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A SINGLE CASE STUDY ON CHEDANA KARMA IN DUSHTA VRANA W.S.R TO DIABETIC ULCER

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ABSTRACT
Diabetic Ulcer is very common in diabetic mellitus patient. As per Wagner's grading of Diabetic Ulcer, grade 4 & 5, gangrene of part of the tissue or gangrene of entire or one area will be noticed & it is life threatening disease. *Dushta vrana*[3] being a chronic ailment attains *puti mamsa puti gandha* causes long term process of healing and needs specific medical treatment. In present paper the effect of *Chedena karma* in case of *Dushta vrana* with oral *Ayurvedic* Formulation is documented. The study was conducted on 82 years old male patient who was admitted in SKAMCH & RC *Shalya Tantra* IPD, with the complaints of wound in between 4th and 5th toe of left foot, pricking type of pain and burning sensation since 10 days. The condition was diagnosed as *Dushta Vrana* (Diabetic ulcer). *Chedana Karma* (Early and exhaustive debridement) of 5th toe was done followed by *Shodhana* With *Panchvalkala Kwatha* and *Ropana karma* with *Jatyadi taila*. Oral medications *Triphala Guggulu*, *Gandhaka Rasayana*, Tab Manoll were given. Significant improvement was observed in the patient in subjective parameters. Patient resumed his routine work and there was no discomfort, side effect or complication or recurrence after treatment and in follow up period.

KEYWORDS: *Dushta Vrana*, Diabetic ulcer, *Chedana Ropana*.

INTRODUCTION
Diabetic Ulcer is very common in diabetic mellitus patient.[1] As per Wagner's grading[2] of Diabetic Ulcer, grade 4 & 5, gangrene of part of the tissue or gangrene of entire or one area will be noticed & it is life threatening disease. It is a emergency due to the high mortality rate. It can be correlated with *Dushta vrana*[3] in *Sushuruta Samhita*. तत्र अति संवत्रो .....पूति पूय मांस सिर स्नायु प्रभ्रतिभि पूर्ण पूति पूय श्रावा..... दुष्ट व्रण लिङ्गानि II कोथा पूति भावा II means death and pus formation or gangrenous changes of tissues. The disease has a fulminant spread from toe up to below knee & Thigh. *Chedana karma* has been described in *Sushruta Samhita* for *Kotha*.[4] छेध्या भगन्धर ग्रन्थि.....स्नायु मांस सिर कोथो अधि मांसका[5] .....स्नायु कोथदिषु तथा छेदनं प्राप्तं उच्च्यते II[6] Many studies show a prolonged inflammatory phase in diabetic wounds, which causes a delay in the formation of mature granulation tissue and a parallel reduction in wound tensile strength.[7]

Incidence
It occurs in 15% of people with diabetes[8], and precedes 84% of all diabetes-related lower-leg amputation.[9]

CASE REPORT
A 82 years old male patient presented to SKAMCH & RC Shalya tantra OPD with complains of wound in between 4th and 5th toe of left foot, pricking type of pain and burning sensation since 10 days. Patient was apparently healthy 10 days back, one day while going to bathroom bare feet he got a pricking type of pain in between 4th & 5th toes of left foot, when he stretched his toes ,he found a superficial injury with mild blood discharge(the cause of injury not known) Patient did not inform to his any of family members for next 3 days, gradually patient developed more pain & burning sensation at the injured part, & the injury was more deeper with serous discharge, he also developed swelling and blackish discoloration at the 5th toe & yellowish discoloration at the dorsum surface just below the 5th toe of left foot. Patient was k/c/o DM, & not a k/c/o/HTN/TB. There was no H/O any surgical intervention. Patient was thoroughly examined and vitals were taken.

On local examination, inflamed toe with necrotic patches of tissue and slough covering almost whole 5th left toe was found. Local temperature was raised, tender toe along with indurated skin & subcutaneous tissue of toe. Tenderness was also present at the dorsal surface of left

foot. The condition was diagnosed as *Dushta Vrana* (Diabetic ulcer) and the patient was admitted in male *Shalya Tantra* ward viz. IPD No- 1465/16 & Bed No-143 dated 30/03/2016. Patient was fully conscious, well oriented to time, place &person. B.P-130/70mmHg, P.R 82/Min. No abnormality was detected in CVS, Respiratory systems, per abdominal and CNS.

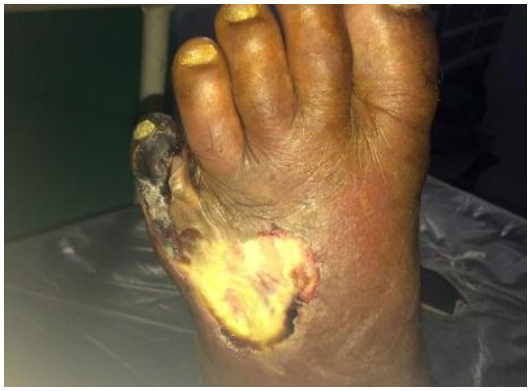

Figure-1: Presentation of wound before treatment

Investigation

Hb g% CT, BT, ESR, RBS, HIV, HBsAg, ECG, CXR-PA View, Urine–R/M were done. All investigations were within normal limits.

