Necrotising Fasciitis Pathway UHL Guideline

University Hospitals of Leicester NHS
NHS Trust

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1. Introduction

Necrotising fasciitis is a devastating, albeit relatively rare, condition.

Necrotising fasciitis is a synergistic bacterial infection that affects the soft tissue and fascia (a sheet or band of fibrous connective tissue separating or binding together muscles and organs). It can occur following a cut or some other opportunity for the bacteria to enter the body, such as surgery.

Patients who are at high risk of this condition include those who use drugs of abuse, have diabetes mellitus or atherosclerotic vascular disease and patients with reduced immunity. In post natal patients there should be a high index of suspicion if the woman presents with a wound infection or an abnormal appearance of the wound during the early phases of healing. Another area where diagnostic difficulty can be encountered is that of cellulitis. In patients with cellulitis who have sepsis out of proportion to the apparent clinical signs, necrotising fasciitis should be actively excluded.

Due to the different clinical areas to which patients with necrotising fasciitis can present, and with the sometimes difficult diagnosis, one of the greatest risks to effective management is a delay in taking clinical ownership. This guideline clarifies this aspect of management.

2. Scope

All clinical areas where patients may present with necrotising fasciitis (specifically the Emergency Department, General Surgery, Urology, and Trauma & Orthopaedics). In addition this applies to Medical areas where patients present with cellultis and there can be diagnostic uncertainty.

3. General Principles,

Patients presenting with necrotising fasciitis usually, but not always, present with signs of sepsis and the sepsis care pathway should be enacted. The pathway states that source isolation and control is a vital component of management and necrotising fasciitis should be recognised as the source of the sepsis. Source identification and control is time critical, especially when dealing with necrotising fasciitis. The diagnosis can be difficult at times a high index of suspicion especially if the patient's pain is out of keeping with the clinical signs, there is blistering of the skin (especially if the blisters contain dark fluid) or there is subcutaneous emphysema.

Speciality referral should be anatomically based, the rationale being that the given speciality will be familiar with the anatomy of that area and the interests of the patient will take precedence over which speciality will take the patient if there is doubt at the boundaries of the anatomical areas:

- Trunk and perineum (including axilla, groin and buttock above infra-gluteal fold) – General Surgery
- Scrotum - Urology
- Lower Limb (including buttock below infra-gluteal fold) – Orthopaedics
- Upper Limb
- - Mon to Thurs - Orthopaedics.
  - Fri to Sun - Plastics (i.e. the same arrangement as for hand trauma)
- Head and Neck – ENT
- Vulva and Vagina - Gynaecology

The first speciality seeing the patient takes responsibility for the patient's care until the patient is accepted by another specialty. In particular this will mean:

- Inform the relevant consultant
- Booking for theatre
- Involving plastics for second opinion, when needed
- Involving critical care
- Discussion with microbiology (about samples to send, antibiotic regimen, IgG)

Plastic Surgery should be contacted for advice and will attend on request, if there is diagnostic doubt or for help with debridement and/or reconstruction in all patients.

Review should take places as soon as practically possible, up to a maximum of one hour from referral, in cases where there is a reasonable suspicion of NF.

The relevant Consultant should be contacted as soon as NF is suspected and should make the decision around who needs to lead the theatre team and who needs to be involved in the patient's care

In palliative care situations the lead should be taken by the owning physician, appropriately supported by the palliative care team if necessary.

A multi-disciplinary team approach working with microbiology, intensive care and other surgical specialities as necessary is essential to giving the patient the best chance of survival.

Time to Theatre – Aim is within 30 minutes from decision to operate (i.e. in line with the Level 1 emergency standards)

5. Monitoring and Audit Criteria

Element to be Monitored	Lead	Method	Frequency	Reporting arrangements
Lead Speciality confirmed without delay	DMD supported by HOE	Retrospective case note audit	Annually	MRC and Specialities
Theatre within 30 minutes of decision to operate	DMD supported by HOE	Retrospective case note audit	Annually	MRC and Specialities

6. Supporting References

UHL Watershed Policy

7. Key Words

Necrotising Fasciitis

CONTACT AND REVIEW DETAILS	
Guideline Lead (Name and Title) Rebecca Broughton, Head of Outcomes & Effectiveness	**Lead Committee or Executive Lead** Deputy Medical Director / Mortality Review Committee
Date of Next Review by Approval Committee: December 2017	**Details of Changes made during review:** 'Can' changed to 'Should' contact Plastic Surgery and requirement for them to attend if required added. June 16