

The Contact Lens Teach

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For all new contact lens wearers, the teach is an exciting part of their journey; the final step before independent lens wear at home. The fact that many eye care professionals delegate this part of the fitting is not due to lack of importance but more as a testament to the time required to ensure patients leave the practice feeling confident and motivated to wear their lenses. Done well, the teach appointment builds an important relationship between the practice and their contact lens wearers, instilling trust by offering professional advice and support.

Overcoming challenges faced by new wearers often requires motivation and persistence. Handling difficulties are the principle reason given by 1 in 4 new spherical lens wearers for dropping out of lens wear in the first year.¹ Therefore, appropriate and personalised support, both during and after the teach appointment is important. Understanding a patient's motivation for contact lens wear and recognising concerns and anxieties is essential to allow you to personalise the teach experience. Simple methods for continued support once patients leave the practice can then be employed to help reduce drop out in new wearers.

Are you sitting comfortably?

Practices need a designated private, clean area with a comfortable chair, wash basin and mirror for patients to learn how to apply and remove lenses (Figure 1). First ensure you have everything you need; contact lenses, case and solutions (if needed), lint-free tissues, support materials and alcohol wipes to clean between patients. A magnifying mirror can also be a great help to high hyperopes and presbyopes. While setting up you can discuss the home environment and possible options for a suitable clean space where they can apply and remove lenses. Pointing out that sitting at a desk or table, rather than standing looking into a mirror over a crowded sink next to the toilet in the bathroom can be helpful advice for a novice wearer.

Applying lenses

Before application or removal of lenses, the first step will always be to ask the patient to wash their hands with soap (preferably anti-bacterial liquid soap) and dry them on a lint-free towel (Figure 2). Whilst many patients understand that hand washing helps to reduce the risk of infection in contact lens wear, they may cut corners and not always comply with hand washing advice. A study by Morgan et al. in 2011 across 14 countries, found only around 40% of patients were correctly washing their hands before handling their lenses.² With studies showing an increased risk of contact lens associated infections in patients following inadequate hand-washing,^{3,4} it is important to take time to discuss a proper hand washing routine at

this stage before reinforcing it later in the appointment.

Preparing the lens

The patient can now learn to handle the lens (Figure 3). They may be concerned about damaging the lenses and this is a good time to discuss the importance of short fingernails for novice wearers. Reassurance can be given, if needed, that as they become more proficient many wearers manage to safely apply and remove lenses with longer nails. Comparing the size of the lens to their eye aperture can help the patient understand that they need to hold their eyelids wide apart to get the lens on the eye. At this point the patient should be advised to check that the lens is also clean, tear-free and safe to use (Figure 4).



Figure 1. A clean private space is essential to teach successfully

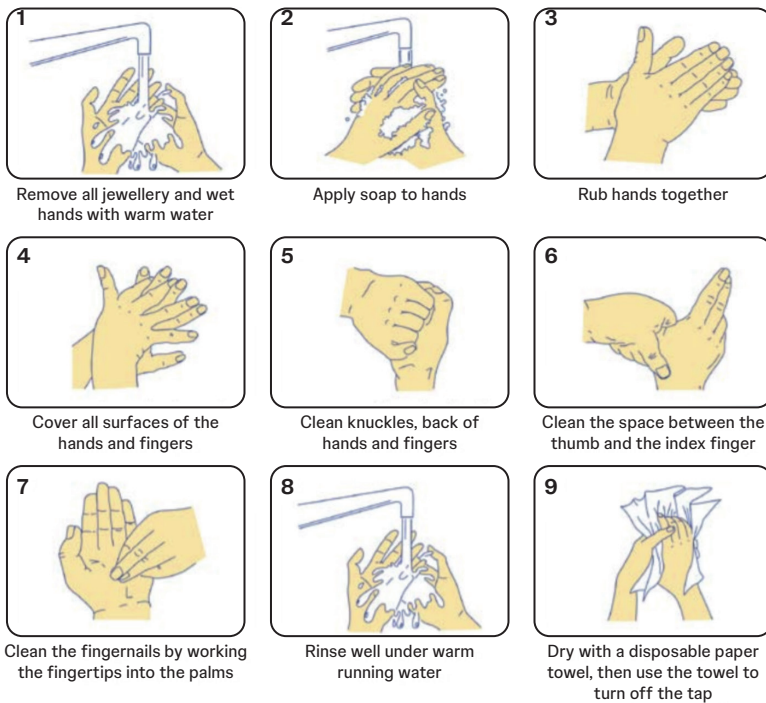


Figure 2. The first step for both application and removal is effective hand washing. (Image from the Johnson & Johnson Institute)



Figure 3. Check for short clean fingernails as you allow the patient to handle the lens. Inversion indicator '123' can be seen here, showing the lens is the correct way round.

