

# Postpartum Necrotizing Fascitis Of Right Leg Necessitating Above Knee Amputation

P Chinnachamy, J Sharma, S Kumar, K Roy, N Malhotra, S Chumber

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## Abstract

## INTRODUCTION

Necrotizing fascitis is an uncommon infection of the subcutaneous tissues and superficial fascia, characterized by a tendency for rapid and diffuse spread, systemic toxicity, fulminant course and a high mortality rate.<sup>1</sup> Cases have been reported after gynecological surgeries, caesarean sections, tubal ligation, and episiotomy and even after normal puerperium.<sup>2</sup> Postpartum necrotizing fascitis in otherwise healthy women after vaginal delivery has been reported, with mortality approaching 50%.<sup>3</sup> We present a case of postpartum necrotizing fascitis after an uneventful vaginal delivery necessitating above knee amputation after failure of conservative treatment

## CASE REPORT

A thirty years old fourth para presented 15 days after an uneventful vaginal home delivery bluish discolored, painful right lower limb. She had high grade fever from 6<sup>th</sup> day of puerperium along with progressively deepening jaundice. She had also developed pain and edema in her right lower limb, progressively worsening with bluish red color change and peeling of skin. At the time of admission, she was conscious and oriented; she was icteric, severely anaemic and was running high grade fever of 102°F. Pulse rate was 120 per minute, blood pressure was 90/60mm of Hg and respiratory rate was 40 per minute. Her right lower limb was edematous, foul smelling, cold to touch with bluish red patches, distal pulses were palpable at right dorsalis pedis and sensations were intact. Mobility was restricted. No other focus of infection was detected other than a foul smelling lochia. Uterus was empty. Her Hb was 5.5g%, Total Leukocyte Count- 19500, PT- 13"/17", Serum bilirubin -1.7mg%. Urgent Doppler ultrasound of the lower extremities revealed normal arterial flow and collapsible, good flow in mid thigh veins; lower leg veins couldn't be

assessed due to the edema. Provisional diagnosis of deep vein thrombosis was made and patient was started on continuous heparin infusion. She was given 2 units of packed red blood cells and was started on intravenous cefotaxime, metrogyl and gentamicin, later changed to cefoperazone and sulbactam based upon wound culture and sensitivity which showed a mixture of gram negative bacteria. High vaginal swab revealed Klebsiella. Blood culture was sterile. A week passed; her fever spikes didn't come down. Total Leukocyte Count kept on increasing unto 30,000; the affected limb worsened day by day, skin peeled off, blebs appeared, burst and plasma was continuously oozing, patches of gangrene started appearing (figure 1).

Figure 1



Figure 1: showing necrotizing fascitis of the right leg with peeling of skin and patches of gangrene

Her supportive therapy including heparin, antibiotics, albumin and daily wound care didn't bring her out of the sepsis, the limb becoming deadly, endangering her life. After seven days of extensive conservative treatment, with

fulminating sepsis, a final diagnosis of necrotizing fascitis was made. Heparin was stopped; prothrombin time normalized by fresh frozen plasma transfusion and on 8<sup>th</sup> day of admission, above knee amputation of right lower limb was done with debridement of remaining areas.

Postoperatively serial wound debridement was done, antibiotics continued for two more weeks. Patient improved dramatically, given prosthesis, advised physiotherapy and discharged in a stable condition.

### **DISCUSSION**

Although *Streptococcus pyogenes* is the commonest causative agent, other micro organisms like *Staphylococcus*, *Bacteriodes* and polymicrobial organisms have also been isolated. *Streptococcus pyogenes* usually causes puerperal sepsis with necrotizing fascitis, myositis, shock and even multiorgan failure. Clad et al<sup>4</sup> has even reported fatal puerperal sepsis with necrotizing fascitis due to *Streptococcus pneumonia*. Treatment involves broad spectrum antibiotics; operative wound exploration to confirm the diagnosis, determination of the extent of soft tissue involvement, repeated and widespread debridement of all infected and necrotic tissue until infection is controlled and rarely open limb amputation in the presence of failure of conservative treatment and persistent fulminant infection

despite repeated debridement. In the above case, the sepsis was due to *Klebsiella* and the involvement had a line of demarcation without involving perineum, resulting in a fulminant life endangering situation requiring amputation to save the life, a treatment also resorted by McHenry<sup>5</sup> in one of his patients.

### **CONCLUSION**

Postpartum necrotizing fasciitis is an uncommon condition. Its course is more aggressive in obstetric patients because of their immunosuppressed status. Early identification and appropriate wound debridement is the key. In severe cases, leg amputation may be life saving.

### **References**

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**Author Information**

**Priya Chinnachamy, MD**

Department of Obstetrics and Gynaecology, All India Institute of Medical Sciences

**J. B. Sharma, MD MRCOG**

Assistant Professor, Department of Obstetrics and Gynaecology, All India Institute of Medical Sciences

**S. Kumar, MD**

Professor, Department of Obstetrics and Gynaecology, All India Institute of Medical Sciences

**K. K . Roy, MD**

Additional Professor, Department of Obstetrics and Gynaecology, All India Institute of Medical Sciences

**N. Malhotra, MD MRCOG**

Associate Professor, Department of Obstetrics and Gynaecology, All India Institute of Medical Sciences

**S. Chumber, MS**

Additional Professor, Surgery, All India Institute of Medical Sciences