



MANAGEMENT OF 25 CASES OF DIABETIC FOOT PROBLEMS

Dr Sandipkumar Chaudhari*

(MS, FMAS, FIAGES, FCCS) *Corresponding Author

Dr Chirag Chaudhary

MS Ortho.

KEYWORDS : Diabetic Foot, amputation, debridment, dressing, antibiotics

INTRODUCTION:

Foot Infections are a major source of morbidity and a leading cause of hospitalization for persons with diabetes. Ulceration, infection, gangrene, amputation are significant complications of diabetic foot. Charcot foot (neuropathic osteodystrophy) is another serious complication of long standing diabetes. It is a progressive condition characterized by joint dislocations, pathologic fractures and severe destruction of pedal architecture, which can lead to limb threatening conditions. Five Major Pedal Complications of diabetes are:

- 1) Diabetic foot ulcer
- 2) Diabetic foot infection
- 3) Diabetic charcot foot
- 4) Diabetic foot ischemia
- 5) Deformities

MATERIALS AND METHODS :

Cross sectional observational study of 25 patients with diabetic foot admitted in tertiary care hospital during the period of 6 months. Pediatric patients have been excluded from study. Evaluation and management done by classifying the disease according to Wegner's classification for diabetic foot.

Magitt-Wegner Classification of foot Ulcers (Table 1)

Grade	Description of the ulcer
0	Pre or Post ulcerative lesion completely epithelized
1	Superficial, Full thickness ulcer limited to the dermis, not extending to subcutis
2	Ulcer of the skin extending through the subcutis with exposed tendon or bone without osteomyelitis or abscess formation
3	Deep ulcers with osteomyelitis or abscess formation
4	Localised gangrene of the toes or the forefoot
5	Foot with extensive gangrene

Patients had been taken randomly from different wards in hospital. Data collected by taking proper history and clinical examination of foot, wound or ulcer. Age, sex, duration and type of diabetes, examination findings, grade, investigation including blood sugar, swabs from ulcer, X ray of foot and treatment carried out were recorded.

Age Incidence in diabetic foot (Table 2)

Age (Years)	No. of Cases	Percentages
Upto 40	1	4%
41-50	10	40%
51-60	4	16%
61-70	6	24%
71-80	4	16%
Total	25	100%

Incidence of diabetic foot according to Gender (Table 3)

Sex	No. of cases	Percentages
Male	18	72%
Female	7	28%
Total	25	100

Diabetic Foot Infection according to cause (Table 4)

Causes	No. Cases	Percentages
Infective	15	60%
Ischemic	6	24%
Neuropathy	2	8%
Infective + Ischemic	1	4%
Infective + Neuropathy	1	4%
Total	25	100%

Grading as per Wegner's Classification (Table 5)

Grade	Present Study		Dr. Rooh UL Muqim et al study	
	No. of Patients	Percentages	No. of Patients	Percentages
0	0	0%	6	6%
1	1	4%	14	14%
2	3	12%	25	25%
3	9	36%	30	30%
5	4	16%	4	4%

Culture and Sensitivity (Table 6)

Organism	Cases	Percentages
Staphyococcus	11	44%
Pseudomonas	6	24%
Streptococcus	1	4%
Klebsiella	3	12%
No Growth	4	16%

RESULTS:

In present study, Limbs were preserved in 12 out of 25 surgically treated diabetic foot patients. 13 (56%) out of 25 cases despite of proper medical management and repeated debridment had to undergo amputation due to gangrene and uncontrolled fulminant infections.

In a Study Conducted by Dr. A.H Khan et al (200 patients), 70% required debridment, out of which 48.5% undergo skin grafting and rest 30% required amputation of different levels.

In a study (100 patients) conducted by Dr. Rooh UL Muqim et al (51, 48% of patients required amputation.

Modalities of Treatment (Table 7)

	Present study		Dr. A.H. Khan et al Study	
	No. of cases	Percentages	No. of cases	Percentages

Incision & Drainage	2	8%	-	-
Debridment	1	4%	43	21.5%
STG + Debridment	9	36%	97	48.5%
Amputation	11	44%	60	30%
Amputation + STG	2	8%	-	-
Total	25	100%	200	100%

Amputation Levels (Table 8)

	Present study		Dr.Rooh UL Muqim study	
	No.of cases	Percentage	No.of cases	Percentage
Toe	4	31%	32	66.6%
Transmetatarsal	3	23%	-	-
Syme's	0	0%	5	10.4%
Below Knee	3	23%	11	22.9%
Above Knee	3	23 %	-	-
Total	13	100%	48	100%

CONCLUSION:

We can save maximum number of Limbs in diabetic foot infections with early recognition of Infection and treatment ,patient's education about foot infection and proper care,aggressive use of antibiotics and repeated debridment when required.Due to complexity and multifactorial pathogenesis of diabetic foot problems,despite sophisticated investigations and treatment modalities amputation rate is still higher.

REFERENCES:

1. Evaluation and management of diabetic foot according to wegner's classification a study of 100 cases Rooh-UL-Muqim ,Samson Griffin,Mukhtar Ahmed
2. Approach to Managing Diabetic Foot Complications,A study of 200 cases KHAN A.h.1,BAJWA G.R
3. A Study-Steps for avoiding foot ulcers by ramya,kannan 2007
4. Incidence,outcomes,and cost of foot ulcers in patients with diabetes by dr.scott d.ramsay
5. A comparison of two Diabetic Foot Ulcer Classification systems The wegner's and the University of texas wound classification systems by Dr.Samson oyibo
6. Dinh T,Pham H veves A,Emerging treatments in diabetic wound care,wounds 2002;14:2-10
7. Pinzur MS.Amputations in the diabetic foot.In Boulton AJM,Rayman G(eds),The Foot in diabetes.4th edn.Chichester : Wiley, 2000 ;308-322.
8. Lipsky BA,Berendt AR,Deery HG,et al. Diagnosis and treatment of Diabetic foot Infections,Clin Infect Dis 2004 ;39:885-910
9. Saunders LJ,Mrdjencovich D,Anatomical patterns of bone and joint destruction in neurophth diabetic.Diabets 1991 ; 40 :529A
10. Boulton AJM,Gries FA,Jervell JA.Guidelines for the diagnosis and outpatient management of diabetic peripheral neuropathy.Diabet Med 1998 :15 :508-514