Which way round?

Preparing and positioning the lens for application is a key concern for patients and clear instructions should be given. Ask the patient whether they would like to apply the right or left lens first and encourage them to stick to this as it helps to prevent lenses getting mixed up.

Remove the lens from the blister pack or storage case. After checking the finger is still dry, carefully position the lens on the pad of the finger. Hold the lens up to the light and check it is the correct way round; if the edges flare out, it's inside out (Figure 5). If it looks like a smooth-edged cup then it's the correct way round. Some lenses have indicators (Figure 3) to help identify the correct way round and knowledge of these for the lens fitted is helpful.

Apply gently and slowly

Both upper and lower lid should then be secured. This is an important step but

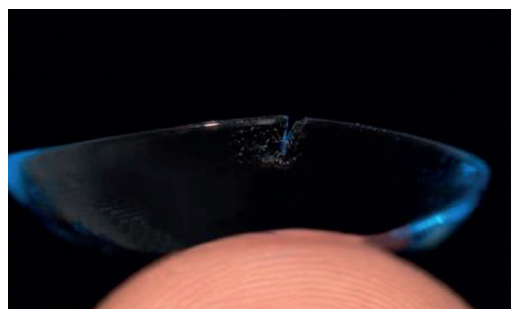


Figure 4. Before application, the lens should be inspected to ensure there is no dirt or debris on the lens and to check for tears, as shown here

often proves challenging for the patient. A flexible approach is needed to establish the best option for each patient. For their right eye, start by suggesting that the left hand is placed over their head using the fingertips to lift the upper lid. This may not work for left-handed patients so any approach which allows the patient to firmly hold the lids can be used. It is important the lid is grasped at the lid margin (Figure 6). Reminding them that they need to hold lids firmly to overcome the natural blink reflex helps. Consider asking them to try and blink while looking in the mirror can help them understand whether they are grasping the lid firmly enough as the upper lid should not move.

The lower lid should then be pulled down to open the eye wide. As a guide, the lids need to be held wide enough for them to observe the entire cornea (Figure 6). Lowering the chin slightly so they are looking up a little to the mirror can help widen the aperture. The patient can then be encouraged to slowly



Figure 5. Check the lens is the correct way round before application. Inside-out markers, if available, may help this process.

place the lens directly onto the cornea. The patient should be instructed to keep both eyes wide open throughout the application process, allowing the eye which is not having the lens applied to fixate and suppress the image of a finger coming towards the other eye. This can take a little time to master and a slow methodical approach is generally more successful. Patients often release the upper lid too soon and so are unable to successfully place the lens of the eye. This leads to frustration and may raise anxiety. Encouraging the patient to stop before application when the lids are not held correctly or if the lens is not in the correct place can help. Repeated attempts lead to anxiety and frustration; focus on a few slow quality attempts. Continue to talk to the patient and ask how they are feeling; remember patients may not recall what you have advised if they are feeling stressed. Positive feedback and encouragement, reminding them of their motivation for wearing contact lenses, is important at this stage.



Figure 6. Holding the lids correctly – An essential step for successful lens application and removal in a new wearer

Key Steps - Application

1. Wash and dry hands
2. Sit lens on the pad of the index finger
3. Look directly ahead into a mirror
4. Secure upper and lower lid ensuring eye is wide open
5. Gently place lens directly onto cornea
6. Once lens is in place slowly look right and left
7. Release lids and gently close eye

Removing lenses

As with application of lenses the first step for removal will be to wash and dry hands. Then, with the patient looking into a mirror, explain that the lids now need to be secured in the same way they were for application. Reinforce that there are different ways to achieve this and suggest starting with the method that worked best for application. Once both upper and lower lids are secured the patient should be instructed to look up slightly.

