



# Practical Ophthalmic Procedures Vol.3

Teaching Set

This colour teaching set, the third volume in a series of four, is designed to equip the student with a further six ophthalmic skills. The contents are:

- Hot Spoon Bathing
- Tape correction for lower eyelid entropion
- Irrigation of the eye
- Management of an eye prosthesis/conformer
- Schirmer's test
- Eyelid cleansing for blepharitis

These will build on the procedures and knowledge gained from Volumes One and Two. Indeed, procedures explained in those volumes will be referred to in this text.

The procedures should be taught by an experienced teacher, offering supervised practice.

### **Remember**

#### **Before performing any eye procedure**

- Wash your hands (and afterwards too)
- Position the patient comfortably with head supported
- Avoid distraction for yourself and the patient
- Ensure good lighting
- Always explain to the patient what you are going to do

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## 1. Hot Spoon Bathing (1)

### **Indications**

- To aid absorption of eye medication, e.g., dilating drops
- To reduce inflammation
- To aid rupture of a cyst or sty
- To reduce pain and give comfort

## 2. Hot Spoon Bathing (2)



### You will need

- Kettle to boil water
- Large bowl
- Wooden or plastic spoon
- Clean cotton wool or gauze
- Bandage or strips of clean cloth

### 3. Hot Spoon Bathing (3)



#### Preparation

- Cover the spoon with a generous padding of cotton wool or gauze secured by a firm bandage or strips of cloth

## 4. Hot Spoon Bathing (4)



### Method

- Place the bowl on the table and carefully pour in the boiling water from the kettle
- Sit the patient at the table, making sure the table is a comfortable height for the patient

### ***Remember!***

The patient ***must*** be supervised throughout the procedure.

### **Instruct the patient to:**

- Dip the spoon into the water so that the padding is immersed
- Raise and hold the spoon at a distance of approximately 10 centimetres under the affected eye
- Allow the steam to rise

***Note: This 'bathes' the eye. The spoon should never touch the eye.***

- Advise the patient to keep the eye closed during this time
- Repeat the dipping and bathing every 10-15 seconds and continue the procedure for about 20 minutes

### ***Important!***

***Ensure the water temperature is maintained by changing it as necessary***

## 5. Tape Correction for Lower Lid Entropion (1)

### Indications

To provide *temporary* correction of entropion:

- To relieve discomfort
- To avoid corneal abrasion caused by inturned eyelashes (trichiasis)

## 6. Tape Correction for Lower Lid Entropion (2)



### You will need

- Waterproof adhesive tape/strapping (ideally, one inch wide)
- Scissors
- Mirror

## 7. Tape Correction for Lower Lid Entropion (3)



### **Preparation**

- Sit or stand the patient comfortably and offer a mirror as a teaching aid

### **Method**

- Cut a piece of tape about 3 centimetres in length
- Gently evert the lower eyelid to its former, normal position

## 8. Tape Correction for Lower Lid Entropion (4)



*Left picture*

- Apply one end of the tape to the skin about 6mm below the centre of the lower eyelid
- Pull gently downwards on the tape creating a horizontal fold in the skin

*Right picture*

- Secure the remainder of the tape to the facial skin, maintaining the skin fold

***Note: This should correct the eyelid position***

- Ask the patient to close, and then open, both eyes naturally. This will indicate if the taping is secure enough and effective and also if it allows adequate eyelid closure

***Remember!***

***The patient will need to learn to manage this procedure him/herself.***

***Allow the patient supervised practice.***

***Emphasise the need to replace the tape regularly to maintain benefit.***

***Ensure the patient has a supply of tape.***

## 9. Irrigation of the Eye (1)

### Indications

- To wash the eye thoroughly following alkali or acid burns
- To prevent corneal and conjunctival scarring
- To remove multiple foreign bodies from the eye

### *Remember!*

This is an emergency situation - prompt and thorough action is vital.  
*Do not* delay to check visual acuity - proceed to irrigation immediately. Alkali and acid solutions in the eye may cause serious damage to vision.

## 10. Irrigation of the Eye (2)



### You will need

- pH indicator strips or litmus paper (if available)
- Local anaesthetic eye drops
- Towel
- Waterproof sheet
- Cotton buds
- Lid retractors
- Kidney dish
- Gauze swabs
- Small forceps
- Small receptacle with pouring spout, e.g., feeding cup
- Irrigating fluid - Universal Buffer Solution, if readily available. Otherwise, clean water at room temperature should be used

## 11. Irrigation of the Eye (3)



### Preparation

- If available, use pH indicator strips or litmus paper to assess the acidity / alkalinity of the tears caused by the injury
- Take two small strips and, with these, gently touch the inside of each lower eyelid
- Compare the colour result with the scale on the container and record in the patient's documentation

**Note: This is repeated after the procedure and will determine if sufficient irrigation has been done.**

- Instil local anaesthetic eye drops (this procedure is explained in Practical Ophthalmic Procedures - Volume One).

