

ADVICE & GUIDELINES ON PROFESSIONAL CONDUCT

FOR DISPENSING OPTICIANS

SECTION 4: CROSS INFECTION CONTROL

Introduction

122. The Health & Safety at Work etc. Act (1974) requires employers to provide a safe working environment as far as is reasonably practical to ensure the welfare and safety of staff, patients and self-employed practitioners.

123. All equipment must be properly maintained and all systems of work and clinical procedures must be carried out safely. Drugs and harmful substances must be handled with care and stored safely.

124. Strict hygiene must be observed when dealing with patients; particular attention to be paid to equipment with which they come into direct contact.

Personal Protection

125. There is a degree of risk to practitioners, support staff and patients from cross-infection of systemic diseases (e.g. HIV, TB, tetanus, meningitis, syphilis, herpes simplex, hepatitis B and C, adenovirus and chlamydia infection) via skin contact, blood, other body fluids and instruments, which has led to increased awareness of the need to practise strict infection control in clinical work.

126. Although HIV has been isolated in the tear film it is considered unlikely that this would lead to a risk of cross-infection between patient and practitioner.

Recommended Advice

127. Immunisation - All practitioners and support staff should be up to date with immunisations against infectious diseases e.g. tetanus, polio, hepatitis B and tuberculosis.

128. Barrier Techniques - All cuts and abrasions should be covered with waterproof sticking plasters. When there is a risk of infectious diseases, surgical gloves should be worn and discarded after use.

Hand Washing

129. Every consulting room should have a wash-hand basin and clinicians should thoroughly wash their hands between patients and after certain procedures as necessary. Hands should be dried with disposable paper towels, or hot air dryers.

130. Consideration is given in the medical profession to three levels of hand washing:-

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| <u>Level</u> | 1. Social | - Use of liquid or bar soap covers most needs. |
| | 2. Hygienic | - As 1. with addition of an antiseptic hand cleanser. |
| | Indications | - Before and after contact lens patients |
| | e.g. | - After contact with contaminated articles |
| | | - Before and after dealing with high risk patients. |
| | 3. Surgical scrub | - Not normally required in dispensing/ophthalmic practice. |

Cleaning Disinfection and Sterilisation

131. Cleaning - All items of equipment and appliances need regular cleaning and maintenance to ensure maximum safety. Detergents and ultra-sonic cleaners are frequently used for cleaning purposes to remove debris likely to support micro-organisms.

132. Disinfection - Reduces the number of vegetative micro-organisms but is not necessarily fully effective against bacterial spores or viruses and is achieved by boiling, pasteurisation or chemical means.

133. Sterilisation - Completely kills or removes all types of micro-organisms and spores. Autoclaving is the preferred method involving three stages - cleaning, autoclaving, aseptic storage.

134. In optical practice not all equipment needs to be sterile before use and the following is a general guideline:

- Sterile – equipment or appliances which are invasive or come into contact with damaged skin or mucous membrane.
- Disinfected - equipment in contact with healthy body surfaces.
- Clean - general instrumentation or working areas and surfaces.

Cleaning and Disinfection Agents

135. In addition to liquid or bar soap for cleaning the following disinfection agents might be used:-

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|--------------------------|---|--|
| Antiseptic Handwash | - | chlorexidine gluconate
4% skin cleanser (hibiscrub) |
| Disinfection Clean Hands | - | chlorhexidine 0.5% in 70%
isopropyl alcohol plus
emollient |
| Instruments | - | surgical spirit, or
Cetrimide |
| General | - | hypochlorite solution |

Contact Lens Solutions

136. Contact lens opticians must ensure that all contact lens care products used during the examination are carefully maintained and discarded prior to their expiry date. As recent studies have demonstrated, varying levels of contamination exist in the plastic bottles containing contact lens solutions. Clinicians should note when these bottles are opened and discard them in accordance with DOH guidelines - (normally after 28 days or as determined by manufacturers). All solutions run the risk of infection during the time that caps are removed, they must therefore be replaced immediately after each application.

