Royal Cornwall Hospitals
NHS Trust

LocSSIP Guideline for: Lateral Canthotomy in the Emergency Department

V1.0

July 2025

Summary

This guideline outlines the process to be followed for staff whilst undertaking the listed procedure.

It applies to all patients undergoing the following the procedure: Lateral Canthotomy in the Emergency Department.

The guideline has been written as a result of the LocSSIPs requirements (Local Safety Standards for Invasive Procedures).

Summary (as shown on Resus rare procedure card)

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Lateral Canthotomy

Orbital Compartment Syndrome (OCS) is an **EYE EMERGENCY** causing **permanent visual impairment or blindness**

A lateral canthotomy is a procedure which can relieve OCS and prevent loss of sight, if performed early after onset of symptoms.

OCS should be suspected in patients with **facial/orbital trauma** or **recent eye surgery.**

A retrobulbar haematoma causes a rise in intra-orbital pressure leading to optic nerve compression and irreversible vision loss

Indications

Signs of suspected OCS

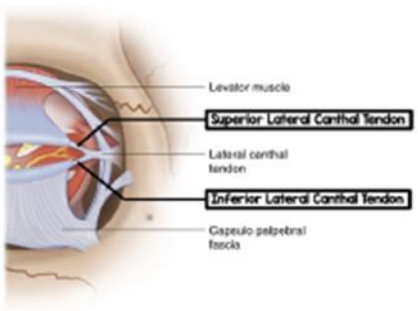
- Proptosis
- Restricted painful eye movements
- Decreased visual acuity
- Diplopia
- Loss of colour vision
- Hard, tense eyeball (push on eyelid)
- Relevant afferent pupillary defect

Contra-indications

Signs of globe rupture

- Irregular pupil
- Hyphema
- Herniated iris tissue
- Leak of aqueous humour

Anatomy of lateral canthal tendon – left eye shown



If suspected Orbital Compartment Syndrome call for help **IMMEDIATELY**

Call ONCALL OPHTHALMOLOGIST

Perform a Lateral Canthotomy - Decompress ASAP

within 60minutes of symptoms starting

TIME IS VISION

How to perform a Lateral Canthotomy

Equipment

- Local anaesthetic eye drops
- Chloraprep skin cleansing wipe
- 5ml syrringe and 25G needle
- Local anaesthetic (with adrenaline if available)
- Blunt scissors
- Straight artery forceps
- Toothed forceps
- Gauze

Sign IN—WHO Procedure Checklist

1. **CLEAN** the area of the lateral canthus (see arrow) and consider local anaesthetic eye drops. **INJECT** 1-2mls of 1% lidocaine into the lateral canthus (aim the needle down and laterally, away from the globe)

2. Use straight artery forceps to **CLAMP** the tissues at the lateral canthus for 1minute. Slide your scissors into the same position and **CUT** through the tissues.

3. Pull the lower eyelid away from the globe using the toothed forceps.

4. **STRUM** the tissue beneath the canthotomy incision to identify the inferior crus of the lateral canthal tendon (It should feel like a guitar string) **CUT** through the tendon using the scissors in a direction perpendicular to the first incision

5. Image 5 shows intraocular pressure has been relieved allowing the globe and orbital contents to move forward. If the orbital pressure is not relieved, cut through the superior canthal tendon too

Sign OUT —WHO Procedure Checklist

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Data Protection Act 2018 (UK General Data Protection Regulation – GDPR) Legislation.

The Trust has a duty under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed, and documented. We cannot rely on opt out, it must be opt in.

Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 please see the Information Use Framework Policy or contact the Information Governance Team.

Royal Cornwall Hospital Trust rch-tr.infogov@nhs.net

1. Introduction

The Royal Cornwall Hospital Trust is committed to providing high quality patient centered care and a safe environment for all patients requiring lateral canthotomy.

2. Background

2.1. This guideline aims to provide a safe approach to the rare emergency procedure Lateral Canthotomy Next Paragraph.

2.2. It will provide evidence of what additional requirements are needed ie training and education to fit with local working practices and staffing. This ultimately will enhance the National Safety Standards for Invasive Procedures (NatSIPPs), and mitigate the risk of never events, serious incidents or near misses. It will also provide a process for analysis or learning.

3. Definitions

Lateral Canthotomy is a time-critical, rare emergency procedure performed to decompress a sight-threatening retrobulbar haemorrhage.

4. Governance and Audit

4.1. The Urgent, Emergency and Eldercare Care group will monitor the implementation of this guideline in the event of an incidence of this rare procedure being performed. See Appendix 1

4.2. This document incorporates the process undertaken as part of the WHO safer surgery checklist.

4.3. Patients must be assessed prior to the procedure and informed consent gained. If the patient in the Emergency Department lacks capacity then lateral canthotomy should proceed in the best interests of the patient.

