

# **POLICY AND PROCEDURE ON:**

# HOME TREATMENT OF CELLULITIS OF UPPER AND LOWER LIMBS IN THE EMERGENCY DEPARTMENT

IN CORK UNIVERSITY HOSPITAL GROUP

July 2024

Title	Policy and procedure on the home treatment of cellulitis of upper and lower limbs in the Emergency Department in Cork University Hospital Group					
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Policy and procedure on the home treatment of cellulitis of upper and lower limbs in the Emergency Department in Cork University Hospital Group P/PR-CUH-063 revision 01 approved 22 Jun 10, revised July, 2024



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# 1 Purpose of this policy

The purpose of this policy is to outline the processes of referring patients for intravenous (IV) treatment, with antibiotic, for cellulitis, by the Community Intervention Team (CIT) at their treatment centres.

#### 1.1 Target population

Adult patients (> 18yrs age) with upper and lower limb cellulitis requiring therapy with IV Cefazolin (+/- probenecid orally).

#### 2 Definitions

#### 2.1 Community Intervention Team

The HSE South established the Community Intervention Team (CIT) service to provide nursing and home help services in the community on a 7-day week basis. This service is available to patients with an acute episode or illness who have been medically assessed and IV medication initiated, and it has been determined that their care can be managed in a designated treatment hub with the additional service of the CIT.

# 3 Policy

Referral of patients for Treatment Centre management of cellulitis by the CIT to be performed in accordance with the procedures outlined below.

#### 4 Procedure

On confirmation of a cellulitis diagnosis requiring IV Cefazolin (+/- probenecid PO) the following steps must be undertaken to arrange referral for community treatment by the CIT.

#### 4.1 Patient assessed for CIT referral

#### 4.1.1 CIT Referral Criteria

- The patient must be over 18 years, consent to treatment and willing to travel to a community hub as specified on discharge from the Clinical Decision Unit (CDU).
- Demonstrate an acceptable understanding of both verbal and written English, or evidence of an equally proficient supportive home translator available at all times.
- · Have a mobile contact number
- Next of Kin contact number

#### 4.1.2 Medical Assessment

- Patient is advised to bring pharmacy pack and CIT treatment record sheet with them to the CDU. (This would be a discharge letter from CIT.)
- Patient medically assessed by the Emergency Medicine Consultant



- The CDU EM Consultant confirms that results of any blood tests or other investigations are acceptable.
- The consultant in EM will document on the ED Patient Record Chart that the patient is suitable for home treatment of cellulitis via CIT.
- The consultant in EM must complete the Home IV antibiotic prescription sheet (Appendix 2).
- Insertion of IV canula in CDU

#### 4.1.3 Exclusion Criteria

- Underlying Osteomyelitis, Necrotizing Fasciitis, Septic Joint or Abscess are excluded from the differential diagnosis.
- · History of drug or alcohol abuse
- Pregnancy
- · Rapidly progressing cellulitis
- · Underlying abscess requiring drainage
- Unstable vital signs or other concurrent medical conditions (e.g. Diabetes, Peripheral Vascular Disease, Rheumatoid Arthritis, Patients on Warfarin)
- Pyrexia (temperature greater than 37.5°C)

#### 4.1.4 Inclusion Criteria

- Compliant with rules of engagement: IV cannula care, attend hub at time agreed upon, open to communication with care givers
- Willing to travel to and from the hub

#### 4.1.5 Emergency Department Nursing Staff will:

- Arrange for medications to be dispensed from pharmacy.
- Email CIT with the completed Referral Form (Appendix 3).
- Email patient's GP of discharge arrangement.
- Arrange and provide an appointment for the patient to return to be reviewed by the CDU EM consultant in 3 days.

#### 4.2 On Discharge

- Confirm that the Patient has received and has tolerated at least one dose of IV Cefazolin (+/0 oral probenecid) – document the time of administration of IV antibiotic to ensure no adverse effect within one hour post IV.
- The patient is given a patient information leaflet "Home Treatment of Cellulitis Patient Information Leaflet" and advised that if they are concerned for any reason they may refer back to the CDU at any time, day or night (Appendix 1).
- Advise patient that they might not return to physical work.
- The patient is given a pharmacy pack (Appendix 4)
- The patient is given CDU NEWS chart to present at CIT. A photocopy of the CDU NEWS chart is kept in the patients chart.



