Cellulitis: An Atypical Presentation

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Citation

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Abstract

We report a unusual case of cellulitis , which clinically resembled necrotizing fascities, but histology did not confer with the clinical diagnosis. However patient improved with thorough debridement and simple antibiotics.

CASE REPORT

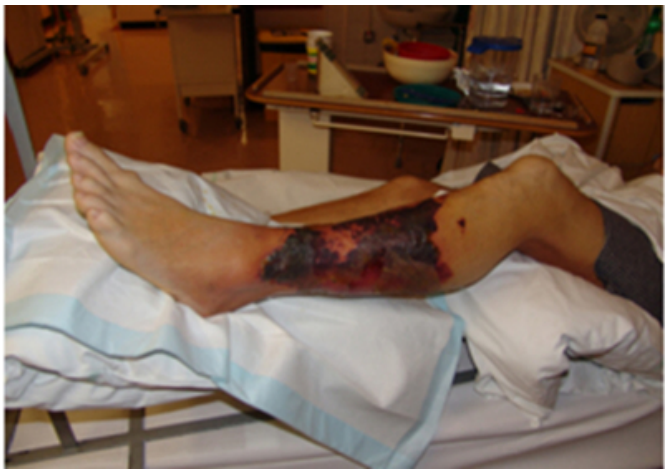
A 58 years old man presented with cellulitis of the left leg for last 3 days. He had started ciprofloxicin prior to his admission. The cellulitis initially limited to a small area of redness around his left ankle. This was associated with chills and rigor, and swelling of his left inguinal lymph node. He couldn't recall of any trauma or insect bite over his leg, nor did he have any past medical history of any chronic diseases. Over a period of 3 to 5 days the whole of the lower leg was involved, which was red and brawny to start with but later developed dark bluish-black hemorrhagic patches with blisters, over almost three quarters of his left lower leg. He was initially started on intravenous benzylpennicillin and flucloxacillin, but later changed to clindamycin.

The swabs and blood culture send on admission, and subsequently during his stay in the hospital, failed to grow any organisms. CRP was raised, but no other blood abnormality noted. The working diagnosis of necrotising fascitis was made, and a thorough debridment was done.

Biopsy revealed oedema and haemorrhage in papillary dermis, with vascular ectasia and inflammatory cell, appearances not suggestive of necrotising fascitis. The inflammation was limited to dermis, with no evidence of extension to the fascial planes.

The patient made steady progress and was sent home on oral clindamycin. Follow –up showed complete recovery.

Figure 1



DISCUSSION

Cellulitis is an acute inflammatory condition of the skin characterised with localised pain, erythema, swelling and heat.

Our concern in this patient was Necrotizing fascities (NF), also called streptococcal gangrene, may be associated with Group A streptococcus or mixed aerobic-anaerobic bacteria or as a part of gas gangrene caused by Clostridium perfringens. There is extensive thrombosis of blood vessels in the dermal papilla, with extension to the deep fascia, & rapid spread along the fascial planes, through venous channels & lymphatics. However, our patient didn't meet the criteria of NF as it didn't progress along the fascial planes.

Patients in the late stages of NF are usually toxic and manifest shock and multiorgan failure. The bacterial aetiology of cellulitis is difficult to establish. Even with needle aspiration of the leading or a punch biopsy of the tissue, cultures are positive in only 20% of cases. These observation suggest that relative a low number of bacteria

may cause cellulitis and the erythema within may be a direct effect of extracellular toxins or of the soluble mediators of inflammation elicited by the host. However history plays an important role as to the nature of the organism. Many papers have cited severe local pain, which is out of proportion to the size and type of wound is a hallmark sign in NF. The pain was never a problem with our patient. Simple analgesics provided adequate pain control.

Newer methods of diagnosis for NF involve tissue oxygen saturation monitoring with the help of near-infrared spectometry and Magnetic resonance imaging (MRI). Maganetic resonance imaging with gadolinium contrast determines the presence of necrosis and the extent of fascial involvement, hence helpful in planning surgery. However, it remains to to be globally accepted and standardized. Tissue saturation with the help of near-infrared spectrometry is still largely unavailable, due to its high cost of the technologies involved.

Although we were unable to establish a bacteriological aetiology, the simplest course for us was to do a early thorough debridement and fasciotomy, which in itself was curative.

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