



LONG- STANDING LEG ULCER WITH REFERENCE TO THEIR TREATMENT SEEKING BEHAVIOUR : A HOSPITAL BASE STUDY

Gynaecology

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ABSTRACT

Chronic leg ulcer is a relatively common condition amongst adults. This results in social distress and considerable healthcare and personal costs. It is also known that social activities are restricted due to fear of injury and negative body image. In a developing country like India the stigma associated with ulcers, various ineffective home remedies, quackery and illiteracy result in erratic and often delayed treatment seeking behaviour.

KEYWORDS

CLU, trophic, venous, Doppler study

INTRODUCTION:

Chronic leg ulcer (CLU) is defined as those that show no tendency to heal after 3 months of appropriate treatment or are still not fully healed at 12 months¹. This results in social distress and considerable healthcare and personal costs². CLU is reported to have impact on sleep, mobility, work capacity and personal finances. Significant amount of time and money is spent in treating chronic leg ulcers with up to 50% of community nursing time spent on managing this condition³.

MATERIALS AND METHODS

The study was conducted at the Out Patient Department between July 2015 to June 2016. Patients with long standing ulcers of at least 3 months duration, ≥ 18 years of age were included.

A detailed history was taken which included duration, onset and evolution of ulcer, associated pain and discharge from ulcer, amount and characteristic of discharge, aggravating factors associated with pain, recurrence of ulcer, presence of any other comorbidity like diabetes mellitus, autoimmune disease, peripheral vascular disease, atherosclerosis, inflammatory bowel disease, and connective tissue disease were taken.

Also numbness, paresthesias, burning, or loss of sensation in the feet and history of drugs were taken. Moreover treatment history was recorded.

Cutaneous examination included inspection and palpation. Surrounding skin was inspected for hemosiderin staining, lipodermatosclerosis, reticular or varicose veins, atrophic blanche (patchy areas of ischemia), telangiectasia, stasis eczema, callosity, presence of pale hairless, cool, shiny skin, and changes of foot structure. The area of the ulcer was calculated by measuring the longest dimensions in both horizontal and vertical axis. For our study we classified wound exudate as mild, moderate and severe.

Mild- exudate just covering the ulcer bed with no measurable discharge

Moderate- exudate saturating the ulcer and involving 50% of dressing
Severe- exudate saturating the ulcer and involving > 50% of dressing

The location of ulcer, a key component in ulcer examination was classified in three zones. It was as proposed by Baker et al⁴

Zone 1 - area corresponding to the foot

Zone 2 - area including the distal half of the leg and ankle

Zone 3 - proximal half of the leg

So ulcer examination also included the zone in which the ulcer was present.

The investigation reports like Doppler study for arterial and venous study and wound swab for gram staining and culture sensitivity if available were recorded.

Study commenced after approval from the IEC. Patients of long-standing leg ulcers were subjected to informed consent process in compliance with the ICMR biomedical research ethics and those consented voluntarily were enrolled.

Results:

Table-1 Shows gender wise relationship.

SEX	FREQUENCY	PERCENTAGE %
MALE	84	93.33
FEMALE	6	6.66
TOTAL	90	100.00

2: Age distribution of chronic leg ulcer patients

AGE DISTRIBUTION (years)	NUMBER	PERCENTAGE
15-30	10	11.11%
30-45	24	26.66%
45-50	15	16.66%
50-65	22	24.44%
65-80	19	21.11%

Figure - 1. Ulcer Distribution According To Etiological Sub-groups

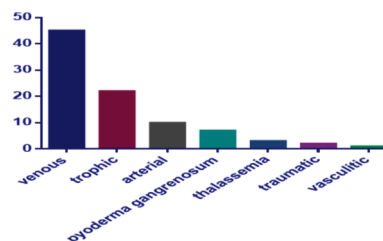
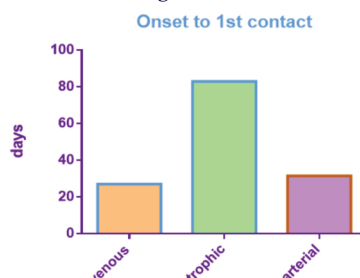


Figure-2. Treatment Seeking Behaviour



Total 90 cases were included in the study. Male predominance was observed (Table-1). Maximum number of cases was seen in middle age group people (Table-2). Fig - 1 shows that out of 90 CLU patients, 50% belonged to venous ulcer subgroup, 24.44% had trophic ulcer, 14.44% had arterial ulcer while pyoderma gangrenosum was seen in 7.77% of total patients. Trophic ulcer with history of Hansen's in 95.45% of them. This Least number of patients were seen in traumatic ulcer and vasculitic ulcer subgroup with 2.22% and 1.11% weightage respectively.