Remove the lens gently and slowly

While looking up place the pad of the finger on the lens and slide the lens downwards until it is on the white of the eye. Gently squeeze the lens between the thumb and index finger to remove (Figure 7). If unsuccessful at the first attempt, it is often

best to encourage the patient to release their lids, blink and slowly start the removal process again. Once safely off the eye the patient should check the lens to ensure the whole lens has been removed. For both application and removal instruction, it can be useful to direct the patient to watch videos of other patients going through the process, some examples are available at www.acuvue.co.uk. If a patient continues to struggle with applying or removing their lenses, then you may want to reconsider their lens type. Some lenses can be a little easier to handle than others. Lenses with lower modulus can be more challenging to apply and remove.

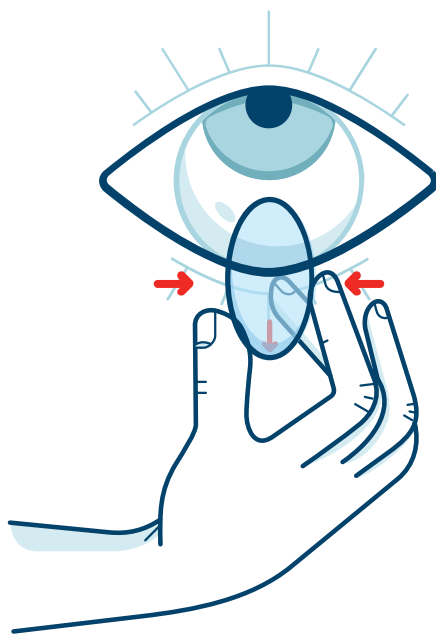


Figure 7. Whilst looking up, the patient should gently squeeze the lens between the thumb and index finger to remove.

Key Steps - Removal

1. Wash and dry hands
2. Look directly ahead into a mirror
3. Secure upper and lower lid ensuring eye is wide open
4. Gently slide lens downwards using the pad of the index finger
5. Gently squeeze lens between the thumb and index finger and remove
6. Check lens to ensure whole lens has been removed
7. Discard daily disposable or comply with cleaning advice for reusable lenses

cleaning regimen; after applying lenses patients should empty the case discarding all old solution. The case and lid can then be cleaned by rubbing and rinsing with fresh solution, then drying with a clean tissue to remove any biofilm, before placing both the case and cap face down on a clean tissue. Careful consideration needs to be given to a suitable clean place to dry the case, with warm, humid bathrooms being avoided. Remind the patient that the case should be replaced regularly, typically every month. In a study by Dantum et al. in 2016, more than 80% of storage cases were contaminated with microorganisms after only 2 weeks of use,⁵ with inadequate cleaning seen to increase the risk of microbial keratitis in another study.⁶

Lens disposal

Daily disposable lenses should be discarded responsibly after every wear. Setting phone reminders to dispose of reusable lenses at the required replacement interval can be helpful. Discussing local options for recycling of contact lenses and their packaging helps raise awareness of more ethical ways to dispose of lenses (Figure 8). Patients should be warned against disposing of their lenses in the toilet or sink as this can add to plastic water pollution.

Reusable lenses

Patients with reusable lenses can then be shown how to comply with their cleaning regimen and case cleaning. The patient instruction guide should always be followed when advising patients how to clean their lenses. Multipurpose cleaning regimens should all require a rub and rinse step; show the patient how to place the lens in the clean, dry palm of their hand, and apply a few drops of the Multipurpose solution. Then get them to gently rub the lens back and forth using one finger to clean the lens surfaces on the palm of the hand. The lens should then be rinsed in a little more Multipurpose solution before it is placed in a clean case with fresh solution. Case cleaning is also an essential part of the daily



Figure 8. ACUVUE® recycling boxes are available in some practices for all brand of soft contact lenses and their packaging

Struggling to apply or remove lenses?

Some patients find application and removal easier than others; some who struggle may require a second appointment to reassure both patient and practitioner while others just need empathetic, honest and open discussion. For this to take place those teaching application and removal should understand common patient anxieties and barriers to successful lens

wear. Practitioners carrying out a teach appointment may assume that the barriers to successful lens wear have already been addressed, however, many of these fears and concerns may still remain. Exploring patient motivation to wear, anxieties and potential concerns at this stage is necessary if we want to minimise drop out in the first few months of wear.

