

A CASE OF NECROTIZING FASCIITIS DEVELOPED AFTER TENOXICAM INJECTION^a

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Keywords

Tenoxicam Injection,
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ABSTRACT

Necrotizing fasciitis is a rapid and mortal subcutaneous infection that is observed in the superficial fascia and settles in the tissues between the skin and deep muscle layers. Although its incidence is 0.4 per 100 thousand cases, its overall mortality is as high as 52%. It should be considered when clinically severe pain and systemic toxicity are encountered. It was observed that our case was in septic shock, and the patients clinical condition progressed aggressively in the emergency department follow-up. In this article, a 55-year-old patient who developed necrotizing fasciitis as a result of tenoxicam injection and underwent debridement is presented.

INTRODUCTION

Necrotizing soft tissue infections are a group of diseases with sudden onset and rapidly worsening, widespread soft tissue necrosis and systemic toxicity with high mortality¹. These Infections may initially appear benign. Risk factors for necrotizing soft tissue infections; advanced age, diabetes mellitus, alcoholism, peripheral vascular disease, heart disease, kidney failure, human immunodeficiency virus (HIV), cancer, NSAID use, decubitus ulcers, chronic skin infections, IV drug use and immune system disorder².

CASE

A 55-year-old male patient applied with the complaints of swelling, pain and redness in the right hip after tenoxicam injection, which was administered at home one week ago. He had no known chronic disease. Examination findings include painful joint movements in the right hip and knee, ecchymotic appearance in the right hip, swelling, redness. There was widespread tenderness and crepitation in the lateral thigh and hip. The general condition of the patient was moderate when he came

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to the emergency department; blood pressure: 100/60 mmHg, pulse rate: 98/min and rhythmic, fever: 38.2C°, respiratory rate: 22/min. Laboratory findings; leukocytes: 26.5x10³/L(4000-10000), hemoglobin: 6.5 g/dL(11-15), CRP: 279 mg/L(0-5). In the emergency superficial US examination, fluid reaching 2 cm in width in its widest part was observed in the right gluteal region. On this background, the skin had a subcutaneous voluminous, edematous appearance. Computed tomography imaging of the pelvis and lumbosacral region with the preliminary diagnosis of necrotizing fasciitis showed a collection containing free air near the right gluteal region, heterogeneity and dirty appearance in the subcutaneous tissue, free air values between the muscle planes of the right thigh. The patient was given meropenem 2 gr, vancomycin 1 gr, clindamycin. 500 mg was started. The patient with low hemoglobin was given 2 units of erythrocyte suspension. Plastic surgery was consulted. The patient diagnosed with necrotizing fasciitis was taken to emergency surgery for debridement. The patient was followed up by plastic surgery for about 50 days and was discharged with full recovery.

DISCUSSION

Necrotizing soft tissue infections are mostly polymicrobial. These microorganisms are gram positive cocci, gram negative bacilli and anaerobes. Monomicrobial infections are caused by group A streptococci. It is mostly seen in people who have a history of trauma or who have had a recent operation from the infection site. Community-acquired MRSA is particularly common in IV drug users, athletes, and hospitalized patients. The rapid necrotizing process typically results from an external trauma (IV injection, surgical incision, abscess, insect bite, ulcer) or begins with direct invasion of subcutaneous tissue, spreading through hollow organ perforation^{1,3}. Skin involvement develops secondary to vasculitis and thrombosis of blood vessels. There is little skin change in the early stage to show the extent of the infection, as multiple capillary beds must be thrombosed before skin manifestations develop.

As the disease progresses, diffuse gangrene occurs in the skin, subcutaneous fatty tissue, fascia and skeletal muscle. Clinical symptoms are severe pain, anxiety and sweating. Pain is usually hypersensitive in the area of erythema

and is disproportionate to physical examination findings^{4,5}. Therefore, it is the most important feature in early diagnosis. Therefore, emergency surgical consultation and surgical intervention are the main treatment. The patient was followed up by plastic surgery for about 50 days and was discharged with full recovery.

On examination, subcutaneous edema that does not easily collapse with pressure in the painful area can be seen and there may be crepitation caused by bacterial gas production. The main symptoms of necrotizing fasciitis are crepitation, skin necrosis, bullae, hypotension and gas on the radiograph.

Gas may not always be seen on the radiograph. Contrast-enhanced CT is the most sensitive method in necrotizing fasciitis. The most reliable indicator of necrosis in CT is the deep tissues that are not enhanced. Due to tissue ischemia in necrotizing skin infections, the immune system cannot destroy bacteria and prevents antibiotic activity⁶.

CONCLUSION

Necrotizing fasciitis is a rare but progressive and fatal soft tissue infection. Despite all the interventions, effective treatment protocols and patient care, it is a disease that is difficult to manage. It should never be forgotten that it progresses with high mortality despite early diagnosis and treatment.

Image 1. Case of necrotizing fasciitis developed after tenoxicam injection



Image 2. Abdominal CT scan detecting intramuscular free air. Subcutaneous emphysema of the right thigh root.

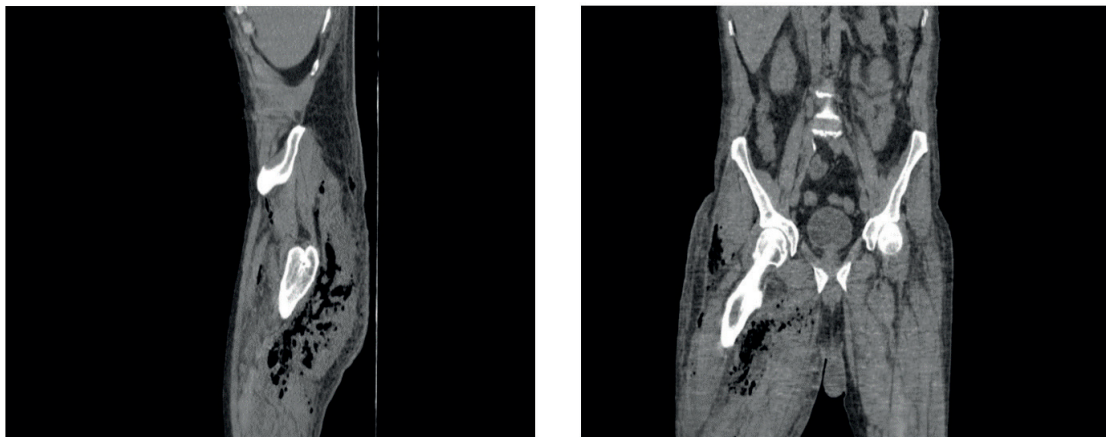


Image 3. First day after surgical debridement



Image 4. Granulation tissue after debridement postoperatively



Conflict of interest statement

The authors declare that they have no conflicts of interests.

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