A 25 year-old female Type 1 diabetic managed by insulin pump presented with a 1 week history of malaise, fever and lethargy associated with back pain. No other focal symptoms.

On examination, her abdomen was described as ‘diffusely tender’ and a urine dipstick was positive for leucocytes.

She was diagnosed and treated for a urinary tract infection.

By the next morning she had deteriorated. Features of sepsis and pain were now disproportionate to clinical signs.

On performing personal care, nursing staff noticed an odd area on her buttock. Clinician review confirmed an area of necrotic tissue, surrounded by spreading cellulitis but no crepitus.

We immediately suspected necrotising fasciitis and instigated appropriate emergency treatment, investigation and referrals.

CT imaging requested by the surgical team, reinforced the suspicion of necrotising fasciitis (see images).

She was taken to theatre for immediate laparotomy, retroperitoneal debridement, appendicectomy, de-functioning colostomy and debridement of perineum.

Further CT scanning and debridement occurred due to ongoing features of systemic inflammatory response syndrome.

The patient required ICU care for organ support and ultimately survived to be discharged home.

Despite review by three doctors the degree of sepsis was underestimated and the source not found.

With hindsight a comprehensive, systematic exposure and examination had not been completed. Failure to expose resulted in a delay of diagnosis and treatment.

In some cases of sepsis, identification and surgical control of the source is vital to prevent death 1,2.

Clinical findings in necrotising fasciitis
- Infection, necrosis of fascia & subcut tissue with relative sparing of underlying muscle.
- Signs of sepsis are disproportionate to the clinical findings or size of source you can see.
- Pain is also often disproportionate - its really hurts!
- The patient might walk in but rapidly deteriorate in front of you.
- The absence of palpable crepitus and gas in the soft tissues does not exclude it.
- Diagnosis remains a clinical one – A high index of suspicion is therefore required.
- Involve the senior surgeon and senior anaesthetist early.

Necrotising fasciitis is a rare, rapidly progressive soft tissue infection with high lethality.

There are some clinical findings traditionally associated with necrotising fasciitis, several of which were present in this case, none are particularly sensitive 3.

Diagnosis requires a high index of suspicion.

This case highlights the importance of full exposure on clinical examination.

This is particularly important if the patient is acutely unwell or the presentation is atypical.

Our patient complained of lower back and buttock pain on presentation but the area was not formally examined at that time.

Acute physicians must remain vigilant to serious surgical pathology.