Understanding common barriers to lens wear

Being aware of common concerns raised by patients will help address them. For example, around 5 in 10 non-lens wearers report that touching their eyes is a key barrier to contact lens wear.⁷ Research has identified that patients experience a mix of rational and emotional barriers to lens wear. A rational barrier may be a patient who worries that they will poke themselves in the eye causing damage, how a contact lens may feel or whether it will roll behind their eye. An emotional one may be that they are concerned that their work colleagues will consider them as vain. To succeed in lens wear these barriers need to be outweighed by benefits of lens wear. If recognised at this stage concerns can be simple to address, perhaps offering a lens for the patient to feel how “soft” they are or explaining basic anatomy to a patient concerned about lenses rolling behind the eye.

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Patient motivation is important

So how do we help patients overcome barriers and progress to be successful contact lens wearers? Research shows that

highly motivated patients achieve higher levels of satisfaction with their contact lens wear.⁸ In the same way that a patient experiences a mix of rational and emotional barriers, they will also have a mix of rational and emotional driving forces motivating them to wear lenses. The intrinsic need of a patient to be self-confident at work or the extrinsic fact that they want others to think they are attractive are motivations that may not be discussed with the practitioner, but are perfectly valid reasons to improve the patient's overall wellbeing. Research shows that emotional motivation and barriers have greater impact on retention of lens wearers than rational ones (Figure 9).⁷ It is these emotional factors that patients are less likely to discuss with you so finding ways to address these issues can help reduce drop out.

Reflecting on our own experiences and emotions when learning a new skill may

enable a more empathetic approach. All of us have experience of learning new skills that we can relate to; perhaps learning to ride a bike, play tennis or drive a car. When reflecting on your own experiences some recollections will be more emotional than others. For many, learning new skills as a child or teen may have come more easily, whilst a relatively simple task learnt as an adult takes time and commitment, sometimes stirring up emotions of frustration, anger and blame as you struggle to achieve your goal. Success always feels good and for any task glimpses of success and achievement will motivate and encourage, but this often takes time and commitment. The stronger the motivation driving you towards your goal the more likely you are to persist. It is therefore important to identify which driving factor is most important to your patient, then consider using it to motivate them during the contact lens teach.

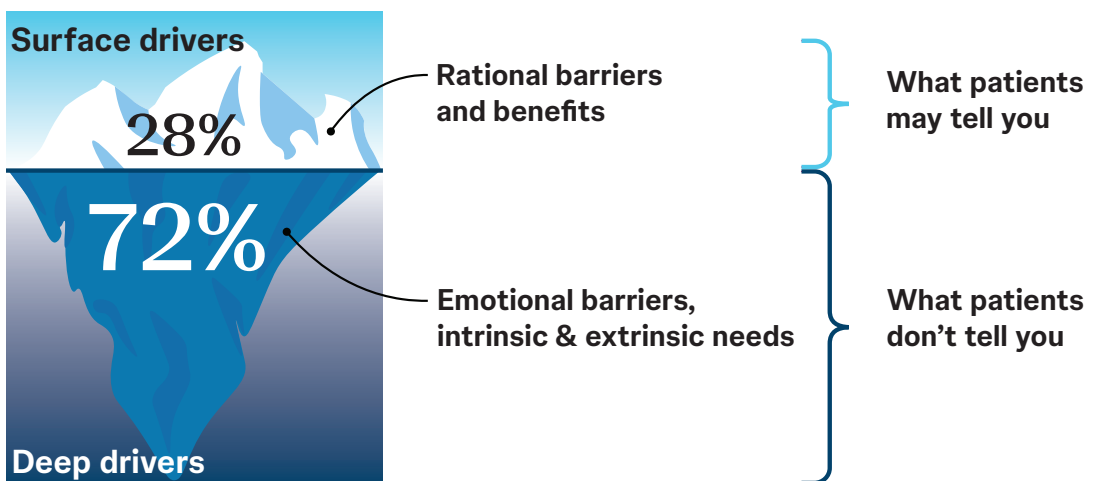


Figure 9. Understanding barriers and motivation to wear is important as patients may not always share their emotions with you.⁷

Top Tip!

