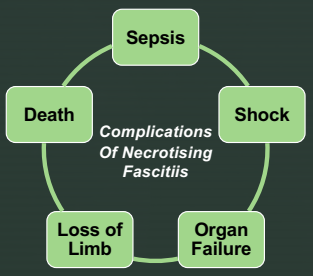
Cascade of surgical complications: A case of Necrotising Fasciitis

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Introduction

- Necrotising fasciitis (NF) is a rare life-threatening bacterial infection resulting in soft-tissue death
- 500 cases every year in the UK
- Most common cause: **Group A *streptococcus* infection**[1]
- Symptoms
  - Early (up to 24hr): intense pain, fever, flu-like symptoms, erythema mostly affecting limbs and perineum
  - Advanced (3-4 days): swelling and blistering of affected area, diarrhoea, vomiting
  - Critical (up to 5 days): severe hypotension, toxic shock, unconsciousness



Definitive treatment → emergency surgical debridement + empirical antibiotics



1 in 3 people with necrotising fasciitis will die from the infection[2]



6 out of 10 patients with necrotising fasciitis and streptococcal toxic shock syndrome at the same time die[2]

Patient Background

Patient Background
• **Presenting complaint:** 60 year old retired female who presented with non-specific abdominal pain, distension, haematemesis, fever and chills to SEAU
• **Past medical history:** Hypertension, 2 strokes and hypothyroidism. She has a complex surgical history including a hiatus hernia repair and bowel resection for colon cancer.
• **Allergies:** adverse reaction to ibuprofen, codeine and aspirin
• **Family history:** malignant hyperthermia; identified as high risk for anaesthesia
• **Social History**: Independent in her activities of daily living

12 week patient journey

On Admission
- Emergency Laparotomy due to multiple small bowel (SB) perforations requiring resection

Week 1-4
- ITU stay
- 14 theatre visits for a washout, surgical debridement of NF and negative pressure VAC dressing change
- Developed fistula of SB due to erosion from the VAC dressing

Week 8
- Proximal jejunostomy in situ (used for feeding as well)

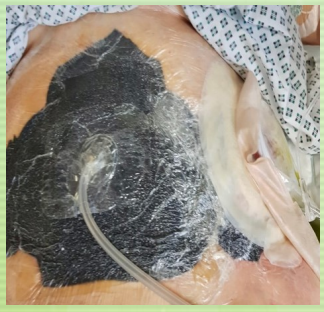
Week 12
- Transferred to St Marks for a joint abdominal wall reconstruction with plastic surgeons



On admission: surgical debridement



Week 4: post surgical debridement



Week 6: negative pressure VAC dressing



Week 8: jejunostomy in situ

Significance of Case

- There are no public health guidelines specific to the prevention and control of NF [3]
- Currently it is treated according to the guidance for the management of infections caused by Group A *streptococcus pyogenes*[3]
- There are no surveillance programmes to monitor the data on cases of NF caused by all possible organisms
- NF is associated with high mortality, high morbidity [4] and severe complications. Therefore, there needs to be further research into devising a national guideline for treating NF.

Learning points:

- **Uncommon disease with high mortality (25-35%); diagnosis can be difficult and acting fast is key**
- **High level of suspicion + low threshold for surgical referral for cases with pain, fever, erythema**

References

1. Paz Maya, S; Dualde Beltrán, D; Lemercier, P; Leiva-Salinas, C (May 2014). "Necrotizing fasciitis: an urgent diagnosis". Skeletal Radiology. 43 (5): 577–89. doi:10.1007/s00256-013-1813-2. PMID 2446915
1. https://www.cdc.gov/groupastrep/diseases-public/necrotizing-fasciitis.html
2. https://www.gov.uk/guidance/necrotising-fasciitis-nf
3. Pattern and predictors of mortality in necrotizing fasciitis patients in a single tertiary hospital. Gaby Jabbour,Ayman El-Menyar, Ruben Peralta, Nissar Shaikh,Husha Abdelrahman, Insolvisagan Natesa Mudali,Mohamed Ellabib,and Hassan Al-Thani