Contact Lens Practice

137. All contact lens opticians should have the equipment considered necessary to carry out safe contact lens fitting. The contact lens optician has the responsibility to ensure that his/her equipment is well maintained. The system for fitting and aftercare of contact lenses must last for at least 6 months from the date of the initial fitting and proper arrangements be made thereafter.

General Points

138. All surfaces used for preparation prior to fitting or aftercare should be disinfected regularly.

139. All containers used for temporary storage, whilst the patient is undergoing an examination, should be cleaned and disinfected before and after use.

vCJD

140. Wherever practicable, a contact lens or ophthalmic device that comes into contact with the ocular surface should not be used on more than one patient, as to do so may expose patients to unnecessary risk through the transmission of disease. Where this is impracticable suitable items should be decontaminated using a recognised method.

Decontamination

141. A solution containing 20,000 parts per million of available chlorine sodium hypochlorite is effective in reducing Transmissible Spongiform Encephalopathies, including vCJD.

142. Decontamination of contact lenses and ophthalmic devices should be carried out using the following procedure:

1. The item should not be allowed to dry following use.
2. It should be cleaned as usual and then soaked in 2% sodium hypochlorate (Milton) solution for one hour.
3. It should be removed from the solution and residual solution shaken off.

4. It should be thoroughly rinsed with sterile solution saline or boiled water.
5. Then disinfected using the normal procedure before storage.

The item may then be safely used.

Recognised Risk Categories

143. Certain patient groups have been identified as being at greater than normal risk of developing classical CJD:

- Recipients of pituitary derived hormones such as human growth hormone or gonadotrophins.
- People known or assumed to have had human dura mater implanted, including people who have had brain surgery before August 1992, and people who have had an operation for a tumour or cyst of the spine before August 1992.
- People diagnosed of suffering from CJD of any type or with a family history of CJD.
- People with degenerative neurological diseases of unknown causation.

For these groups single patient use items must be used, or, where this is not possible, the clinician should refer the patient to the Hospital Eye Service.

Safety Issues

144. Chlorine can be toxic to the eye. Should any sodium hypochlorite solution come into contact with the eye, irrigate with sterile normal saline, check the ocular area for inflammation and for damage using fluorescein, and if there are any clinically significant signs, re-examine the next day or refer as appropriate.

Glossary

Trial Contact lens: a contact lens that is used to assess fitting.

Special Complex diagnostic contact lens: a lens used by the clinician to assess the performance of design of the lens on the eye.

Ophthalmic device: any instrument that comes into contact with the eye.

Prions: proteinaceous infectious particles, smaller than viruses. They contain no DNA or RNA.

vCJD: Variant Creutzfeldt-Jakob Disease: A variant of classic CJD believed to be caused by the Bovine Spongiform Encephalopathy (BSE) prion.

The full vCJD guidelines were issued by the Joint Working Group in October 2001, a copy of which was sent to all members. Further copies are available from the ABDO or the College of Optometrists website (See Appendix G).

IT IS THE DUTY OF ALL CONTACT LENS OPTICIANS TO REVIEW AND WHEN NECESSARY UPDATE THEIR HYGIENE ROUTINES IN THE LIGHT OF NEW INFORMATION AND PRODUCTS.

Minimum equipment necessary for contact lens fitting

- Range of diagnostic lens sets
- Trial frames & trial lenses or appropriate other refraction equipment
- Test chart
- Slit lamp (capable of at least 25 x magnification)
- Keratometer/Topographical instruments
- Focimeter
- Record cards (suitably designed) including a recall procedure
- Solutions & products required for contact lens fitting
- Burton lamp

Access to:-

- Contact lens verification equipment - such as Radiuscope or Measuring Device, V-Gauge, Band Magnifier, Lens Analyser
- Ophthalmoscope
- Retinoscope