Once you've recognised which driving factor is most important to your patient consider using it to motivate them during the contact lens teach. This will encourage them to continue.

Don't overlook patient anxiety

A study looking at anxiety levels for new wearers during the teach appointment found that anxiety peaks just before application and then again before removal.⁸ Understanding this can alert you to look for changes in tone of voice or body language at appropriate times. Is your patient getting flustered or flushed, do they have a dry mouth or are they starting to sweat? Evaluating patient anxiety levels during fitting, Court et al.⁹ found that increased anxiety led to disrupted recall of information, poor attention and reduced satisfaction. Practitioners should therefore anticipate anxiety and actively look for signs so that they can consider ways of managing it. Interestingly, anxious patients do not necessarily struggle more with application and removal; if they are highly motivated this helps them to persist and overcome their anxiety and handling difficulties.

Tips to help relieve patient anxiety

1. Ensure you have a calm environment, away from external distractions
2. Give exercises prior to fitting, such as touching the white of the eye with a clean finger, to help reduce the blink reflex
3. Ask patient to relax their breathing and jaw to relieve tension
4. Suggest the patient practices approaching the eye with the lens, but without putting it on
5. Regularly mention why the patient first wanted contact lenses to re-motivate
6. Consider the language you use carefully: use 'applying' or 'putting on' a lens rather than – more alarmingly – 'inserting' it
7. Ensure staff are prepared and confident in all aspects of the teaching session

Discussing the 'do's and don'ts' of contact lens wear

Ensuring that patients are aware of any risks involved when selling and supplying contact lenses is essential and practitioners should be open and honest with their patients when explaining the risks. The

British Contact Lens Association (BCLA) lists common 'do's and don'ts' for contact lens wear on their website¹⁰ and key points need to be discussed with all patients. For example, all wearers should know the importance of never using tap water on their lenses. Adding context to this statement by explaining that, although rare, *Acanthamoeba* Keratitis (AK) is a serious corneal infection that can affect contact lens wearers¹¹ is important. Expanding further to explain that *Acanthamoeba* can be found in UK domestic tap water as well as lakes, oceans, swimming pools and hot tubs will help to fully inform your patient of the risks associated with rinsing lenses with tap water, swimming or showering in lenses.

An understanding of what to do if the lens feels uncomfortable is important. A tiny filament, air bubble or other foreign body can occasionally become trapped under the lens. Carefully sliding the lens onto the white of the eye with a clean finger may sometimes dislodge it, but if discomfort persists explain that the lens will need to be removed, rinsed with saline or a multipurpose cleaning solution and re-applied, checking carefully that it is the correct way round. When summarising advice the BCLA suggest you get patients to ask themselves three questions every time lenses are worn: Do my eyes feel good with my lenses? Do my eyes look good? Do I see well? If the answer to any of these questions is no, lenses should be removed and the contact lens practitioner contacted for further advice.

Informed consent

Practitioners should be aware of the legislation dictating contact lens fitting in the UK. The General Optical Council (GOC) Contact Lens Rules 1988¹² states who can fit lenses and states that the teach is considered as part of the initial fitting process. The GOC standards of practice regarding informed consent¹³ state that you should obtain explicit consent where the procedure, treatment or care being proposed is more invasive and/or has greater risks involved. It is therefore important when teaching a patient to apply and remove contact lenses that you obtain consent and provide your patient with clear and accurate information presented in a way that they can understand. You can use your professional judgement to determine the most appropriate way of providing information to a patient; this could be in writing, for example in a leaflet, or by talking to the patient. Many practitioners ask patients to sign a document stating that key points have been covered. The patient can then be given a copy which can also include information on recommended wear schedules, emergency advice, with an out of hours number, and other hints and tips for lens wear.