- Patient is advised to bring pharmacy pack, CIT treatment record sheet and CNU NEWS chart with them to CDU.
- The patient's medical record chart is retained in CDU for the duration of the home treatment.

#### 4.3 CDU Review

- Each patient will be reviewed in the CDU within 72 hours of discharge.
- On each visit, a decision will be made to discontinue IV antibiotics or continue with it for a further 48 hours.
- A further review at the CDU will continue until the patient is changed to oral antibiotics and discharged to patient's GP.
- The CDU NEWS chart is returned to patient record once the patient is changed to oral antibiotics.
- The GP will then be issued a discharge letter from the CDU clinicians.

# 5 Responsibilities

#### 5.1 Emergency Medicine Consultants

- To assess, approve and document in the medical record the patient's suitability for home treatment of cellulitis.
- To ensure Non-Consultant Hospital Doctors (NCHDs) are aware of and have access to this policy and procedure and that it is implemented accordingly.

#### 5.2 Clinical Nurse Managers

• To ensure nursing staff are aware of and have access to this policy and procedure and that it is implemented accordingly.

## 5.3 Nurses

To read and adhere to this policy and procedure.

## 5.4 NCHDs

• To read and adhere to this policy and procedure.

#### 6 Useful details:

#### 6.1 CDU: 00 353 21 492 0231



#### 7 References

- An Bord Altranais (2007e), *Guidance to Nurses and Midwives on Medication Management*, An Bord Altranais, Dublin.
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- Health Service Executive South (2004) Community Infection Control Guidelines.
- Health Service Executive (2005) *Guideline on the Nursing Management and Administration of Subcutaneous Medication in the Community in HSE* South East.
- Woodley,S., Briggs,J., Read, D. (2005) *Policy for Administration of Intravenous Antibiotic Therapy to Adults in the Community and Community Hospitals*. Cambridge City and South Cambridgeshire Primary Care Trusts NHS.



# 8 Appendicies

#### 8.1 Appendix 1





# Community Treatment of Cellulitis:Patient Information Leaflet



Charles Decision Unit. Emergency Department Cont. Investit Hospital Telephone Number 12, 19212.1

#### What is Cellulitis?

Cellulitis is a skin infection caused by common bacteria that normally live on your skin. These bacteria only cause a problem if they get underneath your skin, often through a simple break or cut in the skin. You will require intravenous (IV) antibiotics to treat this infection.

#### What does receiving IV antibiotic therapy in the community involve?

This involves a nurse from the Community Intervention Team treating you in the treatment centre nearest your home with the IV antibiotics you have been prescribed.

#### What happens next?

You will be assessed by the Emergency Medicine Physician to see if you are suitable to receive treatment at home.

A cannula will be inserted into your hand/arm through which you will receive your injections.

Following insertion of a cannula, you will be admitted to the Clinical Decision Unit in the Emergency Department for commencement of your treatment.

Your response to treatment will be monitored while you are in the Clinical Decision Unit and after assessment.



#### What is a cannula?

A cannula is a small hollow plastic tube inserted into your hand/arm. This tube will be secured with a special bandage. After 72 hours, the cannula will be removed. If however you still require intravenous antibiotics, a new cannula will be inserted.

#### How do I care for my cannula when I am at home?

- To prevent infection your cannula must be kept clean and dry at (all times) the exit site. A transparent or clear dressing will cover the exit site. You should avoid heavy lifting and excessive movement of the arm to prevent dislodgement.
- You can still bath/shower so long as the line is kept clean and dry. The line should not be immersed in the bath. If the dressing does become wet underneath, please tell the Community Intervention Team nurse when they arrive and they will renew it. Please do not swim with the cannula in place.
- If the cannula site becomes red or painful, this may indicate local infection at the site of cannula. Other signs of infection include inflammation, tenderness. If you notice any of these please contact the Clinical Decision Unit as soon as possible to arrange insertion of a new cannula.
- If the cannula comes out apply direct pressure to the area with cotton wool, gauze or a tissue. Maintain this pressure continuously until the bleeding has completely stopped. This can take several minutes-repeatedly removing the pressure to see if the bleeding has stopped, prolongs the length of time it takes for this to happen. When the bleeding has stopped, apply a plaster.

Contact the Clinical Decision Unit Emergency Department 021/4920231 as soon as possible to organise insertion of a new cannula in order to complete your course of antibiotic.