Figure -2 is depicting the time taken in days from onset of ulcer to 1st contact with medical health professional.

Following data on treatment seeking behaviour highlights that the time taken by the patient to come in contact with any form of medical health professional ranging from Primary health centre to specialist care varies widely among various groups. The mean time to 1st contact from onset was 27.53 days in venous ulcer group with patients presenting as early as 1 day after onset to 90 days after onset. Notably the onset to 1st contact time was maximum in the trophic ulcer group with mean time being 83 days and the longest being as long as 1 year after the onset of ulcer. For the arterial ulcer group the mean time to 1st contact from onset was 31.65 days with a range from as early as 1 day after onset to 8 months after the onset.

DISCUSSIONS

In our cohort of chronic leg ulcers male patients outnumbered females with a great margin of 93.3% and male: female ratio of 14:1. In Western population where female predominance is seen. The explanation provided that in India men are mainly involved in outdoor activities exposing them to a higher risk for CLU. We propose that in a patriarchal society with socio- cultural differences and financial dependance may also contribute to this skewed sex ratio with females less likely to seek or avail specialist attention in tertiary care centre.

It affect 0.6 - 3% population above 60 years of age with an increase to over 5% till the age of 80 years and above ⁴. In our cohort the age distribution favoured a trend towards increased incidence in the elderly age group with 45.03% of patients belonging to above 50 years age group. Strikingly 26.6% of our patients were in 30-45 year age group which is higher. This increased incidence in younger population in our sample may suggest the effects of lower per capita income, lower literacy levels and less awareness about leg ulcers in east India.

Venous insufficiency was the dominating causative factor in 47.6% and arterial insufficiency was present in 14.5% ⁵. Our study established a similar frequency of venous and arterial ulcer which is 50% and 14.44% respectively. 24.44% of total patients had Trophic ulcer with history of Hansen's in 95.45% of them. This goes with the prevalence of Leprosy in this part of country. 9 out of 45 venous ulcer patients had colour Doppler report and among them 3 patients had combined arterial and venous insufficiency.

The data on demographic profile and socio economic strata of these patients revealed that 65.55% of these patients were below a per capita income of 2000 and as many as 82.23% of patients below a per capita income of 4000.

Jobs including prolonged standing and sitting were found to be risk factors in previous studies ⁶.

The zonal distribution of Chronic leg ulcers proposed by Baker et al was utilized and it revealed that Zone 2 was the commonest site of CLUs with 91.1% of venous ulcers in Zone 2 and 94.54% of trophic ulcers in Zone 1. Interestingly whenever multiple ulcers were present it was most likely to be present in Zone 1 as well as Zone 2 for all etiological subgroups. In our study the percentage of patients with ulcers co-existing in Zones 1 and 2 was 12.22%.

This sheds light on the treatment seeking behaviour of our cohort suggesting that trophic ulcer patients took an average of 4 years for a specialist consultation in a tertiary care centre, followed by 3 years for venous ulcer patients and less than a year for arterial ulcer. Treatment seeking behaviour in chronic leg ulcers are not available. A study in chronic leishmanian ulcers in Peru shows the various home remedies tried, alternative treatment and over the counter medications like clotrimazole cream, ethanol etc which was used by leg ulcer patients. In this study authors highlighted three main themes which shape the

treatment seeking behaviour of rural, low income patients of chronic leg ulcers.

Alternative treatments including home remedies, cultural practices etc. Barriers to healthcare preventing prompt consultation A number of cultural practices and beliefs came up in the data, most of which significantly affected the patients' wound care. These included traditional remedies such as animal fur, saliva, soil, cow dung and local herbs.

In our study the presence and absence of pain as well as intensity of pain using VAS scoring system was studied. In the arterial subgroup all patients had painful ulcers with 30.7% patients having severely painful ulcers. Pyoderma gangrenosum ulcers were also more likely to be painful (85.71%) with up to 42.85% having severe pain in this subgroup. In the venous subgroup 62.23% patients had painful ulcers however intensity of pain was severe in less than 5% of patients. Trophic ulcers were rarely painful, probably reflecting the high percentage of neuropathic ulcers in this cohort and resulting sensory loss. In a study ⁷ the most intense pain was reported in subjects from the lowest income bracket studied and female gender and was correlated with alterations in sleep, movement, walking, and mood. Nonsteroidal anti-inflammatory drugs were most commonly used (70%) for pain management.

In conclusion, developing country like India the stigma associated with ulcers, various ineffective home remedies, quackery and illiteracy result in erratic and often delayed treatment seeking behaviour among Chronic leg ulcer patients.

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