

**A CASE REPORT ON VARICOSE VEINS WITH VENOUS ULCER: SKIN DEBRIMENT
THERAPY WITH ANTIBIOTICS****S. Sunilkumar*, B. Benjamin Samuel, Dr. NDVR Saradhi, M. Keerthana, S. Irfan and S. Naga Jyothi**

Santhiram College of Pharmacy, Nandyal, Kurnool Dist, Andhra Pradesh – 518501.

***Corresponding Author: S. Sunilkumar**

Santhiram College of Pharmacy, Nandyal, Kurnool Dist, Andhra Pradesh – 518501.

Article Received on 07/05/2019

Article Revised on 28/05/2019

Article Accepted on 19/06/2019

ABSTRACT

Venous ulcers are the wounds which are the most serious chronic & venous insufficiency complications, these venous ulcers caused due to the inappropriate functioning of the venous valves. When veins get damaged/ruptured due to any trauma, then the pressure in the veins get raised & cause hypertension and in turn it leads to ulcers. In this case the possible study effects were made to present the venous ulcers to the patient that was mainly due to trauma. The varicose veins with venous ulcer & the tissue gets exposed with microbial infection on the surface of the left lower limb of the foot was treated with several antibiotics, debriment therapy & certain dressings. The infection gets reduced due to the initial treatment of providing Antibiotic therapy & dressing on the wound without any exposure would result the fast healing of the wound.

KEYWORDS: Varicose veins, Debriment, Amputation, Clinical Study.**INTRODUCTION**

Due to the trauma on the surface of the skin & underlying varicose veins the tissue get damaged are the major cause of the venous ulcers. Venous ulcers are the wound that occurs mainly to the legs due to inappropriate functioning of venous veins.^[1] This venous valves get damaged or ruptured due to the trauma it may leads to the prevention of back flow of blood causes hypertension due to pressure raises in the veins.^[2] Venous ulcers would not heal without any cleaning, regular dressings & continuous treatment if not they usually spread quickly. The surgical & hydrosurgical debridement are indicated in large necrotic & infected wounds as this treatment was preferred to reduce the time of healing proper care should be taken for the patients which requires the cooperation of both physicians & wound care specialists.^[3] Perforated vein interruption is also an option.

Increase in venous pressure is also responsible for the signs & symptoms which commonly associated with chronic venous disease.^[4,5] It may also cause long-term hospitalization & may risk to amputation, if the infection is aggressively progressed.

We are reporting that venous ulcers in a patient who received initial antibiotic therapy successfully, debimentation & certain dressings. The patient was discharged after 1 month 20days.

CASE REPORT

A 44 yrs old male patient with varicose veins was reported at the emergency department on 22nd April 2019 with a wound of 10x7cm present on the surface of the left lower limb of the foot due to the trauma additionally he had fever & multiple swellings over the left lower limb. The patient was admitted to the general surgery ward for the wound care. The exudates were sent to the microbial culture test it released positive for streptococcus aureus. The large necrotic & infected sites on the surface of the wound should be debrimented the treatment followed for this patient show a significant improvement for the wound healing process. The initial antibiotic therapy followed for 3 weeks such as ceftriaxone, Amikacin & metranidazole given for this patient due to the infection of microorganism like streptococcus aureus, where the tissue growth seen at the wound where large necrotized infection site/ region due to debrimentation. A good progress was achieved within a short duration of time and also providing a high protein rich diet to the patient, at 3rd week Antibiotics were discontinued intravenously for 3 days given as in oral form & again continued from 4^{rt} week in varicose veins with venous ulcers the wound healing is a time taking process, this was overcome by initial antibiotic therapy & skin debrimentation process.



Anterior Tibial region of the leg before treatment.

DISCUSSION

Venous ulcers are the wounds that are mainly due to the improper functioning of venous valves & it is caused due to the trauma. It mainly associated with the varicose veins a collection of small dark engorged superficial veins.^[6] The ulceration mainly depends on pathophysiological abnormalities, anatomical changes & environmental influences.

In this study we observed increased blood pressure that is caused by the venous ulcer. Where venous valves exist to prevent the back flow of blood and raises the pressure in veins to increase blood pressure^[7,8,9,10], where the other diseased conditions may also the root cause of venous ulcers.^[9]

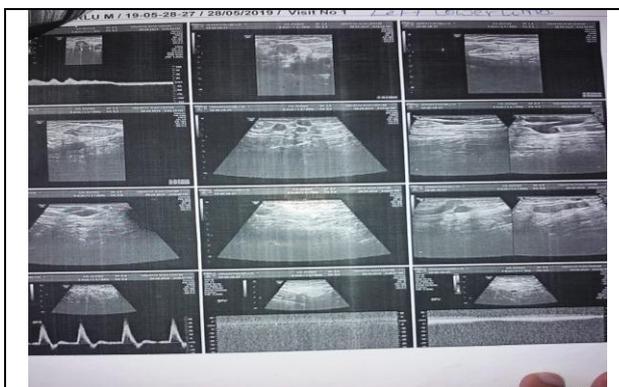
The patient had fever & multiple swelling over the left lower limb was treated with the NSAIDS, here the large necrotic infected sites on the surface of the left lower limb at the hip of the ankle region not debrimented and the initial antibiotic therapy was provided for the extensive wound healing. In our study we used Antibiotics like Ceftriaxone, Amikacin & Metranidazole combination given as treatment for controlling hypertension. Clinidipine was provided which occur mainly due to the varicose veins. Sliver containing dressing was provided without any exposure to the contaminants where it increases the probability of healing for venous leg ulcers^[11] with this combination completely cured the site of infection within 1month of the follow up of the study.