# Keep applying direct pressure to the area. Lift your arm above your head.

- Telephone the Community Intervention Team immediately between the hours of 08:00 and 11:30 seven days a week at 0818837427. Alternatively make your way to the Clinical Decision Unit in the Emergency Department, Cork University Hospital.
- A nurse will remove the cannula when it is decided your IV antibiotics can be changed to tablet form. It will come out easily and be dressed with sterile gauze.
- The other most important factor in your recovery is keeping the affected arm/leg raised (as explained prior to your discharge) at all times.
- Take regular painkillers as advised prior to your discharge and Do Not Return to Work.

## About the Community Intervention team?

This team was established to provide nursing and home help services in the community on a 7-day week bases within a 10-mile radius of Cork City.

As well as administering your treatment in the home, the nurse will also monitor the progress of your treatment. Your GP will be advised that you are receiving treatment for cellulitis in the community. However, collectively the staff at the Clinical Decision Unit, the



Emergency Department, and the Community Intervention Team, will be your main carers for the course of this treatment.

#### What happens now?

Before you leave the hospital, you will be given a pharmacy pack and a Home IV Antibiotic Prescription.

## This pack will contain the following:

- Patient Information Leaflet
- Antibiotics for your treatment
- Community IV Antibiotic Prescription
- An appointment to return in 72 hours to the Emergency Department Review Clinic or the Clinical Decision Unit.
- Bring the pharmacy pack with you whenever you return to the hospital.

#### What are the risks?

Allergic reaction to a drug may sometimes occur when a new drug is given. Your risk of a significant allergic reaction during the home phase of your treatment is very low as you have already received one dose (or more) of antibiotics prior to your discharge from hospital. It is extremely unusual for any significant reaction to occur with further doses of the same drug.

#### When you return for your appointment:

- Your blood tests may be repeated.
- The consultant in Emergency Medicine will make a decision to discontinue IV antibiotics or continue with same for a further 48 hours.
- A further clinic review will be arranged until you are changed to oral antibiotics and discharged to your GP.
- The GP will then be issued a discharge letter from the review clinic

If there are any issues that you are worried about in relation to the program, or you are concerned about your health on or after discharge you can contact a member of the Community Intervention Team (CIT) or the Clinical Decision Unit (CDU) on any of the following numbers.

#### **Contact Details**

Community Intervention Team: Telephone Number: 0818837427

Between 08:00 – 17:00 on Weekdays, Weekends: & Bank Holidays.

Clinical Decision Unit, Emergency Department, CUH: 021 4920231

At any time Day or Night.



# 8.2 Appendix 2



# CORK UNIVERSITY HOSPITAL

# **HOME IV ANTIBIOTIC PRESCRIPTION**

Name:		-			ograph la			
Address:								
MRN		<del>-</del>			D.O.B		_	
Tel Home	meMobile							
Diagnosis:								
Allergies:								
		Med	licatio	on – Cef	fazolin			
Medication	Dose (gm)	Freque	ncy	Route		Date Commenced	Re da	view te
Cefozolin	2g	od		IV				
WFI	10ml per 1g vial							
NaCl 0.9 %	Flush	Pre and IV dose		IV				
	Med	lication -	- Prol	benecid	(Crysta	pen®)		
Medication		Dose (gm)	Freq	uency	Route	Date Commence	ed	Review date
Probenecid		1g	od		ро			

The medication listed below will only be administered to treat an adverse reaction

Medication	Dose	Route
Chlorpheniramine (piriton®) 10mg/ml	10mg stat then refer to ED	By intravenous injection over 1 minute or by intramuscular injection
Hydrocortisone (Solucortef®) 100mg	100mg stat then refer to ED	IV injection over 1-10 minutes. Add 2ml WFI to vial before administration.
Adrenaline 1mg/ml minijet	500mcg (0.5ml)	IM injection, repeated every 5 minutes if necessary



Drs Signature : /		BLEEP No.:	Date:/	
Drs Name(Print)				
	Fo	or Pharmacy Us	e	

#### **Products:-**

Product		Qty per day	Qty. Supplied ( days)	Batch No.	Expiry Date	Disp By	Cked. By
Cefazolin	2 gm 						
Probenecid	1 gm 						
WFI Amp	20ml						
NaCl 0.9% Amp	10ml						

#### **Pharmacy Instructions**

- 1. From the home IV antibiotics prescription, identify the number of days treatment to supply based on when the review date is
- 2. Create a patient file (if not already there) on clinic script using the pharmacy cost centre "CIT" (EM community intervention team)
- 3. Enter the antibiotics & reconstitution items under the individual patient's name, putting the dose and frequency on the labels.
- 4. All doses of each item to be of a single batch. The batch number and expiry date must go on the dispensing label.
- 5. Attach the prescription to the pharmacy record sheet and leave in the home IV antibiotics folder in the dispensary.