## 12. Irrigation of the Eye (4)



### Method

*Left picture:*

- With the patient sitting or lying down, protect the neck and shoulders with the waterproof sheet and towel
- Place the kidney dish against the cheek, on the affected side, with the head tilted sideways towards it
- Fill the receptacle with the irrigating fluid and test it for temperature by pouring a small amount against the patient's cheek

*Right picture:*

- Spread open the eyelids, if necessary gently using eyelid retractors
- Pour the fluid slowly and steadily, from a distance of no more than 5 centimetres, onto the surface of the eye, and importantly, inside the lower eyelid and under the upper eyelid
- Evert the upper eyelid to access all of the upper conjunctival fornix (this procedure is explained in Practical Ophthalmic Procedures - Volume Two).
- Ask the patient to move the eye continuously in all directions while the irrigation is maintained for 30 minutes
- Remove any residual foreign bodies with moist cotton buds or forceps
- Check the pH again and, if this is unchanged or not yet normal, continue the irrigation
- Check and record the visual acuity when the procedure is finished

### ***Important***

***Refer the patient for urgent medical assessment.***

## 13. Management of an Eye Prosthesis or Conformer (1)

### Indications

- To give the patient a good cosmetic appearance
- To enable the patient to be self-caring following the removal of an eye
- To maintain socket volume (size and shape)

*Note: A conformer should be used, until a prosthesis (artificial eye) is available, to prevent socket shrinkage.*

## 14. Management of an Eye Prosthesis or Conformer (2)



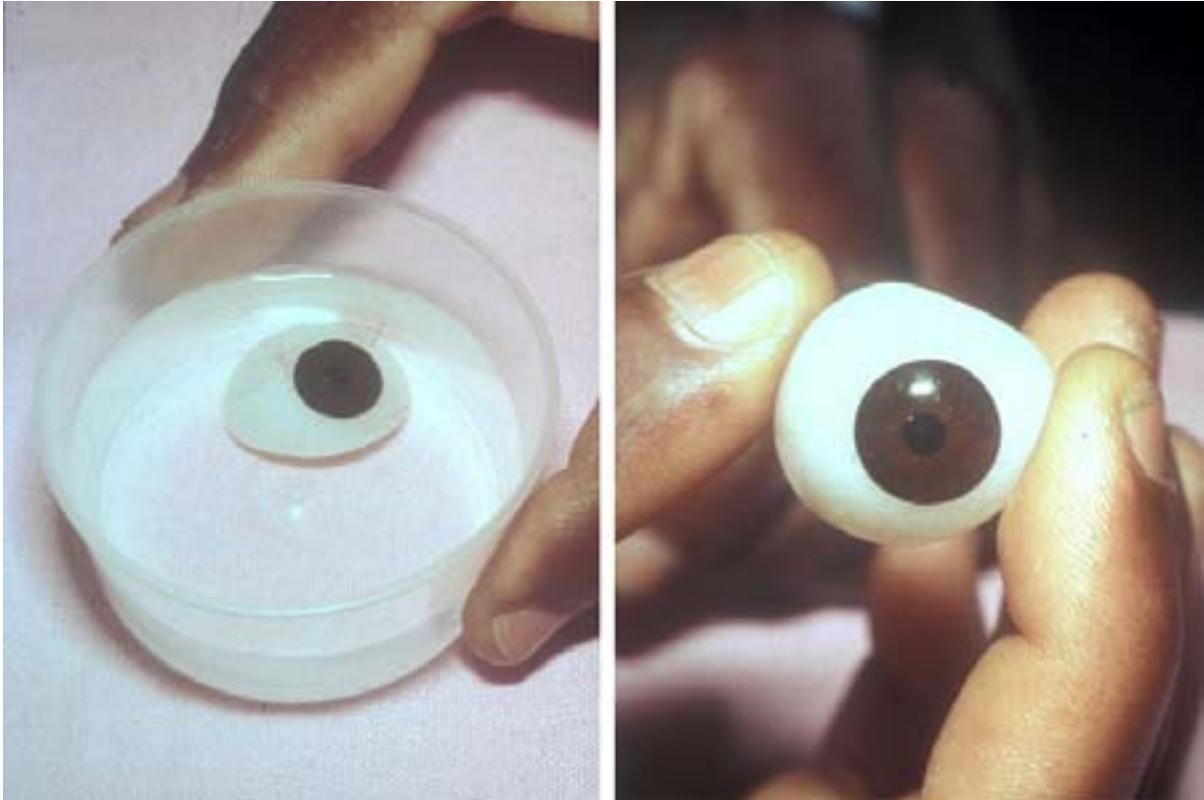
### You will need

- Small pot of saline or cooled boiled water
- Mirror
- Cotton buds
- Gauze swabs
- Prosthesis (artificial eye) or conformer (shell)