Treatment plan

Chedana Karma(Surgical Debridement under L.A) was planned. Patient taken supine position The surgical site is cleaned with povidone iodine solution & drapped. Inj. Xylocaine 2% local given. A straight incision was given in between 4th & 5th toes followed by elliptical incision towards lateral side of left foot along with the margin of ulcer The necrosed tissue excised & the 5th toe was amputated from its proximal end with the help of bone cutter. A stump was made followed by open flap. Haemostasis achieved, amputated part packed. The excised tissues were sent for histopathological examination and culture & Sensitivity test. Antibiotics were started as per culture & sensitivity report along with analgesics and anti-inflammatory drugs. पञ्चमं शोधनं कुर्यात , षष्टं रोपणं मिष्यते[10] before wound healing the wound should be cleaned. *Shodhana Karma* with *Panchavalkala kwatha* and packing with *Jatyadi Taila* daily was continued for 8 weeks. After 8 weeks of *Shodhana karma*, *shudha vrana* features were observed. त्रिभिर्दोषा अनाक्रान्ता श्याव ओष्ठ पिडकीसम अवेदनो निरःस्रवो व्रण शुद्ध इह उच्च्यते II[11] The wound which is free from the symptoms of vitiated *dosha*, has bluish margins, granulation tissue at the level of skin surface and has no pain or discharge is said to be clean one. Oral medications- *Triphala Guggulu* 2 tab twice daily after food, *Gandhaka Rasayana* 1 tab. thrice daily after food, Manoll 1 tab twice daily after food twice, for one month were given after 1 week of *Chedana karma*.

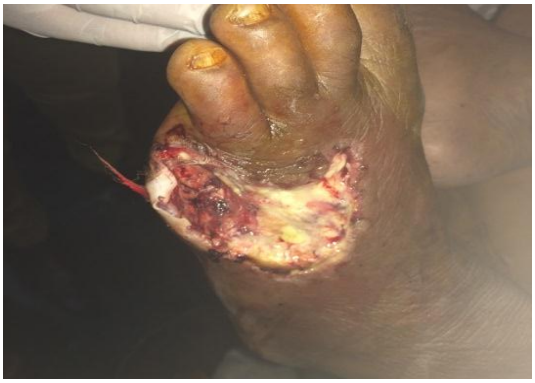

Figure-2: Presentation of wound after Chedana Karma

Follow Up

After treatment period of 8 weeks patient was discharged and regular follow up was advised. Follow up was done weekly for 1 month. Improvement was noticed on each visit to the hospital and any side effects or fresh complaints were asked. No fresh complaints or side effects were observed. There was day to day improvement in the condition of the operated site and general condition of the patient was noticed on each visit.

RESULT

Significant improvement was observed in the patient in subjective parameters- pain, swelling & tenderness. Patient returned to his routine work and there was no discomfort after treatment. There was no recurrence of symptoms in follow up period. No any side effect or complication was complained during treatment and follow up period.

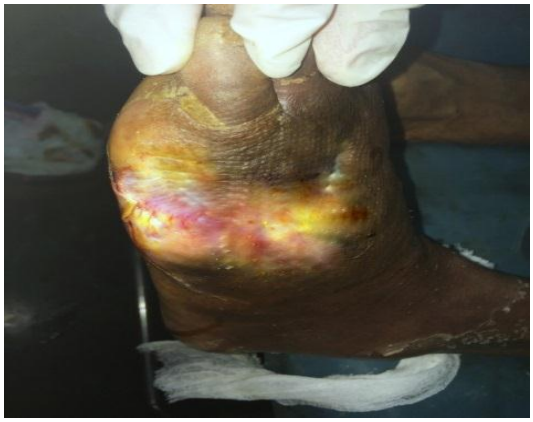

Figure-3: Presentation on 8th week

DISCUSSION

Dushta Vrana (Diabetic ulcer) is a fulminant disease; it should be treated as early as possible. Step by step treatment process helped in the recovery of the patient. *Chedana karma* caused removal of necrotic tissues and slough in the left 5th toe which prevented the spread of the disease upwards. After extensive debridement the role of *Shodhana* is important. After proper *shodhana*, *ropana* can be achieved.

For *Shodhana karma Panchvalkala kwatha* was taken. *Panchavalkala kwatha* phytochemically dominant in phenolic group components like tannins, flavonoids which are mainly responsible for its excellent activities antiseptic, anti-inflammatory, immuno modulatory, antioxidant, antibacterial, antimicrobial and wound purifying as well as healing, astringent properties.[12]

Jatyadi taila was used for wound dressing which has potent wound healing property, which helped in quick wound healing.[13] *Triphala guggulu* possess antibiotic property preventing the secondary infection.[14] Tab-Manoll boosts immunity and restore body's vitality, acted as an immune modulator and antioxidant which exerted effect on wound healing causing better wound healing.

CONCLUSION

Though Diabetic ulcer is a life threatening condition, prompt diagnosis and extensive debridement along with oral *Ayurvedic* formulations can cure the condition with comparatively better outcome. The use of oral *Ayurvedic* formulations after surgical debridement helped in early granulation tissue and epithelialization.

Treatment principle described in *Sushruta Samhita* proved to be very scientific. Stepwise procedures consisting of *Chedana* along with supportive care with *Gandhak rasayana* & *Triphala guggulu*, Tab Manoll and local use of medicated oil (*Jatyadi taila*) is very much useful in the management of *Dushta Vrana* (Diabetic ulcer).

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