

ULCERATED LEG SEVERITY ASSESSMENT SCORE (ULSA) IN PREDICTION OF HEALING OF VENOUS ULCERS OF LEG

***¹T.Prem Kumar, ²R. Baskaran, ³M. Prema and ³Karthick Raja**

¹Post Graduate, Department of General Surgery, Rajah Muthiah Medical College, Chidambaram.

²Professor, Department of General Surgery, Rajah Muthiah Medical College, Chidambaram.

³Assistant Professor, Department of General Surgery, Rajah Muthiah Medical College, Chidambaram

Article History: Received 28th October, 2016, Accepted 9th November, 2016, Published 10th November, 2016

ABSTRACT

Background: Leg Ulcers are a big problem for both patients and health service resources. Most ulcers are associated with venous disease. **Aim:** The study is on the utility of Ulcerated Leg Severity Assessment Score (ULSA) in the prediction of healing and in the management of venous ulcers in patients with primary varicose veins. **Objectives** The study would identify the effectiveness of the ULSA score in predicting venous ulcer healing with conventional modes of treatment such as compression and dressing under antibiotic cover and to surgically intervene in patients with high ULSA scores. **Patients and Methods:** 50 cases of varicose veins of the lower limb with venous ulcers were studied using ULSA score and were prospectively analyzed over a period of 24 weeks in surgical wards of Rajah Muthiah medical college hospital during the period of SEPTEMBER 2014- SEPTEMBER 2017. **Results:** Patients with ULSA score less than 20 had completely healed in 24 weeks and ulcers with scores more than 50 did not heal completely by conservative management

Keywords: ULSA, .Healing

1. INTRODUCTION

Leg Ulcers are a big problem for both patients and health service resources. Most ulcers are associated with venous disease, but other causes or contributing factors include immobility, obesity, arterial disease, vasculitis, diabetes, and neoplasia (Das, 2001).

Most of the venous leg ulcers could be healed if patients were admitted to hospital for continuous leg elevation, shortage of hospital beds, high cost of inpatient care is now rarely practical (Cuschieri, 2000). Furthermore ulcers often recur when the patient returns home and resumes a lifestyle in which most of the leg is spent with the legs in dependency (McGrego, 1986; Bailey and Love, 2007). Outpatient systems of care that maintain mobility and avoid the complications of bed rest are more cost effective and appropriate. Outpatient and community based care also maintain independence and quality of life (Bergan, 1996). Compression bandaging have dramatically improved healing rates and reduced cost.

2. METHADODOLOGY

AIM:

The study is on the utility of Ulcerated Leg Severity Assessment Score (ULSA) in the prediction of healing and in the management of venous ulcers in patients with primary varicose veins.

OBJECTIVE:

The study would identify the effectiveness of the ULSA score in predicting venous ulcer healing with conventional modes of treatment such as compression and dressing under antibiotic cover and to surgically intervene in patients with high ULSA scores

STUDY DESIGN:

A prospective study of 50 cases of varicose veins of the lower limb with venous ulcers were studied using ULSA score and were prospectively analyzed over a period of 24 weeks in surgical wards of Rajah Muthiah medical college hospital during the period of SEPTEMBER 2014- SEPTEMBER 2017.

*Corresponding author: **Dr T.Prem Kumar**, Post Graduate, Department of General Surgery, Rajah Muthiah Medical College, Chidambaram

INCLUSION CRITERIA:

Patients with primary varicose vein of the lower limb and venous ulcer were selected on the basis of Age, Chronicity, Size

EXCLUSION CRITERIA:

The cases associated with DVT, HT, peripheral vascular disease, Malignancy, Ascites, DM, vascular malformations, secondary causes for varicosity and Recurrent varicose veins after surgery were excluded.

COLLECTION OF DATA:

The sources of the data were the patients presented to the surgical OPD with venous ulcers. All patients were routinely examined clinically and also investigated with duplex scan. Peripheral vascular system was also examined. The ULSA score was applied at the time of presentation and prospectively analyzed over a period 24 weeks All Patients were followed regularly at 8 Wks, 12Wks, 24Wks to assess healing rates.

