

**A CASE REPORT ON SKIP LESION / SKIP ABSCESS IN DIABETIC FOOT****\*Dr. Saravana Kumar, MS., DA, <sup>1</sup>Dr. S. M. Kannan MD and <sup>2</sup>Dr. P. Isakkirajan**

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**ABSTRACT**

Incidence of diabetes is increasing these days. The diabetic foot ulcer is the most common complication due to diabetic neuropathy. A diabetic patient with diabetic foot ulcer presented with metastatic abscess in the thigh. The metastatic abscess is a rare complication of diabetic foot ulcer.<sup>[1]</sup> Cases of infected diabetic foot ulcer leading to metastatic abscess have been reported previously.<sup>[2]</sup> A 52 years old male, known diabetic for past 12 years, with right foot diabetic ulcer on treatment for past 10 days, was admitted with fever with chills and rigors and swelling in the lateral aspect of the right thigh. MRI thigh showed an intramuscular abscess in the thigh. Patient was diagnosed to have metastatic abscess with right diabetic foot ulcer. Patient was treated with thorough wound debridement and incision and drainage of the abscess cavity under spinal anesthesia. Patient improved symptomatically after clearance of infection.

**INTRODUCTION**

Diabetes is a group of disorder characterized by hyperglycemia and insulin resistance or insulin deficiency. The common complications of diabetic foot ulcers are peripheral vascular disease, diabetic neuropathy, diabetic retinopathy and localized and generalized infection, that can lead to increase in morbidity and mortality and also increased number of amputations.<sup>[3]</sup> Epidemiological studies shown that the number of diabetic patients increased from 30 million cases in 1985 and 177 million in 2000, 285 million in 2010 and more than 360 million cases are expected in 2030.<sup>[4]</sup> Diabetic neuropathy affects the nerves of the foot and decreases the perception of pain and pressure. Nerve damage, poor blood circulation and chronic hyperglycemia increases the risk of foot ulcer.<sup>[5]</sup> The diabetic foot ulcers are categorized based on severity grade, provide prognosis on healing and in determining the treatment plan.<sup>[6]</sup> The preventive strategies for diabetic foot ulcers are cost-effective, diabetic foot ulcers still occur frequently and are a challenge for the individual and for the healthy system.<sup>[7]</sup>

**CASE HISTORY**

A 52 years old male, known diabetic for past 12 years, with right foot diabetic ulcer on treatment for past 10 days, was admitted with fever with chills and rigors.

**EXAMINATION**

On examination, tachycardia was present. On local examination, a swelling of size 4 \*3 cm noted in the anterolateral aspect of the right thigh with signs of

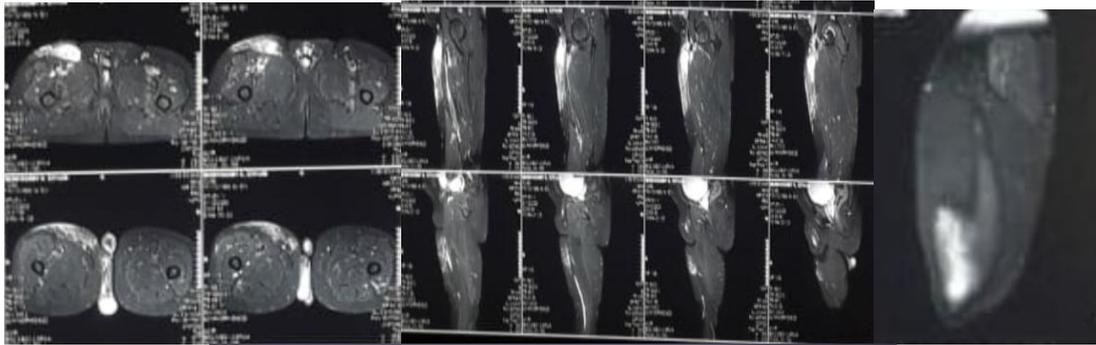
inflammation. Right inguinal lymph nodes are enlarged and palpable. Ulcer present over the dorsum of the right foot, extending from little toe of the right foot to 5 cm from the ankle joint. While the region between the right foot diabetic ulcer and the thigh abscess was normal.

**INVESTIGATION**

Total leucocyte count was done and it was elevated. Sugars are present in his urine and Random blood glucose was also elevated. MRI right thigh and inguinal region was done, this revealed the presence of intramuscular abscess in the lateral aspect of the right thigh

measuring about 3.70 \* 2.30cms with enlarged right external iliac, internal iliac and inguinal group of lymph

nodes with suppuration. Pus culture and sensitivity.



URINE CULTURE AND SENSITIVITY  
CULTURE YIELDS MODERATE GROWTH OF KLEBSIELLA

HIGHLY SENSITIVE TO (in mm)	MODERATE SENSITIVE TO	RESISTANT TO
CIPROFLOXACIN - 29mm	AZITHROMYCIN - 15mm	CINDAMYCIN
LEVOFLOXACIN - 25mm	TOBRAMYCIN - 14mm	CEFOTAXIME
PIPERACILLIN+ SULBACTAM - 24mm	CLARITHROMYCIN - 14mm	GENTAMICIN
CEFOPERAZONE+ SULBACTAM - 23mm	CEFUROXIME - 14mm	MEROPENEM
PRULIFLOXACIN - 22mm	TIGECYCLINE - 13mm	LINEZOLID
IMIPENEM - 19mm	AMOXYCLAV - 13mm	CEFTRIAZONE
	NETHMICIN SULPHATE - 12mm	AMIKACIN

### TREATMENT

Patient was planned to be treated as in patient and was admitted. Under spinal anaesthesia, thorough wound debridement done along with drainage of the intramuscular abscess and inguinal node excision to clear the infection. Patient was treated with intravenous antibiotic according to the pus culture and its sensitivity. IV fluids are given to maintain the hydration of the patient. Nutrition supplementation to improve the nutrition status of the patient. Insulin is administered to achieve the glycemic control.

### INTRA OPERATIVE FINDINGS

- Pus with unhealthy tissues around little toe with pus extending to mid-dorsal region and extends upto the ankle joint both medially and laterally.
- Thigh :
  - Vertical incision is made and pus was found to be in the vastus lateralis muscle.
- Lymph node was untouched.



(diabetic foot ulcer with abscess in the thigh)

### OUTCOME

- Patient, fever settled after 48 hours and got discharged on the 4th post-operative day.
- Inguinal swelling reduced.
- Wound inflammation reduced.

## DISCUSSION

Metastatic infection is a rare complication of diabetic foot ulceration.<sup>[9]</sup> The metastatic infection can present as an intra-muscular abscess in thigh or even as a spinal abscess presenting with paraplegia. The common sites of metastatic infection are psoas muscle, kidney, eyes, joints and epidural space. The most common organism identified to cause metastatic infection is *Staphylococcus aureus*.<sup>[1]</sup> Sometimes patient needs medical management or aggressive surgical management as life saving procedure.<sup>[8]</sup>

## CONCLUSION

Diabetic foot ulcers need careful examination to rule out multiple foci of infection in order to get a good treatment outcomes and speedy recovery.

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