<u>Pharmacy Contact Details</u> <u>CDU Contact Details</u>

Pharmacy Ext: 22542/22146 CDU Ext:20231



# 8.3 Appendix 3

# **Community Intervention Team Referral Form**



CIT Referral Form- 0818 37 427 Referrals Faxed to 021- 4840093

ALL FIELDS MUST BE COMPLETED, otherwise patient will not be accepted

Patient Details								
Surname:			Sex:   Male  Female			Next of Kin (NOK) Name:		
Forename:			Address/Discharge Address:			OV Deletienskie () Centect		
DOB:		Addre	255:		No	OK Relationship & Contact o.		
Pt Contact Number:	GMS/DPS/	LTI/PF	PSN:			iving Alone? <b>Yes</b> □ <b>No</b>		
		Dof	orring	Source		165   110		
Referring person & Wa	rd/Hospital			Date of re	forral	Time of referral		
Referring person & Wa	ru/riospical/	rriin, C	Jr	Date of Te	ierrai	Time or referrar		
Ward & MRN (Medical	Records Nu	mber)		ssion date	Consul	tant		
			to ho	spital				
Date to be seen by CIT	GP Name		l	GP Addres	s & cont	act details		
Discharge referral sent		Know	n aller	gies				
□ GP □ Ph □ PHN □ OT								
Relevant Medical/Surg addition, please provid						current diagnosis (In		
Copy of prescription	Has patier				Infection Control Status, MRSA, C-Dif			
supplied?	consented			VRE, Other?				
Hes   No	information	sharing of		Others				
		 □ No						
Mobility Status	Cognitive	Status		Reason	Reason for referral to CIT			
	□ Orienta							
	□ Confuse	ed						
Current vital signs HR BP _				LTOT				
Y / N RR Temp								
Any additional Information/								
Comments								
For CIT Office Use								
Has patient been	Are there				Any additional CIT			
informed of the						mation/comments:		
option to attend CIT clinic for treatment?	to be awa visits?	re or fo	or nom	е				
□ Yes □ No		□ No						

YOU RECEIVE CONFIRMATION BACK FROM CIT THAT THEY CAN ACCEPT THE CARE OF YOUR PATIENT CIT 001-1.1



# 8.4 Appendix 4

# **Pharmacy Pack**

#### **Contents:**

- Home IV antibiotic Prescription
- Antibiotics as prescribed
- Water for injection 20mls per 1 gram vial of antibiotic
- NACL 9% 10ml Amp flush as prescribed



#### 8.5 Appendix 5

#### **CDU Referral Process to CIT**

01

#### **CDU referral process to CIT**

- Contact CIT to discuss capacity and acceptance of referral. Referring team completes CIT Referral Form. See policy for inclusion/exclusion criteria.
- CIT referral form is emailed to CIT including both the antibiotic and anaphylaxis prescription. Baseline observations and level of cellulitis also noted
- CDU staff wll arrange for pharmacy pack to to be dispensed.
- · Email patients GP to inform of discharge arrangement.
- Provide appointment time for patient to return to CDU for review in 72hrs

#### Course of treatment

- Patient will travel to Southside treatment centre for antibiotics.
- Patient will bring pharmacy pack and patient information leaflet with them which includes patient's clinical status, EWS and Adult peripheral venous cannula monitoring chart.
- On completion of treatment after 72hrs the patient will return to CDU with patient information pack for review.
- CIT nurse will provide the patient with a discharge letter
- · Patient is then discharged from CIT's care.
- CIT will be contacted by CDU if a further 48hrs antibiotics are required.

02

03

#### **Deterioration/IV line issues**

- Any deterioration in the patient's clinical status will be reported to CDU for advisement.
- Any issues with IV cannula or if it needs to be re- sited, CIT nurse will contact CDU and the patient will return for re insertion
- Alternatively CDU can contact the AP car, if available, will travel to Southside treatment centre for re- insertion.