Delegated responsibility

Often optometrists and contact lens opticians choose to delegate the task of teaching a patient to apply and remove their lenses to another member of their practice team. The 2016 GOC standards

for practice¹⁴ gives advice on delegated responsibilities; the person supervising must only delegate to those who have appropriate qualifications, knowledge or skills to perform the delegated activity. The registered professional must be on the premises, so they are able to intervene, if necessary. Details of those being supervised or performing delegated activities must be recorded on the patient record. Professional guidance from the College of Optometrists¹⁵ also provides advice on delegation making it clear that when you delegate care, you are still responsible for the overall management of the patient. It is therefore imperative that any person conducting a teach is well trained, ensuring they have the knowledge and skill to instruct a patient safely. To be done well, good communication between staff members is essential and anyone responsible for the teach should understand patient motivation for wear, type and modality of lenses worn, care regimen and recommended wearing times. A check list is useful when delegating responsibility as a way of ensuring everyone follows correct protocols (Figure 10).

Follow-up

The early stages of contact lens wear are crucial to ongoing success. Many patients need additional support during their trial period to move them from an apprehensive novice wearer to a happy confident wearer as the first few days can be overwhelming. Repeated application and removal failures once the patient is at home may result in frustration and this can increase anxiety.

Contact Lens Teach Check List

- ☐ Clean surfaces
- ☐ Wash and dry hands
- ☐ Teach application technique
- ☐ Get VA check and fit assessment, if necessary
- ☐ Wash and dry hands
- ☐ Teach removal technique
- ☐ Repeat application and removal until patient feels confident
- ☐ Discuss do's and don'ts
- ☐ Discuss care regime and case cleaning
- ☐ Discuss wear times
- ☐ Give emergency advice
- ☐ Give written advice
- ☐ Complete patient record card
- ☐ Get patient signature to confirm teach complete
- ☐ Clean surfaces

Figure 10. Sample check list for a contact lens teach to ensure protocol is followed

Key points for delegation

1. Delegation provides the opportunity to reduce practitioner chair time and involve trained practice members in teaching and advising new contact lens wearers
2. Ensure the staff member conducting the teach is competent
3. Be clear about what you want to be covered
4. Ensure you are on the premises while the task is being carried out
5. Meet regularly with staff to discuss delegated functions
6. Encourage staff to suggest improvements

It is clear that lens wearers have issues with handling lenses as these difficulties feature widely in social media chatter.⁸ This suggests our patients want more advice. If they turn to social media, practitioners have much less control over the advice that's given. Most manufacturers provide online support materials and giving them a link to manufacturer websites or a trusted YouTube video gives you more control over advice they receive at home. Most issues are simple to resolve; encourage the patient to call with any further questions or concerns and ensure they always have your number at hand.

Consider a follow-up call

In addition to the usual follow-up appointment, a phone or video call from a member of the practice team after a couple of days can be invaluable. Remember, once at home anxiety will often continue and new

wearers may find it difficult to recall advice given. Furthermore, patients may find that they need more time than expected to apply and remove lenses successfully. New wearers may consider time needed is too long and so cut corners to try and speed up the process.⁹ Practitioners should be aware that when a patient leaves the practice with new lenses it is simply the beginning of their journey as a lens wearer and further support at home may be needed to ensure the patient develops into a successful contact lens wearer. A call at this early stage can address difficulties that may have arisen early on and encourage patients to stay motivated. Enthusiastic communication is important remembering to relate back to their initial motivation, praise progress and give personalised advice relevant to their circumstances.

Key points for good communication with new contact lens wearers:

1. Use positive feedback and an enthusiastic approach to encourage and congratulate
2. Emphasise the importance of hygiene and hand washing
3. Give written information, with a link to application and removal videos
4. Provide contact details for queries and concerns.
5. Encourage patients to call if they need reassurance
6. Give information on the contact lens and why it was prescribed, and reassure them that other lenses are available if for any reason they are not satisfied
7. Phone after a few days to check progress
8. Book a follow-up appointment

Summary

Learning to wear and care for contact lenses can be an emotional time for patients. The mix of excitement and anxiety can overwhelm at times and all staff delivering this part of the contact lens fitting need to be empathetic and well trained. Practices need a clean, private space to give patients the time needed to learn this new skill. Understanding motivation for contact lens wear and exploring possible concerns and anxieties is essential to personalise the experience ensuring patients leave the practice feeling confident and motivated. Once home it may be difficult for patients to recall advice given or find the time needed to master the new art of applying and removing their lenses. Offering continued support is important to build confidence and ensure the patient stays motivated. Good communication and simple methods for continued support once patients leave the practice can be employed to help reduce drop out in new wearers.

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