4.4. All incidences of lateral canthotomy being performed in ED will be followed up via the Emergency Department morbidity and mortality process.

4.5. The procedure will be documented within the patients record.

5. Workforce

5.1. Minimum workforce requirements for these invasive procedures are as follows: Team composition will vary dependent on patient stability/anticipated difficulty of procedure and COVID status. Roles which need to be allocated include Operator and Assistant. Individuals' experience and competence needs to be explicitly established, and roles allocated appropriately.

5.2. Operator: will only undertake role if suitably trained.

5.3. Assistant: A trained nurse/assistant should be present for the procedure to act as surgical assistant / runner.

5.4. Ophthalmologist: Contact the ophthalmic surgeon on-call prior to performing the procedure since if they are immediately available, they can perform or supervise the procedure. This must not delay the time-critical procedure which should be performed within 60mins of onset of visual deficit.

5.5. It is the responsibility of each member of staff involved in the procedures outlined to: act within their scope of competence under the terms of the professional body i.e.. The General medical Council (GMC) “Good medical Practice”. The Nursing and Midwifery Council (NMC) “Code of professional Standards for Conduct”, or the Health Care Professional Council (HCPC).

5.6. Training – clinicians performing the intervention should have appropriate knowledge and simulation experience.

5.7. It is the responsibility of each member of staff to comply with these set of standards and escalate any concerns regarding competence. Incidents / near misses must be reported in the Datix system. All staff will communicate and work as a team and speak out if they have any concerns underpinned by undertaking annual training. Ie. WHO, Patient Safety (human factors),, Freedom to Speak up on ESR.

6. Scheduling and List Management

Lateral Canthotomy will be performed as a time-critical emergency procedure in ED Resus.

7. Handovers and Information Transfer

7.1. The whole team is responsible for the safety of the patient. The procedure should proceed in a WHO safety checklist style.

7.2. The procedure must be performed in Resus with the guidance available on the Resus rare procedure card and the WHO Checklist on the Resus screen.

7.3. Indications and Contra-indications are to be checked.

8. Safety Briefing

If any issues have arisen or problems such as equipment difficulties, a debriefing is to be undertaken and recorded by the responsible practitioner in the patient note, and a Datix completed if appropriate.If any issues have arisen or problems such as equipment difficulties, a debriefing is to be undertaken and recorded by the responsible practitioner in the patient note, and a Datix completed if appropriate.

9. Sign In

As per ED WHO Checklist.

10. Time Out

As per ED WHO Checklist.

11. Procedure

Lateral Canthotomy proceeds as per the description in the guidance shown on the Resus rare procedure card. (Section1. Summary).

12. Prosthesis Verification

Not applicable to this procedure.

13. Prevention of Retained Foreign Objects

Not applicable to this procedure.

14. Sign Out

As per ED WHO Checklist.

15. Debriefing

All members of the team must feel comfortable to contribute to the discussion and raise any queries or concerns.

16. Dissemination and Implementation

16.1. The document is available on the document library. Significant updates will be communicated via Trust wide email.

16.2. Implementation of the policy will be via Trust wide communication and supported by appropriate training for the relevant members of staff.

17. Monitoring compliance and effectiveness

Information Category	Detail of process and methodology for monitoring compliance
Element to be monitored	The Effectiveness and safety of procedures undertaken during care of the patient in the Emergency Department.
Lead	Dr Mark Jadav.
Tool	ED notes and debrief which will act to review the safety of the procedure. Any emerging trends, areas of failure within this procedure list will be discussed and rectified. Significant morbidity events will be followed up via the ED governance process.
Frequency	This will be monitored for each patient.
Reporting arrangements	This report will be shared with the ED governance meeting. Consider stating this responsibility in committee terms of reference.

Information Category	Detail of process and methodology for monitoring compliance
Acting on recommendations and Lead(s)	Dr Mark Jadav in conjunction with Governance service lead and service lead (both nursing and medical) appropriate to the findings.
Change in practice and lessons to be shared	Change in Practice will be shared through the ED team and wider trust if appropriate via Team Brief, Governance Days and email.

18. Updating and Review

18.1. The document review process is managed via the document library. Document review will be every three years unless best practice dictates otherwise. The author remains responsible for the policy document review. Should they no longer work in the organisation or in the relevant practice area then an appropriate practitioner will be nominated to undertake the document review by the designed director.

18.2. Revision activity will be recorded in the versions control table to ensure robust document control measures are maintained.

19. Equality and Diversity

19.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the 'Equality, Inclusion and Human Rights Policy' or the Equality and Diversity website.