### Preparation

- Provide privacy so that the patient can practice this procedure without others looking on
- Reassure the patient and encourage them that the procedure, although perhaps difficult at first will become, with practice, easier for him/her to manage confidently alone

## 15. Management of an Eye Prosthesis or Conformer (3)



### Method

To *insert* the prosthesis or conformer

It will help if the *patient looks downwards*

- Clean the eyelids using cotton buds or gauze moistened in saline (this procedure is explained in Practical Ophthalmic Procedures - Volume One).

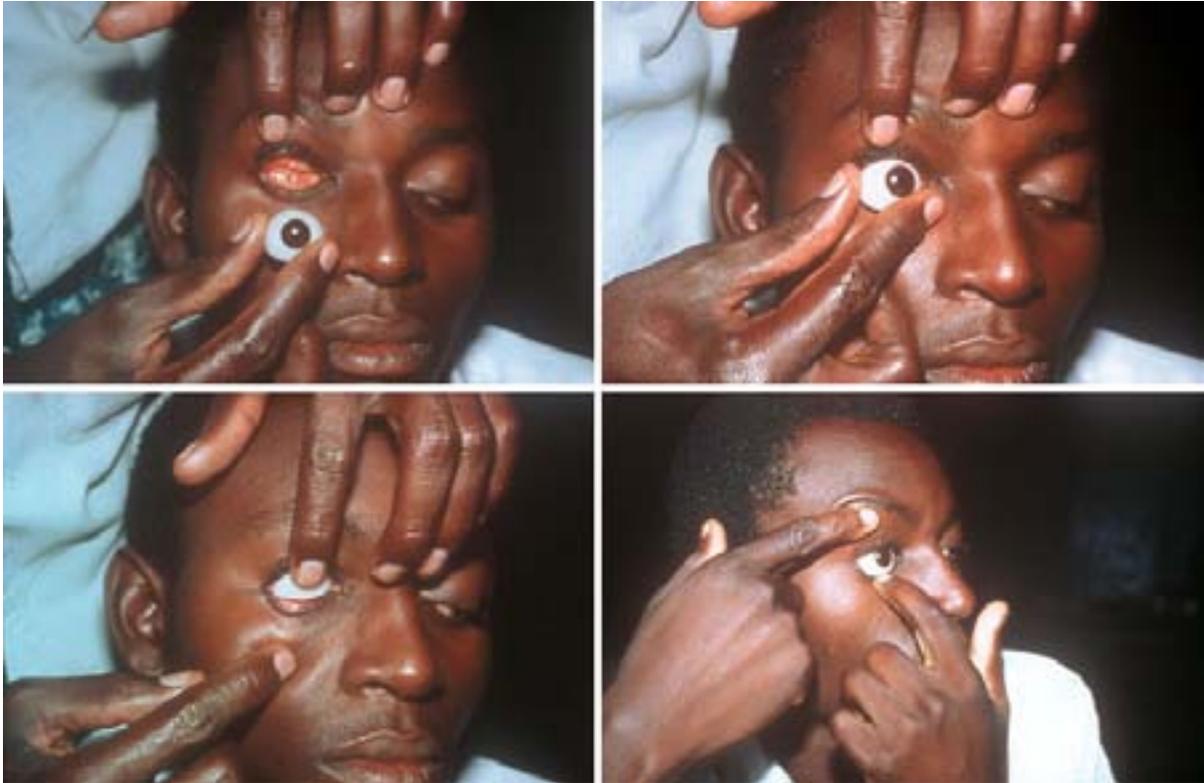
*Left picture:*

- Take the prosthesis or conformer and moisten in the saline

*Right picture:*

- Hold the prosthesis or conformer between the thumb and forefinger with the indentation uppermost and the convex surface outermost

## 16. Management of an Eye Prosthesis or Conformer (4)



*Top left picture:*

- Using the other hand, gently lift the upper eyelid with a fingertip

*Top right picture:*

- Insert the upper part of the prosthesis or conformer under the eyelid in an upwards, backwards and inwards movement

*Bottom left picture:*

- Remove the hand from the upper eyelid (but still support the prosthesis or conformer) and, with the free hand, gently pull down the lower eyelid. The lower part of the prosthesis or conformer should then slip easily into place inside the lower eyelid
- Check that normal eyelid closure is possible and, importantly, comfortable for the patient

**To *remove* the prosthesis or conformer**

**It will help if the *patient looks upwards***

- Clean the eyelids using cotton buds or gauze moistened in saline (this procedure is explained in Practical Ophthalmic Procedures - Volume One).

