

# Necrotising fasciitis

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*Sri Lanka Journal of Child Health*, 2000; **29**: 32

(Key words: Necrotising fasciitis, streptococci, abscess formation)

## Abstract

The first documented case of necrotising fasciitis following  $\beta$  haemolytic streptococcal septicaemia is reported. An 8 year old boy presented with fever, chills and rigors and difficulty in walking. On admission he was found to have severe myalgia with evidence of cutaneous bleeding. Later he developed a brawny swelling over the anterior aspect of right upper thigh. Blood culture grew mucoid colonies of haemolytic streptococci, which were of Lancefield group A. He was treated successfully with intravenous cefuroxime and oral erythromycin.

## Case report

An eight year old boy from Kalutara was admitted to the Professorial Paediatric Unit of Lady Ridgeway Hospital in May 1995. Pain over the right knee joint at the onset associated with fever and generalised myalgia following a fall six days earlier was his presenting complaint. Prior to admission he was treated with diclofenac sodium and later with oral penicillin, for which he developed a rash on his cheeks within 12 hours.

On admission he had an oral temperature of 39<sup>0</sup>C, was flushed with an erythematous rash over the face and severe myalgia. Liver was palpable 4cm and spleen 2cm below the respective costal margins with axillary and inguinal lymphadenopathy. He was started on intravenous cefuroxime and oral erythromycin.

During the course of his illness he developed superficial haemorrhages over the lateral aspect of the right ankle, left heel and a brawny swelling over the anterior aspect of the right upper thigh. Blood culture grew mucoid colonies of  $\beta$  haemolytic streptococci, which were confirmed to be of Lancefield group A, and sensitive to penicillin. The bleeding time was over eleven minutes and the platelet count was  $96 \times 10^9/L$ , suggestive of disseminated intravascular coagulation.

Platelet rich plasma and fresh frozen plasma were transfused as therapeutic measures. Ultrasound examination of the thigh showed necrosis of muscle and abscess formation around the upper right femur, which was shown to resolve on repeated ultrasound scans done

every fortnight. With early effective antibiotic therapy and physiotherapy he made an uneventful recovery without surgical debridement.

## Discussion

Necrotising fasciitis following infections was first described in 1924<sup>1</sup>. In a recent review of 58 cases from Taipei, the most frequently isolated bacteria were *Escherichia coli*, *Proteus mirabilis*, *Klebsiella*, *Streptococcus pneumoniae* and *Staphylococcus aureus*<sup>2</sup>. Sporadic cases due to haemolytic streptococci have been reported. The Gloucestershire outbreak of May 1994<sup>3</sup> was caused by haemolytic streptococci of Lancefield group A and caused widespread panic as it received publicity in the media as a flesh eating bacteria.

Perusal of the literature revealed only one case without precipitating skin trauma in a child<sup>4</sup>. Though there was a history of a fall in our patient, there was no visible trauma to the skin. Risk factors implicated are diabetes mellitus, intravenous drug abuse, age over 50 years, hypertension, and malnutrition/obesity<sup>5</sup>. The M types of  $\beta$  haemolytic streptococci isolated abroad have been 1, 3 and 5, which produce mucoid colonies<sup>3</sup>. In Sri Lanka M types 78 and 25 have been isolated earlier.

## References

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