3.OBSERVATION AND DISCUSSION

DISTRIBUTION OF CASES

Side	No of patients	Percentage
Unilateral	42	84%
Bilateral	8	16%

In this study, 50 cases of the venous ulcers were studied from the period of July 2014 to September 2016

SYSTEMS INVOLVED

S.No.	Systems involved	No. of patients	Percentage
1.	Long saphenous vein with perforators	18	36%
2.	Perforators	13	26%
3.	Long saphenous vein	6	12%
4.	Short saphenous vein	6	12%
5.	Long saphenous vein with short saphenous vein with perforators	4	8%
6.	Long saphenous vein with short saphenous vein	2	4%
7.	Short saphenous vein with perforators	1	2%

Of the 50 cases studied, 18 cases were long saphenous system with perforators. 13 cases were perforators alone, 6 cases were long saphenous system and 6 cases were short saphenous system. 4 cases were a combination of long saphenous system, short saphenous system with perforators. 2 cases were long saphenous system with short saphenous system, while 1 case was short saphenous system with perforators

OCCUPATION AND VARICOSITY

Occupation	No. of patients	Percentage
Agriculture	20	40%
Driver	3	6%
Teacher	1	2%
Watchman	4	8%
Dhobi	6	12%
House wife	3	6%
Tea master	8	16%
Barber	1	2%
Sales man	1	2%
Cleaner	2	4%
Student	1	2%

There was a definite relationship between the type of occupation and varicosity. Of 50 cases 20 cases (40%) are agricultural workers and 8 cases tea master and others. During prolonged standing the long column of blood and gravity exert pressure on the weakened valves of the veins giving rise to varicosity.

SEX INCIDENCE

Sex of patient	Number of patients	Percentage
Male	42	84%
Female	8	16%

Among the 50 cases, 42 patients were males and 8 patients were females Male:female ratio-5.25:1

VENOUS ULCER

Site	No. of patients	Percentage
Supero medial aspect of the medial malleolus	38	76%
Medial and lateral aspect of the leg	12	24%

The ulcer was situated over the superomedial aspect of the medial malleolus in 38 cases. In 12 cases ulcer was seen on medial and lateral aspect of the lower part of the leg.

ULCER PRESENTATION

Ulcer	No. of patients	Percentage
Unilateral	44	88%
Bilateral	6	12%

In this series bilateral ulcer was present in 6 cases. In 14 patients the ulcer was oval in shape and in the rest had irregular margins. All the ulcers were surrounded by black pigmentation and margins were sloping in nature. Most of the ulceration occurred in the gaiter area.

Age wise distribution

Age in years	No of cases
31-40	21
41-50	18
51-60	8
>60	3

Chronicity wise distribution

Duration in weeks	No of cases
<20	25
21-40	19
41-60	4
>60	2

Size of ulcer

Size of ulcer in cm	No of cases
<5cm	28
5cm - 8cm	16
>8cm	6

Size of ulcer and healing

Size in cm	8 weeks	12 weeks	24 weeks
<5	19	23	28
5-8	9	12	13
>8	0	0	3

A large ulcer took a longer time to heal

Age of patient and healing

Age in years	8 weeks	12 weeks	24 weeks
31-40	18	20	21
41-50	8	12	17
51-60	2	3	6
>60	0	0	0

Patients in the higher age group had slower healing rates.

ULSA SCORE AND HEALING OF ULCER

ULSA score	8 weeks	12 weeks	24 weeks
<20	21	24	28
21-40	7	9	12
41-60	0	2	4
>60	0	0	0

Patients with a low ULSA score had faster healing rates when compared to those with high scores. Majority of cases with ULSA score less than 20 healed within 24 weeks, while those with more than 60 never healed at 24 weeks.

4.CONCLUSION

Among the 50 cases of varicose veins with venous ulcers of the lower limb studied in this series from SEPTEMBER 2014 to September 2009, those with a low ULSA score at the time of presentation healed earlier than those with high scores.

Patients with ULSA score less than 20 had completely healed in 24 weeks and ulcers with scores more than 50 did not heal completely by conservative management. The result of this study correlates with the study undertaken at Cheltenham hospital, United Kingdom where ULSA score less than 50 was associated with complete healing by conservative management.

5.BIBLIOGRAPHY

- Bailey, T. and Love, A. 2007. The short practice of surgery — Twenty fifth edition
- Bergan, J.J. 1986. Surgical treatment of venous obstruction and insufficiency – J. Vas. Surgery 31:174..
- Cuschieri, A. 2000. Essential surgical practice – Fourth edition
- Das, S. 2001. A manual on clinical surgery – Fifth edition.
- McGregor, L. 1986. Synopsis of surgical Anatomy – Twelfth edition
