeratology on Slowing Axial Elongation in Myopic Children by Meta-Analysis. 2016 May;41(5):600–8.

[3]Wu YT, Zhu H, Willcox M, Stapleton F. Impact of air-drying lens cases in various locations and positions. Optom Vis Sci. 2010 Jul;87(7):465-8

[4]Sweeney, D., Holden, B., Evans, K., Ng, V. and Cho, P. (2009), Best practice contact lens care: A review of the Asia Pacific Contact Lens Care Summit. Clinical and Experimental Optometry, 92: 78–89. doi:10.1111/j.1444-0938.2009.00353.x

[5]Choo JD, Holden BA, Papas EB, Willcox MDP. Adhesion of Pseudomonas aeruginosa to orthokeratology and alignment lenses. Optom Vis Sci. 2009 Feb;86(2):93–7.

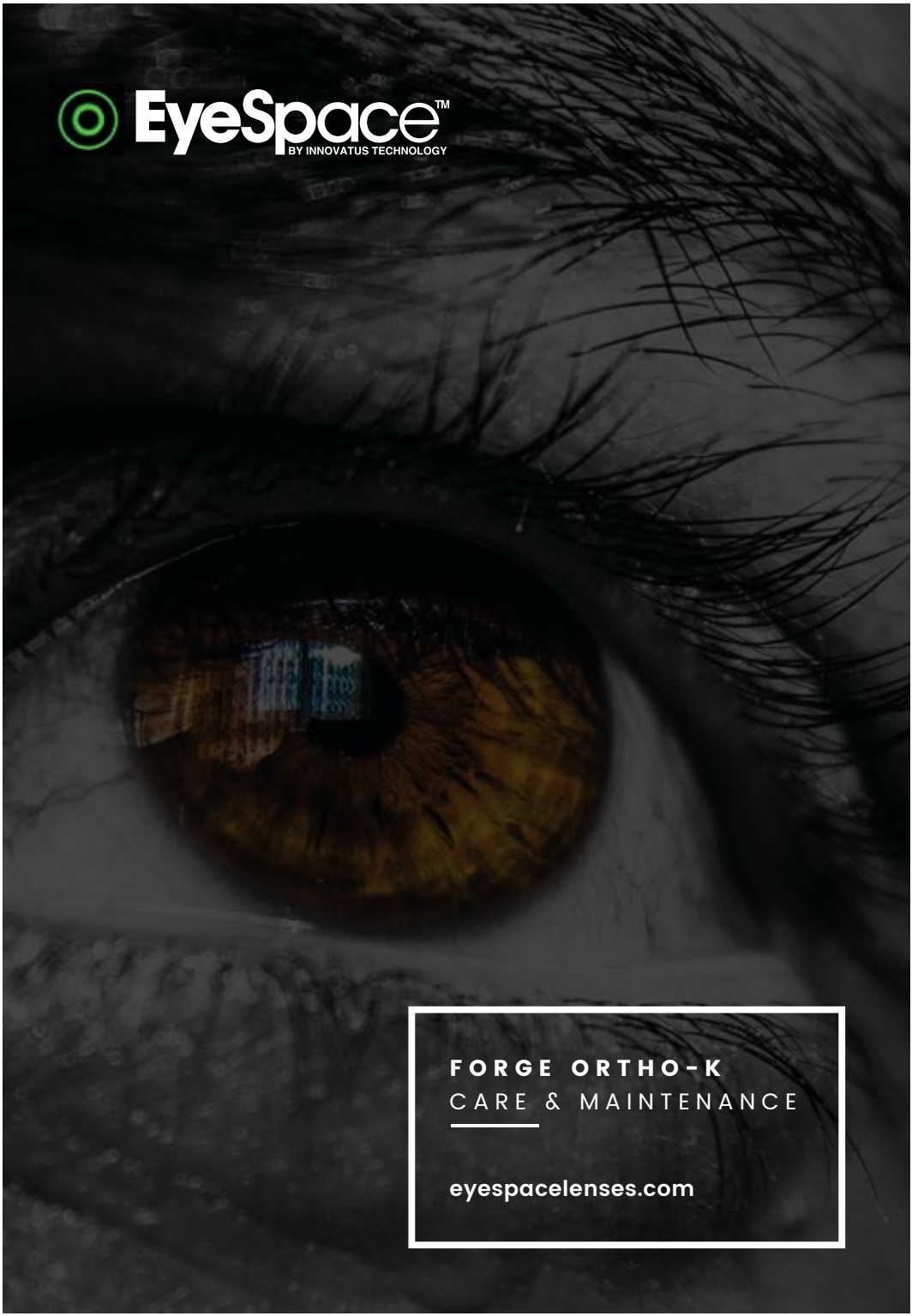
[6]Yepes N. Infectious Keratitis After Overnight Orthokeratology in Canada. 2010 Oct 19:1–4

[7]Bullimore MA, Sinnott LT, Jones-Jordan LA. The risk of microbial keratitis with overnight corneal reshaping lenses. Optom Vis Sci. 2013 Sep;90(9):937–44.

[8]Sweeney, D., Holden, B., Evans, K., Ng, V. and Cho, P. (2009), Best practice contact lens care: A review of the Asia Pacific Contact Lens Care Summit. Clinical and Experimental Optometry, 92: 78–89. doi:10.1111/j.1444-0938.2009.00353.

[9]https://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/HomeHealthandConsumer/ConsumerProducts/ContactLenses/ucm482480.htm

[10]Cho, P., Cheng, S. Y., Chan, W. Y. and Yip, W. K. (2009), Soft contact lens cleaning: rub or no-rub? Ophthalmic and Physiological Optics, 29: 49–57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