



DIABETIC FOOT WITH NECROTISING FASCIITIS IN A 31 YEAR OLD DIABETIC FEMALE - A CASE REPORT.

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ABSTRACT INTRODUCTION

Diabetic foot can be defined as an infection involving the foot due to chronic or acute injury to the soft tissues of the foot with evidence of pre existing sensory neuropathy, micro vasculopathy and immunodeficiency. Angiopathy and neuropathy are relatively common complications of diabetes mellitus (DM), causing diabetic foot, which brings enormous social and economic pressure to the patients. Diabetic foot ulcers combined with necrotizing fasciitis has rapid onset, involves a wide range of lesions. Necrotizing fasciitis is a rapidly progressive life-threatening infection. The risk factors for necrotizing fasciitis are diabetes, immunosuppression, hypertension, chronic renal failure. It causes systemic toxemia, septic shock and multiple organ dysfunctions increasing the mortality rate to 15% to 35%.

KEYWORDS :

CASE REPORT

A 31 year old young female who is a known diabetic since 5 years presented with infection of the right foot with a non healing ulcer over dorsum for 2 weeks duration and edema involving her right leg. The patient had a history of poorly controlled diabetes and is on oral antidiabetic drugs. She had a history of fever with foul smelling discharge from the ulcer.

Clinical Examination

An oval shaped ulcer of size 15x10 cms present over the dorsum of the foot extending till the ankle and also involving sole of the foot. The floor of the ulcer showed extensive slough with foul smelling purulent discharge. Edges were edematous.

Investigations

She was initially investigated for hemoglobin(HB)7.5 gm/dl , white blood cells(WBC)16550 cells/cu mm, red blood cells (RBC) 3.0 millions/cu mm, DLC P 80%, L 15.2%, E 2.5%, M 2%, B 0.7%, high sensitive CRP 30 mg/dl, FBS 220 mg/dl, PPBS 420 mg/dl, HBA1C 10.9% . She also had Dyslipidemia.

Urine ketone body (U- KET)-negative. 24 hrs urinary protein –924 mg /day (N<100mg/day), Renal function test (RFT) –Blood urea –28, S.creatinine- 1.2mg/dl.

Pus for Culture and Sensitivity –Positive for Proteus Mirabilis (G-ve) Antibiotic sensitivity showed sensitive for Piperacillin and Tazobactam and Amikacin.

Non invasive ultrasound-Atherosclerosis of distal arteries in both legs, Ankle Brachial Index was normal. X ray of the right foot showed osteomyelitis of first four toes with low density shadows in the right foot and ankle.

Operative Procedure&Findings:

After taking consent from the patient, she was initially considered for disarticulation of first four toes with extensive debridement of the ulcer on the dorsum of right foot. All the necrotizing tissue on the back of the foot was widely debrided making the foot an open wound. She was started on broad spectrum intravenous antibiotics, 2 units of packed cell transfusion, limb elevation was done. She was advised to take high protein diet. Dexamethasone injection was included in the treatment for a period of 5 days with careful monitoring of blood sugar levels to gain anti inflammatory effect and to minimize the local tissue destruction, amputation of the foot.

Wound dressings were done with papain urea debriding ointment followed by povidone iodine and ornidazole gels. After controlling the infection, topical phenytoin sodium was used to promote fibroblast proliferation and neo vascularization. After the promotion of granulation tissue, SSG was done thus preventing her foot from amputation.



DISCUSSION

Incidence of necrotizing fasciitis in diabetic patients is 40-60%. Early recognition and treatment with systemic antibiotics after antibiotic sensitivity testing is done. Extensive debridement with enough room for drainage and relieving compartmental pressure is important. Dexamethasone can be used for anti-inflammatory effect and prevention of tissue destruction, amputation and death. In these patients, angiogram with angioplasty can be done for improving the blood supply to the lower limb and for quick healing of the ulcer.

CONCLUSION

Diabetes Mellitus causes a great burden on the quality of life and financial status of the patient. In diabetic foot conditions especially in young adults, the need for amputation can be prevented by early identification, careful physical examination, proper foot care, broad spectrum antibiotics, necessary surgical treatment and regular dressings.

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