

Inclusion Criteria	Exclusion Criteria
<ul style="list-style-type: none"> Confirmed clinical signs of a soft tissue cellulitis. Over 16 years of age but not under the care of a paediatrician. Less than 22 weeks gestation. Patient's medical condition has been assessed as stable, has a clear diagnosis and prognosis and is at a low risk of rapid deterioration. 	<ul style="list-style-type: none"> Facial neck cellulitis and perineum (unless agreed by Infectious Disease Consultant or Clinical Microbiologist). Immunocompromised individual. Evidence of extensive skin necrosis. Rapidly progressive soft tissue infection or impending septic shock (fever >38.5°C, hypotension or tachycardia). Suspected or confirmed immediate penicillin or cephalosporin hypersensitivity (anaphylaxis, angioedema and urticaria) Co-existing medical conditions requiring hospital admission. Cellulitis following specific marine exposure. Cellulitis complicating chronic ulcers. Clinical suspicion or laboratory confirmation of multi-resistant organisms (ie previous Methocillin Resistant Staphylococcus Aureus (MRSA) Infection / colonisation). Necrotic changes to skin or other signs of acute vascular insufficiency.

PATHOLOGY WORK UP

- Blood cultures if temp $\geq 38.5^{\circ}\text{C}$.
- Urea and electrolytes, full blood picture, liver function, and blood glucose level.
- Wound swab if open wound or purulent discharge.
- If microbiology investigations indicate cause other than *Streptococcus Pyogenes* or Methicillin sensitive staphylococcus aureus, consult a Clinical Microbiologist or Infectious Diseases Physician.

***INTRAVENOUS THERAPY AT HOME**

Cephazolin 2grams IV daily plus Probenecid 500mg PO twelve hourly.

SUITABILITY FOR ORAL PROBENECID **drug interactions, use of methotrexate concurrently is contraindicated. Caution with sulphonylureas (monitor blood glucose levels) and caution with benzodiazepines as they increase plasma levels.**

- No known allergy to Probenecid.
- Absence of blood dyscrasia, renal urate stones and acute gout.
- Renal function, creatinine clearance >30mL/min.
- Stable liver function.
- For clients unsuitable for oral probenecid (as outlined above) Cephazolin 2 grams IV twelve hourly.

*For animal or human bites refer to section below on Management of Soft Tissue Infections Associated with Animal or Human bites. (Consult Infectious Disease Physician)

Management of Soft Tissue Infections Associated with Animal or Human Bites	Recommended Medication Regime
<ul style="list-style-type: none"> Assessment of extent of infection and the possibility of involvement of underlying tendon, joint or bone. Wound swab to be taken. Wound debrided and irrigated. Assessment of tetanus immunisation and need for additional tetanus toxoid/immunoglobulin. If human bite consider need for detection and management of blood borne diseases (eg HIV, Hep B), seek advice from Governance Doctor and as necessary Infectious Disease Consultant. 	<p>Intravenous Ceftriaxone 1 gram daily + Oral Metronidazole 400mg twelve hourly.</p> <p>Change to oral therapy when client stable as following:</p> <ul style="list-style-type: none"> If infecting organism clearly identified use oral antibiotic based on culture and sensitivity If infecting agent unknown use amoxicillin + clavulanate acid 875mg/125mg PO twelve hourly If immediate penicillin hypersensitivity use oral metronidazole 400mg twelve hourly + EITHER doxycycline 100mg BD <p style="text-align: center;">OR</p> <p>Trimethoprim + sulfamethoxazole 160mg/800mg orally twelve hourly</p> <p style="text-align: center;">OR</p> <p>Ciprofloxacin 500mg orally twelve hourly</p>

TREATMENT REGIME

- Access pathology results from referral source and if necessary organise blood cultures, wound swab and full blood picture.
- Collaborate with medical governance doctor regarding abnormal pathology results
- Initiate intravenous access and commence intravenous therapy as prescribed.
- Nursing assessment as per Cellulitis Assessment Tool.
- Wound swab taken as indicated.
- If no clinical signs of improvement within three days liaise with Governance GP regarding referral to Infectious Diseases Physician.
- If atypical features consider deep vein thrombosis, venous eczema, septic arthritis, bursitis, gout.
- Advise client to rest with limb elevated.
- Advise client on the use of oral Probenecid if prescribed.
- Advise client on the use of oral analgesia/anti pyretic medication as directed.
- Monitor and advise client on psychological wellbeing and refer to other agencies if evidence of de-compensating mental health.

Consider discharge on evidence of:

- Substantial clinical improvement.
- Resolution of fever/lymphangitis.
- Improvement in local signs of Cellulitis, able to tolerate oral antibiotic therapy – commence oral therapy, Flucloxacillin 500mg QID or Clindamycin 450mg TDS (if penicillin hypersensitivity).
- Clinical deterioration – consult Infectious Diseases Physician/admit to hospital – systemic deterioration including unresolving or worsening fever, tachycardia, hypotension, extension of erythema unresponsive to treatment. Increasing pain uncontrolled by prescribed analgesia.

MEDICAL GOVERNANCE

Client has access to medical governance support twenty four (24) hours per day, seven (7) days a week. Care delivery is planned and provided in consultation with the client, medical officer/specialist holding medical governance and nursing staff. Medical specialists may retain medical governance with treatment interventions delivered by Silver Chain. When governance is retained by a Silver Chain medical officer the client will have a medical review within twenty four (24) hours of admission and scheduled follow-up up as determined by the medical officer for that individual client. In the instance when a client's condition deteriorates the Silver Chain medical officer or nursing staff will confer with an emergency department medical officer. All Silver Chain medical officers are formally credentialed. Silver Chain's medical officer holding governance will determine when the client can be discharged and a summary is sent to the referrer or client's general practitioner.

FOLLOW UP

Refer back to General Practitioner.

REFERENCES

Guidelines for the Treatment and Management of Limb Cellulitis in Adults. Western Australian Therapeutics Advisory Group, June 2006

Therapeutic guidelines: Version 13. 2008.

Hospital in the Home Principles and Practice, Michael Montalto 2002.

ACKNOWLEDGEMENTS

Dr Duncan McLellan – Infectious Diseases Physician