

LOWER LIMB SAVED FROM AMPUTATION THROUGH HERBAL MEDICINE ALONG WITH HIRUDOTHERAPY

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Article Received on
28 March 2018,

Revised on 18 April 2018,
Accepted on 08 May 2018,

DOI: 10.20959/wjpr201810-12278

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ABSTRACT

Limb amputation is the only option in most of the cases of gangrenous wounds. A gangrenous wound of the lower legs is a relatively common condition amongst adults that causes pain and social distress. Although, many factors lead to gangrenous wounds but in order to ascertain the pathogenesis, diagnosis and treatment, an interdisciplinary approach to the systematic assessment of the patient may be helpful. The present study was conducted on a 78-year-old woman suffering from non-healing gangrenous wound (on the right foot) and facing the plan of amputation. The patient was having severe pain and foul smelling in the wound. The wound was full with numerous maggots. The patient was kept on Unani medicine besides hirudotherapy. Wound dressing was done with unripe papaya along with honey as it has a very good cleansing action to remove the slough from the wound. The therapy proved useful and wound was completely

healed in three and half months.

KEYWORDS: Non healing gangrenous ulcer, hirudotherapy, unripe papaya.

CASE STUDY REPORT

A 78 year old woman suffering with non-healing gangrenous wound on right foot. She had history of wound infection since last 2 years. The patient was having severe pain 80 mm on a 100 mm (visual analogue scale) and the wound was fully filled with lots of maggots with foul smelling [Fig.1]. The amputation of foot was planned from a outside hospital. At the time of visit in OPD her general health was very poor but vital signs were stable and laboratory

parameters were as follows: haemoglobin (Hb) 7.0 gm%, white blood cells (WBC) 10400/ μ l, neutrophils 78%, lymphocytes 20%, eosinophils 1%, red blood cells (RBCs) 3.03 million cells/ μ l, Platelets 2.15 lacs/Cumm, erythrocyte sedimentation rate (ESR) 52 mm/hr. Blood sugar (F) 99 mg/dl, serum bilirubin total 0.7mg/dl, SGOT 46 IU/L, SGPT 48 IU/L, SAP 86 IU/L. Serum cholesterol total 190 mg/dl, serum triglyceride 160 mg/dl, HDL 40 mg/dl, blood urea 55 mg/dl, serum creatinine 1.9 mg/dl, serum uric acid 6.0 mg/dl, serum total protein 7.0 g/dl, Serum iron 61 g/dl, TIBC 290 mcg/dl, Transferrin 21 mg/dl, Vitamin D₃ 9.24 ng/dl. Thyroid profile was also done, T₃ was 92 ng/dl, T₄ 3.5 μ g/dl, TSH 29 mIU/L. U/S Doppler both lower limb showed 'monophasic low flow in left posterior tibial artery –atherosclerotic narrowing, no significant focal luminal narrowing seen in right lower limb'. Biopsy (taken from gangrenous wound for malignant cells) showed infected granulation tissue.

The patient was kept on musaffiyat (blood purifier) decoction of *Rosa damascene* Mill^[1], *Azadirachta indica* A Juss^[2], *Sphaeranthus indicus* Linn^[3], *Swertia chirata* Buch. Ham^[4], *Tephrosia purpurea*^[5], *Zizyphus jujube* Linn.^[6], medicine which have antiseptic, antibacterial properties and mufatteh sudad (deobstruent and vasodilator) decoction of roots of *Apium graveolens* Linn^[7], *Cymbopogon jwarancusa* Schult, *Foeniculum vulgare* Mill^[8], and *Chicorium intybus* besides leech therapy.^[9] On the very next day maggots were removed by pouring turpentine oil for three consecutive days. Some Unani medicines also added to improve general health. On the seventh day 3 leeches were applied after debridement of gangrenous wound. The wound was washed with *Azadirachta indica* boiled water (leaves of *Azadirachta indica* boiled in plain water) and sterile dressing with mashed unripe fruit of *Carica papaya* Linn was applied daily. On the 15th day the pain and foul smell diminished upto some extents. By the end of 4th week, the pain and foul smelling become disappeared completely. Dressing was continued daily besides debridement as and when required. On the completion of 2 months the patient was asked to walk freely. Laboratory parameters were taken after 3 months as follows: haemoglobin (Hb) 11gm%, white blood cells (WBC) 8400/ μ l, neutrophils 68%, lymphocytes 18%, eosinophils 1% red blood cells (RBCs) 3.04 million cells/ μ l, Platelets 2.52 lacs/Cumm, erythrocyte sedimentation rate (ESR) 32 mm/hr, Blood sugar (F) 89 mg/dl, serum bilirubin total 0.8 mg/dl, SGOT 38 IU/L, SGPT 45 IU/L, SAP 90 IU/L. Serum total cholesterol 185 mg/dl, serum triglyceride 164 mg/dl, HDL 44 mg/dl, blood urea 35 mg/dl, serum creatinine 1.23 mg/dl, serum uric acid 5.6 mg/dl, serum total protein 6.2 g/dl. The wound was completely healed and free from any deformity after three and half months [Fig. 2].



Fig. 1: Before treatment.



Fig. 2: After treatment

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