



Case Report

J. Ayu. Herb. Med.
2016; 2(4): 102-103
July- August
© 2016, All rights reserved
www. ayurvedjournal.com

Wound healing activity of *Arjuna* bark powder in *Dushta vrana* (Non healing venous ulcers) - A Case Report

T.S. Dudhamal

Associate Professor, Department of Shalyatantra, I.P.G.T. & R.A., Gujarat Ayurved University, Jamnagar, Gujarat-361 008, India

ABSTRACT

A non-healing ulcer or chronic wound is defined as a wound that does not improve after four weeks or does not heal in eight weeks. These wounds include diabetic foot ulcers, venous-related ulcerations (varicose ulcers), pressure ulcers etc. Venous ulcers develop at medial part of lower leg and above the medial malleoli of foot and occur as a result of recanalization of DVT (deep vein thrombosis). These ulcers are often large in size, non-healing, tender and recurrent with secondary infection. In this case report a 65 years old male patient of non-healing multiple ulcers at left lower leg visited in OPD. Patient had complaints of severe pain, serous discharge, swelling of leg and multiple ulcers largest one ulcer (6cm x 4cm) at medial aspect of right leg. The pus culture report showed absence of microorganism (Bacteria and fungus). So this case was diagnosed as multiple varicose ulcers and was successfully treated with *Arjuna* bark powder (*Terminalia arjuna*) mixed with coconut oil. Wound was cleaned with normal saline and then applied paste of *Arjuna* bark powder mixed with coconut oil daily once in the morning. All wounds healed completely within one and half month of treatment without any complication. Hence this case highlighted that varicose ulcer can be treated with local application of *Arjuna* bark powder.

Keywords: Ayurveda, *Arjuna*, *Terminalia arjuna*, Venous ulcers, Wound.

INTRODUCTION

Management of *Vrana* (wounds/ulcers) has been dealt since the period of *Veda* to current era. Non-healing wounds present serious problems for patients, family and clinicians. Most of the wounds are associated with a small number of underlying disorders such as Diabetes mellitus (DM), leprosy and peripheral vascular diseases. The vast majority of chronic wounds can be classified into three categories i.e. venous ulcers, diabetic ulcers and pressure ulcers.^[1-2] A non-healing ulcer or chronic wound is defined as a wound that does not improve after four weeks or does not heal within eight weeks. These wounds includes diabetic foot ulcers, venous-related ulcerations (varicose ulcers), pressure ulcers, wounds related to metabolic disease, wounds that repeatedly break down and non-healing surgical wounds.

In developed countries, the most common chronic wounds are leg ulcers. The prevalence of varicose veins increases with age which is in age group 55-64 (55.7%).^[3] Venous ulcer commonly develops at around and above the medial malleoli, medial aspect of lower leg because of presence of large number of perforators which transmit pressure changes directly into superficial system. Ulcer is often large, non-healing, tender and recurrent with secondary infection. It presents with complications of venous diseases like eczema, ulceration, lipodermato sclerosis and venous ulcers.^[4]

In this regard, Sushruta also mentioned the non-healing wounds in the similar manner and mentioned the prognosis of that wounds.^[5] The signs of *Dushta Vrana* (chronic wounds) mentioned in the classics are *Ativivrita* (broad based), *Bhairava* (ugly looking), *Putipuyamansa* (purulent pus discharge), *Gandha* (foul smell), *Vedana* (pain), *Dirghakalanubandhi* (chronic in nature).^[6] *Arjuna* (*Terminalia arjuna*) is plant found nearby river in Uttar Pradesh, Madhya Pradesh, West Bengal and south and central India.^[7]

CASE REPORT

A 65 years old male patient visited outpatient department IPGT&RA Ayurved Research Hospital, Jamnagar with multiple right lower leg ulcers at medial aspect of right leg. Patient had complaints of severe pain, serous discharge, swelling of leg and multiple ulcers largest one ulcer (6cm x 4cm) at medial aspect of right leg (Figure 1). Above complaints had since last 2 months and patient taken medicine and local dressing with antiseptic solution from local doctor but did not get relief so he consulted to Ayurved hospital. Patient's occupation was news paper distribution by using bicycle since last ten years. Patient had addicted to tobacco chewing daily 10-15 times. Prominent varicosity at medial side of both lower limbs

*Corresponding author:

Dr. T.S. Dudhamal

Associate Professor, Department of Shalyatantra, I.P.G.T. & R.A., Gujarat Ayurved University, Jamnagar, Gujarat-361 008, India
Email:
drtsdudhamal[at]gmail.com

was observed. Patient had no history of diabetic mellitus, hypertension, tuberculosis, venereal diseases, bronchial asthma, anemia, cardiac diseases and any other major illness. He did not reported any surgical history in past. Routine blood investigations for complete blood count (CBC), blood sugar level and serum creatinine were normal except increased white blood corpuscles (WBC) and neutrophils. The pus culture report was negative for micro-organism both gram positive and gram negative and for fungal also. So this case was diagnosed as multiple venous ulcers and admitted in Shalya male ward for further management. Wound cleaned with normal saline and then applied *Arjun (Terminalia arjuna)* bark powder mixed with coconut oil daily once in the morning. After seven days patient discharge from hospital and called daily for dressing on OPD basis. Assessment of wound was done on the basis symptomatic relief in sign and symptoms of wound and photographed by weekly interval up to complete wound healing.