*Bottom right picture:*

- Using an index finger gently pull down the lower eyelid. The edges of the prosthesis or conformer will then be seen

- Gently push the eyelid under the prosthesis or conformer and, with the other hand, exert some fingertip pressure on the upper eyelid. The prosthesis or conformer should slip out easily into the cupped hand

***Note: The picture shows the patient doing this himself.***

- Place the prosthesis or conformer in the saline. It should be washed thoroughly before re-insertion

***Remember!***

***The patient may wish to observe, by using a mirror, someone performing this procedure on him/her before attempting removal and insertion himself/herself.***

***Encourage the patient to look at and feel the empty socket. He/She may be fearful of this, it is often the main challenge in building confidence for self-care.***

## 17. Schirmer's Test (1)

### Indications

- To record measurement of tear secretion in patients with suspected 'dry eyes'

## 18. Schirmer's Test (2)



### You will need

- Schirmer's test strips
- Watch or clock
- Clear adhesive tape
- Pen

### Preparation

- Explain to the patient that although this procedure may be uncomfortable, it is not painful

### *Remember!*

*Do not instil any anaesthetic drops or other eye medication before the test. This would give a false result.*

## 19. Schirmer's Test (3)



### Method

*Top left picture:*

- Remove 2 strips from the sterile packet and label them 'right' and 'left'

*Top right picture:*

- Bend each strip, at the notch, to a 90 degree angle

*Bottom left picture:*

- Ask the patient to look up and, with an index finger, gently pull down the lower eyelid
- Hook the bent end of the strip over (and allow it to 'sit' inside) the centre of the lower eyelid
- Repeat the procedure for the other eye
- Note the time
- Ask the patient **not to squeeze** but just to keep the eyes gently closed
- After 5 minutes ask the patient to open both eyes and look upwards, carefully remove both strips

## 20. Schirmer's Test (4)



- Using the package scale, measure the length of the moistened area, from the notch, on the strip and indicate this with a pen mark
- Stick the strips into the patient's documentation and record the measurements below each strip, e.g., 10 mm in 5 minutes. if the strips are completely moistened before 5 minutes, record approximately, e.g., 30 mm in 3 minutes

## 21. Eyelid Cleaning for Blepharitis (1)

### Indications

- To keep the eyelid margins clean in a patient with chronic blepharitis
- To prevent recurrent infection of the eye

## 22. Eyelid Cleaning for Blepharitis (2)



### You will need

- Sodium bicarbonate
- Teaspoon
- Half litre of cooled boiled water
- Cotton buds
- Small pot
- Mirror

### Preparation

- Make a solution using one teaspoonful of sodium bicarbonate to a half litre of cooled boiled water
- Pour a small quantity of the solution into the pot

### ***Important!***

***A fresh solution must be made each time.***

## 23. Eyelid Cleaning for Blepharitis (3)



To clean the *lower eyelid margin*

**Instruct the patient to:**

- Use the mirror, and using the index finger, gently pull down the lower eyelid
- Use the other hand, hold a cotton bud moistened in the solution and clean the eyelid margin with a rubbing motion from the inner to outer canthus. Pay particular attention to the lash roots to remove debris and crusting
- Discard the cotton bud and, using a clean bud each time, repeat the procedure until the eyelid margins are clean

## 24. Eyelid Cleaning for Blepharitis (4)



**To clean the *upper eyelid margin***

**Instruct the patient to:**

Look downwards and, with a hand on the forehead, use the fingertips and gently pull up the upper eyelid against the orbital rim

Use the other hand, repeat the procedure, to clean the upper eyelid margin - extra care must be taken to avoid touching the cornea

*NOTE: This is basically the same technique as that given for post-operative eye dressings prior to instilling eye drops or applying ointment (explained in Practical Ophthalmic Procedures - Volume One).*

*The cleaning effort here needs to be a little more vigorous if it is effective enough to remove crusting.*

*This self-care routine needs to be done at least twice daily as treatment for blepharitis. A fresh solution must be prepared each time.*

*The patient may or may not find it helpful to use a mirror.*

## Acknowledgements

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