

NURSE LED REMOVAL OF CHEST DRAINS IN ADULT PATIENTS

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

Adults with a chest drain in situ and have had the medical/surgical decision to remove the drain.

This guideline is for use by the following staff groups :

Qualified nursing and medical staff

Lead Clinician(s)

Heather Lloyd

Nurse Practitioner Medicine

Reviewed and approved by Accountable Director on: 6th December 2013

Extension approved on: 24th March 2020

Review Date: 24th September 2020

This is the most current document and is to be used until a revised version is available

Key amendments to this guideline

Date	Amendment	By:
17/03/2008	Guideline reviewed by Clinical Lead with no Amendments made	Anne Schlattl
04/02/2009	Amendment made to Competencies	Anne Schlattl
22/07/2013	Guideline reviewed by Clinical Lead with minor Amendment made - regarding using steristrips to aid wound closure – string sutures are no longer used.	Heather Lloyd
02/02/2016	Document extended for 12 months as per TMC paper approved on 22 nd July 2015	TMC
Oct 16	Further extension approved as per TMC paper on 22 ND July 2015	TMC
May 17	Reviewed with no amendments	Heather Lloyd
December 2017	Sentence added in at the request of the Coroner	
March 2020	Document extended for 6 months whilst under review	Heather Lloyd

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Introduction

Chest drains are to be removed when either the air leak or fluid drainage has ceased, the patient's breath sounds have returned to normal and a satisfactory chest X-ray has been obtained and observed by the medical staff. This decision is to be made by the medical staff and documented in the medical notes. Medical staff to assess for evidence of pneumothorax post procedure will review a post chest drain removal chest X-ray.

Details of Guideline

Competencies required

Medical elements of the procedure to be carried out by FY1, SHO or registrar.

Nursing elements of the procedure are to be carried out by a Registered Nurse (RN) adult who is a band 5 nurse and above who has worked on a respiratory area for a minimum of 6 months, who has undergone a period of assessment to certify competency, and is working on the wards where adult patients with chest drains are a regular occurrence, i.e. at least 5 drains per month. This competency will be at least 3 removals of chest drains supervised by either the ward registrars/SHO or a nurse who has gained the competency.

The second nurse, when required, must be a RN (adult).

Patient Group covered

Adults with a chest drain in situ and have had the medical/surgical decision to remove the drain.

Guideline

Equipment required

- Trolley
- Sterile Gloves
- Apron
- Goggles/face visor
- Stitch cutter
- Sterile swab
- Normal saline
- Non-adherent dressing
- Large reinforced yellow bag and tie
- Steristrips

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Procedure	Rationale	Who
Decision to remove Chest drain documented in medical notes.	Lung reinflated or chest drain not in correct position	Doctor
Inform patient about the procedure and provide reassurance	To gain patients consent and co-operation	RN
Ensure analgesia is given prior to procedure.	To maintain patients comfort	RN
Check baseline observations of TPR, BP and oxygen saturations are recorded	To gain baseline measurement for future patient's management.	RN
Perform hand hygiene and put on protective clothing	To prevent cross infection and contamination of wound site.	RN
Remove dressing. Assess viability of exit site to close without suture or with application of a steristrip.	To ensure that the site can effectively be closed on removal of drain. If there is no closure suture and wound requires one, doctors to perform removal to ensure site is sutured.	RN
Perform hand hygiene and apply gloves	To prevent cross infection and contamination of wound site.	RN
For small bore drains cut securing suture/s. Keep hold of drain tube	To enable drain to be removed	RN
Instruct patient to take a deep breath in and hold it.	To prevent the complication of atmospheric air movement into the pleural cavity	RN
Pull drain out and cover with swab. Allow patient to breathe normally. If necessary apply steristrip to aid wound closure.	To remove drain safely	RN
Ensure wound is clean and cover with non-adherent dressing	To prevent wound infection.	RN
Perform TPR, BP and oxygen saturations post removal of drain.	To ensure no deterioration in respiratory status has occurred.	RN

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Ensure patient is comfortable and nurse call is within easy reach.	To enable patient to seek help if required.	RN
Dispose of used equipment as per hospital policy	To prevent cross infection and sharps injury.	RN
Perform hand hygiene	To prevent cross infection	RN
Document procedure	Accurate record of patients treatment	RN
Chest X-ray post procedure	To ensure no pneumothorax	Doctor
Chest X-ray to be reviewed	To ensure no pneumothorax	Doctor

Monitoring Tool

Annual random audit of medical notes by Specialist Practitioner in Medicine attached to respiratory team

STANDARDS	%	CLINICAL EXCEPTIONS
All patients have informed consent	100	
Chest drain removal to be documented in notes	100	
Any complications documented in the notes	100	

References

- BTS guidelines on the insertion of Chest drain. **Thorax** 2003; 58(suppl ii): ii 53-59
- Allibone, Liz Nursing management of chest drains. **Nursing Standard**: vol 17(22), Feb 2003, 45-56.
- Avery, Sarah Insertion and management of chest drains. **Nursing Times**: vol 96(37), sept 2000
- Christensen, 2002 M Nurse-led chest drain removal in a cardiac high dependency unit. **Nursing in critical care** 7(2), 67-82
- Mallett J, Dougherty L 2000. **Royal Marsden Manual of Clinical Nursing procedures**. 5th edition. Oxford, Blackwell

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Contribution List

Key individuals involved in developing the document

Name	Designation
Heather Lloyd	Nurse Practitioner

Circulated to the following individuals for comments

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

Name	Directorate / Department

Circulated to the chair of the following committee's / groups for comments

Name	Committee / group

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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?	NA	
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.

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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:	NONE

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