



HOW TO...

Ophthalmic practice



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Remember – wash your hands before and after performing all procedures!

How to irrigate the eye

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.

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.

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
- Undine or any small receptacle with pouring spout, e.g., feeding cup
- Irrigating fluid – Universal Buffer Solution, if available. Otherwise, clean water at room temperature should be used.

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 or note the colour change of the litmus paper and record in the patient's documentation.

This is repeated after the procedure and will determine if sufficient irrigation has been done



Method

- Instil local anaesthetic eye drops
- 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 undine or feeding cup with the irrigating fluid and test it for temperature by pouring a small amount against the patient's cheek
- Ask the patient to fix his/her gaze ahead
- 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 front 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
- Ask the patient to move the eye continuously in all directions while the irrigation is maintained for **at least 15 minutes**, 30 minutes is better
- 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.

Refer the patient for urgent medical assessment

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