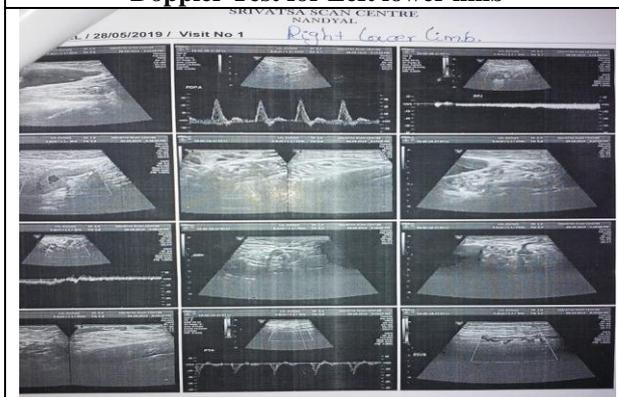
Suppression of wound during the treatment.

In this case the major effort were made to reduce the chance of amputation by antibiotic therapy for the leg ulceration the national institute for the health & care excellence recommends that has not healed within 2 weeks or anyone with a healed leg ulcer.^[12] In this case

the venous ulcer was upto the dermal layer, hence treated with initial Antibiotic therapy to boost up/accelerate the healing process and to count the infection with skin debrimentation.



Doppler Test for Left lower limb



Doppler test for Right lower limb

CONCLUSION

In this clinical study it was proved that safety & efficacy of the Antibiotics like ceftriaxone, Amikacin & Metranidazole for the treatment of venous ulcer mainly this debriment therapy plays a role to heal the wound in a short of span of time; it depends on the size of the infection & efficacy of the treatment followed. The results confirmed that patient got cured by the treatment which was conducted in our tertiary care teaching hospital.

ACKNOWLEDGEMENT

Authors want to thank the Dean, teaching & non teaching faculty of Santhiram Medical College & General hospital for their valuable support for our studies. Also we thank our Santhiram college of Pharmacy for providing the hospital facility.

REFERENCE

1. Venous ulcer http://www.en.wikipedia.org/wiki/venous_ulcer.
2. Das S. 1st edition. Diseases of veins edition published by S. Das publication 13, old mayors' court Calcutta; A concise textbook of surgery.[Google Scholar]

3. White-chu EF, Conner-Kerr TA. Overview of guidelines for the prevention and treatment of venous leg ulcers: a US perspective. *J Multidiscip Healthc*, 2014; 7: 111-117.
4. Ricotta JJ, Dalsing MC, Ouriei K, Wakefield TW, Lynch TG. Research and clinical issues in chronic venous disease. *Cardiovascular surgery*, 1997; 5(4): 343-349.
5. Henke P, Kistner B, Wakefield TW, Eklof B, Lurie F. Reducing venous stasis ulcers by fifty percent in 10 years: the next steps. *J Vasc surg*, 2010; 52(Suppl 5): 37S-38S.
6. ^Hugo, Farne (2015). *Oxford cases in medicine and surgery*. Norris-Cervetto, Edward, Warbrick-smith, James (Seconded). Oxford. ISBN 978-0198716228. OCLC 923846134.
7. ^^{abcdefghij}Brem H, Kirsner RS, Falanga V (2004). "Protocol for the successful non-surgical treatment of venous ulcers". *Am. J. Surg.* 188 (1A Suppl): 1-8. Doi: 10. 1016/S0002-9610(03)00284-8. PMID 15223495.
8. ^^{abc} Mustoe T. "Understanding chronic wounds: a unifying hypothesis on their pathogenesis and implications for therapy". *Am. J. Surg.*, 2004; 187(5A): 65S-70S. doi:10.1016/S0002-9610(03)00306-4. PMID 15147994.
9. ^^{abc} Moreo K. "Understanding and overcoming the challenges of effective case management for the patients with chronic wounds". *The case manager*, 2005; 16(2): 62-3, 67. doi: 10. 1016/j.casemgr.2005.014. PMID 15818347.
10. ^^{abcd} Stanley AC, Lounsbury KM, Corrow K, et al. "Pressure elevation slows the fibroblast response to wound healing", *J. Vasc. Surg.*, 2005; 42(3): 546-51. Doi:10.1016/j.jvs.2005.04.047. PMID 16171604.
11. ^^{ab} Norman, Gill; Westby, Maggie J; Rithalia, Amber D; Stubbs, Nikki; Soares, Marta O; Dumville, Jo C. (2018-06-15). "Dressings and topical agents for treating venous leg Ulcers". *The Cochrane Database of Systemic Reviews*. 6: CD012583. Doi:10.1002/14651858.CD01583.pub2. ISSN 1469-493X.PMC 6513558. PMID 29906322.
12. ^NICE (July 23, 2013). "Varicose veins in the legs: The diagnosis and management of varicose veins. 1, 2 Referral to a vascular service". National Institute for health and Care Excellence. Retrieved August 25, 2014.