19.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1. Governance Information

Information Category	Detailed Information
Document Title:	LocSSIP Guideline for: Lateral Canthotomy In the Emergency Department V1.0
This document replaces (exact title of previous version):	New Document
Date Issued/Approved:	May 2025
Date Valid From:	July 2025
Date Valid To:	July 2025
Directorate / Department responsible (author/owner):	Mark Jadav, Emergency Department Consultant
Contact details:	01872 252452
Brief summary of contents:	Process to be followed for the procedure of lateral canthotomy in the emergency department.
Suggested Keywords:	LocSSIP, lateral canthotomy, safety, invasive.
Target Audience:	**RCHT:** Yes **CFT:** No **CIOS ICB:** No
Executive Director responsible for Policy:	Chief Medical Officer
Approval route for consultation and ratification:	Emergency Department Governance Meeting. Care Group Governance. Safer Surgery.
General Manager confirming approval processes:	Rachael Pearce
Name of Governance Lead confirming approval by specialty and care group management meetings:	Paul Evangelista
Links to key external standards:	None required
Related Documents:	Emergency Department WHO Safety Checklist.
Training Need Identified?	No

Information Category	Detailed Information
Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet and Intranet
Document Library Folder/Sub Folder:	Clinical / Emergency Department

Version Control Table

Date	Version Number	Summary of Changes	Changes Made by
May 2025	V1.0	Initial issue	Mark Jadav, Emergency Department Consultant

All or part of this document can be released under the Freedom of Information Act 2000.

All Policies, Strategies and Operating Procedures, including Business Plans, are to be kept for the lifetime of the organisation plus 6 years.

This document is only valid on the day of printing.

Controlled Document.

This document has been created following the Royal Cornwall Hospitals NHS Trust The Policy on Policies (Development and Management of Knowledge Procedural and Web Documents Policy). It should not be altered in any way without the express permission of the author or their Line Manager.

Appendix 2. Equality Impact Assessment

Section 1: Equality Impact Assessment (EIA) Form

The EIA process allows the Trust to identify where a policy or service may have a negative impact on an individual or particular group of people.

For guidance please refer to the Equality Impact Assessment Policy (available from the document library) or contact the Equality, Diversity, and Inclusion Team rcht.inclusion@nhs.net

Information Category	Detailed Information
Name of the strategy / policy / proposal / service function to be assessed:	LocSSIP Guideline for: Lateral Canthotomy In the Emergency Department V1.0
Directorate and service area:	Emergency Department, Acute Emergency Medicine
Is this a new or existing Policy?	New
Name of individual completing EIA (Should be completed by an individual with a good understanding of the Service/Policy):	Mark Jadav, Emergency Medicine Consultant
Contact details:	01872 253115

Information Category	Detailed Information
1. Policy Aim - Who is the Policy aimed at? (The Policy is the Strategy, Policy, Proposal or Service Change to be assessed)	To give safety and process guidance to Emergency Department staff performing lateral canthotomy.
2. Policy Objectives	Process to be followed for lateral canthotomy within the Emergency Department Team, ensuring safe and effective use.
3. Policy Intended Outcomes	To ensure all staff are following an accepted safe method of lateral canthotomy.
4. How will you measure each outcome?	Debrief following each patient, periodic Audit
5. Who is intended to benefit from the policy?	Staff, Patients, RCHT

Information Category	Detailed Information
6a. Who did you consult with? (Please select Yes or No for each category)	• Workforce: Yes • Patients/ visitors: No • Local groups/ system partners: Yes • External organisations: No • Other: No
6b. Please list the individuals/groups who have been consulted about this policy.	**Please record specific names of individuals/ groups:** Ophthalmology Department. Emergency Department Governance Meeting.
6c. What was the outcome of the consultation?	Approved
6d. Have you used any of the following to assist your assessment?	**National or local statistics, audits, activity reports, process maps, complaints, staff, or patient surveys:** No.

7. The Impact

Following consultation with key groups, has a negative impact been identified for any protected characteristic? Please note that a rationale is required for each one.

Where a negative impact is identified without rationale, the key groups will need to be consulted again.

Protected Characteristic	(Yes or No)	Rationale
Age	No	
Sex (male or female)	No	
Gender reassignment (Transgender, non-binary, gender fluid etc.)	No	
Race	No	
Disability (e.g. physical or cognitive impairment, mental health, long term conditions etc.)	No	
Religion or belief	No	

Protected Characteristic	(Yes or No)	Rationale
Marriage and civil partnership	No	
Pregnancy and maternity	No	
Sexual orientation (e.g. gay, straight, bisexual, lesbian etc.)	No	

A robust rationale must be in place for all protected characteristics. If a negative impact has been identified, please complete section 2. If no negative impact has been identified and if this is not a major service change, you can end the assessment here.

I am confident that section 2 of this EIA does not need completing as there are no highlighted risks of negative impact occurring because of this policy.

Name of person confirming result of initial impact assessment: Mark Jadav, Emergency Medicine Consultant.

If a negative impact has been identified above OR this is a major service change, you will need to complete section 2 of the EIA form available here:
Section 2. Full Equality Analysis