RESULT AND DISCUSSION

In first consultation patient had severe pain, mild swelling, serous discharge and large wound at medial malleolus. As wound was big and multiple sufficient amount of prepared *Arjuna* bark powder and coconut oil was applied on all wounds (Figure-2) and bandaged. The symptoms like pain, swelling and discharge were markedly reduced and wound became clean with mild slough after 7 days. Treatment continued daily on OPD basis and weekly assessed where wound base became clean due to increased circulation and neo-vascularisation after 15 days (Figure-3). Day by day wound size reduced due to epithelisation and wound contraction where wound remained half of the size after one month. Those multiple non healing venous ulcers at medial aspect of right lower leg healed completely after one and half months without complication (Figure-4).



Figure 1: Varicose ulcer (6cm x 4cm) at medial aspect of right leg

Figure 2: Applied *Arjuna* bark powder and coconut oil on wound

Figure 3: Wound status after 15 days

Figure 4: Healed scar after one and half month

According to Sushruta, among 60 measures of comprehensive wound management, *Kalka* (paste) is indicated in cases of chronic wounds which are reluctant to heal.^[8] The paste performs both the functions of cleansing as well as healing of wounds. Previous reports shown that coconut oil has the property of antiulcer so it may accelerate the action of healing in this case.^[9] *Arjuna* has wound debridement activity and it is essential in initial stage as wound has slough, oedema and discharge. Vagbhata mentioned that *Arjuna* is to be topically applied in the treatment of wounds, hemorrhages and ulcers. Drug has neo-vascularisation property (improve circulation) which plays important role in cases of varicose ulcer as there is hampered blood circulation. Wound was quite big so in surgery the skin grafting is advisable which is expensive and sometimes not acceptable due to old age. The take-away message from this case report is non-healing varicose ulcer can be treated with Ayurveda herbal powder of *Arjuna (Terminalia arjuna)*.

CONCLUSION

This single case study highlighted that paste of *Arjuna* and coconut oil has healing potential in management of venous ulcers which need further study in more number of patients.

Acknowledgement

Prof. P.K. Prajapati, Director, IPGT&RA, Gujarat Ayurved University, Jamnagar.

REFERENCES

1. Moreo, Kathleen. Understanding and overcoming the challenges of effective case management for patients with chronic wounds. *The Case Manager* 2005; 16 (2): 62–3,67.
2. Mustoe, Thomas. Understanding chronic wounds: A unifying hypothesis on their pathogenesis and implications for therapy. *The American Journal of Surgery* 2004; 187 (5): S65.
3. Williams NS, Christopher JKB, O'Connell PR. Baily and love's Short Practice of surgery. chapter 57 venous disorders 25th ed. UK Hodder Arnold part of

Hachette. 2008. pp-901.

4. SRB's Manual of Surgery, Sriram Bhat M 4th edition Jaypee Brothers Medical Publishers, Pp- 249.
5. Shastri A. Sushruta Samhita with Ayurved Tatva Sandipika Commentary, Sutrasthana.Varanasi: Chowkhambha Sanskrit Sansthan; 2009. 98 Su.Su.23/7.
6. Shastri A. Sushruta Samhita with Ayurved Tatva Sandipika Commentary, Sutrasthana.Varanasi: Chowkhambha Sanskrit Sansthan; 2009.95. Su.Su.22/7.
7. https://en.wikipedia.org/wiki/Terminalia_arjuna#/media/File:Terminalia_arjuna-1.jpg Accessed on 30.05.2016.
8. Shastri A. Sushruta Samhita with Ayurved Tatva Sandipika Commentary, Sutrasthana.Varanasi: Chowkhambha Sanskrit Sansthan; 2009. 8 Su.su. 1/55.
9. Srivasta va P, Durgaprasad S. Burn wound healing property of *Cocos nucifera*: An appraisal. *Indian J Pharmacol*. 2008. 40(4):144-6.

HOW TO CITE THIS ARTICLE

Dudhamal TS. Wound healing activity of *Arjuna* bark powder in *Dushta vrana* (Non healing venous ulcers) - A Case Report. *J Ayu Herb Med* 2016;2(4):102-103.