ACCIDENT AND EMERGENCY GUIDELINE FOR EYE IRRIGATION

This guidance does not override the individual responsibility of health professionals to make appropriate decision according to the circumstances of the individual patient in consultation with the patient and /or carer. Health care professionals must be prepared to justify any deviation from this guidance.

INTRODUCTION

The most common use for eye irrigation is for the removal of caustic substances from the eye, e.g. cleaning agents, chemical or calcium hydroxide, found in plaster and mortar. This should be done as soon as possible to minimise damage. Waggoner [1997] recommends eye irrigation for 15 – 30 minutes. Failure to dilute chemical agents will increase the risk of more severe injury.

The patients covered by this guideline are all patients who require eye irrigation.

THIS GUIDELINE IS FOR USE BY THE FOLLOWING STAFF GROUPS :

All nurses who have received appropriate training within the department and are deemed competent by qualified nurse / clinician.

Lead Clinician(s)

Ian Levett	Consultant A&E
Approved by Clinical Effectiveness Committee on:	July 2003
Reviewed by Clinical Lead:	22nd January 2019
Review Date: This is the most current document and is to be used until a revised version is available	22nd January 2021

Key amendments to this guideline

Date	Amendment	Approved by:
April 2015	No amendments	Donna Jeynes
27.10.2016	Remove Rose Johnson and change to James France	Joy Powell
	Add Graham O'Byrne KTC in the circulate to section	
	Change J Taylor to T Jones specialist nurse ophthalmology KTC	
December 2017	Sentence added in at the request of the Coroner	
May 2018	Document extended for three months as per TLG recommendation	TLG
June 2018	Document extended for 3 months as per TLG recommendation	TLG
January 2018	Minor amendments	Ian Levett

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INTRODUCTION

The most common use for eye irrigation is for the removal of caustic substances from the eye, e.g. cleaning agents, chemical or calcium hydroxide, found in plaster and mortar. This should be done as soon as possible to minimise damage. Waggoner [1997] recommends eye irrigation for 15 – 30 minutes. Failure to dilute chemical agents will increase the risk of more severe injury.

AIMS

1. To ensure the correct procedure is carried out for eye irrigation.

2. To ensure the patient understands procedure and gives his/her verbal consent.

3. To irrigate the eye adequately.

EQUIPMENT

X2 litre bag 0.9% Sodium Chloride
Giving set
Receiver
Towels
Gauze Swab
pH paper
Local anaesthetic drops

GUIDELINE FOR EYE IRRIGATION

Assessment

Action	Rationale
1. Explain procedure to patient.	To ensure patient understands and gives his/her valid consent.
2. Remove contact lenses prior to irrigation	
3. Check ph of eyes and visual acuity	To provide a baseline measurement. To see if ph is the same as the unaffected eye. (Normal pH range 7 – 9).

Procedure

Action	Rationale
1. Instil anaesthetic drops if required Tetrocaine 1% (see Patient Group Directions)	To alleviate corneal pain so the patient can cooperate fully with procedure.
2. Prepare irrigation fluid to room temperature, connect to giving set.	Tepid fluid will be more comfortable for the patient. Test on inner aspect of wrist to ensure appropriate temperature.
3. Assist patient into comfortable position, head supported with chin almost horizontal, head inclined to the side of the eye to be treated.	To avoid solution running into other eye.
4. Wash hands	To reduce risk of infection.
5. Ask patient to hold receiver against cheek below eye to be irrigated or use a sink.	To collect irrigation fluid.
6. Place towel over patients shoulder (on the side of irrigation)	To protect patients clothing.
7. Hold the eyelids apart using first and second fingers.	Once irrigation commences the patient will be unable to hold eye open.
8. Open giving set and direct flow of fluid from the nasal corner outwards.	Allows control of fluid during irrigation and prevents contamination of opposite eye.
9. Ask patient to look up and down and to either side whilst irrigating.	To ensure adequate irrigation.
10. Evert lids when irrigating.	To ensure complete removal of any foreign bodies
11. Following irrigation ask patient to close eyes, use a swab to dry lids wiping from inner eye to out.	For patient comfort.
12. Dispose of equipment	
13. Wash hands	To reduce risk of infection.
14. Check pH of eye and visual acuity 5 minutes after irrigation	To provide measurement, post irrigation.
15. Wash hands	To prevent cross infection.
16. Complete necessary documentation.	To record procedure.

POTENTIAL PROBLEMS

Problem	Nursing Action
1. Pain	Offer analgesia

Monitoring Tool

This should include realistic goals, timeframes and measurable outcomes.

How will monitoring be carried out?

Who will monitor compliance with the guideline?

Page/ Section of Key Document	Key control:	Checks to be carried out to confirm compliance with the policy:	How often the check will be carried out:	Responsible for carrying out the check:	Results of check reported to: *(Responsible for also ensuring actions are developed to address any areas of non-compliance)*	Frequency of reporting:
	WHAT?	**HOW?**	**WHEN?**	**WHO?**	**WHERE?**	**WHEN?**
	Following correct procedure. Thorough irrigation with Saline. Ensure patient safety and comfort	Spot checks	monthly.	Ward Manager	Matron	Monthly .

References and further reading

Dougherty L and Mallett J (2000). *The Royal Marsden Manual of Clinical Nursing Procedures.* Fifth Edition. London. Blackwell Science.

Waggoner MD (1997). *Chemical Injuries of the Eye: Current Concepts in Pathphysiology and Therapy.* Survey of Ophthalmology, 41 (4), 275 – 313.

CONTRIBUTION LIST

Key individuals involved in developing the document

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Circulated to the following individuals for comments

Name	Designation
James France	Consultant A&E WRH
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T Jones	Specialist Nurse Ophthalmology KH
G O'Byrne	Consultant KTC

Circulated to the following CD's/Heads of dept for comments from their directorates / departments

Name	Directorate / Department

Supporting Document 1 - Equality Impact Assessment Tool

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

		Yes/No	Comments
1.	**Does the policy/guidance affect one group less or more favourably than another on the basis of:**		
	Race	no	
	Ethnic origins (including gypsies and travellers)	no	
	Nationality	no	
	Gender	no	
	Culture	no	
	Religion or belief	no	
	Sexual orientation including lesbian, gay and bisexual people	no	
	Age	no	
2.	**Is there any evidence that some groups are affected differently?**	No	
3.	**If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?**	No	
4.	**Is the impact of the policy/guidance likely to be negative?**	No	
5.	**If so can the impact be avoided?**	Na	
6.	**What alternatives are there to achieving the policy/guidance without the impact?**	Na	
7.	**Can we reduce the impact by taking different action?**	Na	

If you have identified a potential discriminatory impact of this key document, please refer it to Human Resources, together with any suggestions as to the action required to avoid/reduce this impact.

For advice in respect of answering the above questions, please contact Human Resources.

Supporting Document 2 – Financial Impact Assessment

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

	Title of document:	Yes/No
1.	Does the implementation of this document require any additional Capital resources	No
2.	Does the implementation of this document require additional revenue	No
3.	Does the implementation of this document require additional manpower	No
4.	Does the implementation of this document release any manpower costs through a change in practice	No
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff	No
	Other comments:	

If the response to any of the above is yes, please complete a business case and which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval