

Original Research Paper

Surgery

Analysis of Follow-Up of Fifty Cases of Diabetic Foot Syndrome with Recurrent Ulcers

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ABSTRACT

Aim: The objective of the study was to evaluate the causes for recurrence of diabetic foot ulcers.

Methodology: This study was conducted at ACS Medical College Hospital, Chennai. Sample of fifty diabetic foot patients

who were cured from foot ulcers; during July 2014 – December 2015; were reviewed and the ulcer free period was analysed. Result: The patients with good glycemic control and proper foot care are free from recurrent ulcer for longer duration of time.

KEYWORDS: recurrent foot ulcers, diabetic foot syndrome

Introduction:

Diabetic foot ulcers are one of the common surgical ward admissions. All the diabetic foot patients are thoroughly examined, investigated and staged as per University of Texas system of classification and staging. Treatment is given as per the protocol as a team consists of physician, orthopedician, physiotherapist and occupational therapist. All the patients are discharged only after ulcer heals with the instruction of foot care, periodic follow up and pressure relieving foot wear on need basis. During review recurrence of the foot ulcers are noted and the causes for the recurrence are analysed in this study.

Study methodology: Study design:

This study was done to evaluate and analyse the causative factors the recurrent foot ulcers.

Materials and methods:

This study was done at ACS Medical College Hospital, Chennai. A sample of fifty patients who were treated for foot ulcers and cured (discharged without ulcer) during July 2014 – December 2015 were reviewed once in 2 weeks and the ulcer free period was analysed.

During review Clinical examination- foot hygiene, peripheral pulses, sensation of the foot and associated other systemic problems were screened. Biochemical parameters to assess the glycemic control (HbA1c), renal function tests, nutritional status were checked. Socio economic status of the patients were also considered to assess whether they could continue the pressure relieving measures.

All new ulcers were documented and detailed history were elicited to identify the most probable cause for the recurrent ulcer. The data is analysed and summarized.

Inclusion criteria:

All male and female diabetic foot patients who were cured during the hospital stay and came for review were included in this study.

Exclusion criteria:

Diabetic foot with osteomyelitis

Patients who had injury (traumatic ulcer)

Associated venous or arterial ulcers

Hypothesis:

Diabetic patients with recurrent ulcers were identified, detailed history regarding foot hygiene and thorough foot and systemic examination were done to identify the causes for recurrence.

Data analysis: Biological variants:

Male 32, female 18

Age variants:

1. Below 30 years 3

2. 31 – 40 years 1

3. 41 – 50 years 14

4. 51 – 70 years 24

5. Above 70 years 8

Biochemical variants:

HBA1c status

1. Upto 6 4

2. 6—9 29

3. Above 9 17

Sensory loss

1. Mild 22

2. Moderate 14

3. Severe 14

Results:

All the 50 patients were regularly reviewed. Ulcer recurred in 33 patients.

Male 25, Female 8

Proximal half of the foot

2. Distal half of the foot 21

. Stump ulcer 4

Time interval:

1. Within 4 weeks 5 2. 4 –8 weeks 15

3. After 8 weks 13

Ulcer over the scar 12

New site points.

21. The new ulcers were over the pressure

Tobacco users 23, non tobacco users 10

All of them had poor glycemic control.

All the 33 patients were evaluated and treated. Counseling done for foot care and reviewed periodically.

Discussion & Conclusion:

Analysis of the 33 patients revealed that most of them (75%) are male, smokers (70%), poor glycemic control (65%) and poor sensation of the foot. 80% of them were not properly following the pressure relieving measures mostly because of social reasons. Most of the ulcers recurred within 8 weeks after discharge from the hospital and they were over a new site. Even with good glycemic control ulcer has recurred over a new site most probably due to poor foot care practices and non compliance of pressure relieving measures.

We conclude that the recurrence of diabetic foot ulcer is very common. Along with the good glycemic control local foot care and protection of the sole, pressure relieving measures are mandatory to avoid recurrence of ulcers.

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