

**RESPONSE OF DIABETIC WOUND TO KARUVANGA PASPAM,
DATHRI CHOORANAM AND 18- KARAPAN OIL: A CASE STUDY****Thavarasah Vijayakumar* and Ananthajothy Vijayakumar**

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Vijayakumar**Unit of Siddha Medicine,
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Kaithady, Sri Lanka.**ABSTRACT**

A diabetic women, 52 years of age presented with 2 months history of deep wound on her posterior aspect of middle of the left leg. Wound was round with well-defined edge. Diameter was 2.5cm and surface area was 284mm². A black hard tissue was seen on the middle part of the base of the lesion. Serous exudate was seen with no odor. Patient felt difficult in walking due to pain. Patient was treated internally by *Karuvanga paspam* and *Dhathri chooranam* and externally by *18-Karapan oil* for 2 weeks and assessment was done once in *end* of 1st and 2nd week during the treatment and 3rd and 4th week during the follow-up period. At the end of the 2nd week, surface area of the wound

and pain was reduced and black tissue also detached. At 4th week, surface area was reduce by 2/3rd of its initial stage. It could be concluded that diabetic wound showed good response to Combination of medicines of *Karuvanga Paspam*, *Dhathri Churna* and *18-Karapan Oil*.

KEYWORDS: Diabetic wound, *Karuvanga paspam*, *Dhathri chooranam*, *18-Karapan oil*.**INTRODUCTION**

A diabetic women from Meesalai, 52 years of age, presented to a traditional practitioner in Chavakachcheri with the history of a wound on her posterior aspect of middle of the left leg. Lesion had commenced due to scratching on that area by her nail. At the baseline examination the wound was round in shape with 2.5cm in diameter and 284mm² in surface area. It was deep wound with well-defined edge. A black hard tissue was seen on the middle part of the base of the lesion. Serous exudate was seen with no odor. Patient felt difficult in walking due to pain.

Lesion was commenced 2 months ago. The women had a 09 - year history of Diabetes Mellitus (DM) and she was under treatment for it. FBS was 134mg/dl. Patient had no history of dyslipidemia. She did not seek any treatment for wound.

General look of the patient was well with imbalance gait due to pain on the lesion. Blood pressure was 110/70 mmHg and pulse was 81/minute. Temperature was 97°F.

MANAGEMENT (MATERIALS AND METHODS)

Patient was treated with internal and external medicine. *Karuvanga paspam* and *Dhathri chooranam* was provided to take internally. *18-Karapan oil* was issued to apply on wound externally. Dosage of the medicines were showed in the Table 1.

Table 1: Detail of prescribed medicines.

No.	Name of the medicine	Dosage	Vehicle (Anupanam)
Internal Medicines			
1	<i>Karuvanga paspam</i>	10mg/ twice a day/ before meals	Ghee
2	<i>Dathri Churna</i>	5g/ twice a day/ after meals	Warm water
External Medicines			
3	<i>18-Karapan oil</i>	Quantity sufficient/ cleaning and dressing daily	-

Patient was advised to cleaned the wound with the oil and then apply the oil on a piece of gauze and apply on the lesion every day.

Medicines were given for 2 weeks and follow-up was done for 2 weeks. Patient was instructed to visit to the clinic on end of 1st and 2nd weeks during the treatment period and end of the 3rd and 4th week during the follow-up period for the assessment. Assessment was done based on the outcome indicators of difficulty in walking, presence of exudation on the lesion, surface area of the lesion, diameter of the lesion and presence of black hard tissue.

Pain was recorded based on walking difficulty. Surface area of the wound was measured using checkered transparent paper (the surface of each square will be 1 mm²).

RESULTS AND DISCUSSION

Improvement in healing of wound has been described in Table 2.

Table 2: Assessment of wound at baseline, treatment and in follow-up periods.

Outcome indicators	1st day	End of 1 st week	End of 2 nd week	End of 3 rd week	End of 4 th week
Walking	Difficult	Difficult	Not difficult	Not difficult	Not difficult
Exudate	Present	Absent	Absent	Absent	Absent
Surface area of the lesion (mm ²)	286	284	231	178	86
Diameter of the lesion (cm)	2.5	2.5	2	1.7	0.9
Black hard tissue	Seen	Seen	Not seen	Not seen	Not seen

Table 2 revealed that surface area and diameter of the lesion had been reduced on end of 2nd week of the treatment and at the same time patient was able to walk without difficulty. It showed the pain also had been reduced. Black hard tissue also had been detached. It showed that the wound started to be healed at the end of 2nd week.

At the end of the follow-up the size of the wound had been reduced by 2/3rd of the surface area.

Figures 1, 2 and 3 showed the improvement in healing of wound.

**Figure 1: Wound on 1st day.****Figure 2: Wound on end of 2nd week.**



Figure 3: Wound on end of 4th week.

Paspam is a kind of herbo-mineral formulation in Siddha Medicine^[1], used in chronic disorders.^[2] *Karuvanga Paspam* is a *herbo-mineral* drug which is used in *Meha* diseases and used to treat the wounds.^[3,4]

As per the Siddha Classical texts, Diabetes Mellitus is one of the *Meha* disease.^[5] *Karuvanga paspam* would help to heal the wound in diabetic patient.

Dhathri churnam is a poly herbal formulation stated in the text for skin diseases. The main ingredient is dried fruit of *Embllica officinalis*.^[6] Processed dried fruit of *Embllica officinalis* has Ascorbic acid.^[7] Ascorbic acid is essential for the synthesis of collagen and intracellular environment of cells, tissues, blood vessels and it improves the immune and quicken the healing of wounds, and it has anti-inflammatory effect.^[8] It also helps to depigmentation.^[9] Thus *dhathri churnam* would influence in healing of wound by having ascorbic acid.

18-Karappan oil is also a poly herbal oil prepared by traditional method. The one of the main ingredient of the oil is juice of the leaf of *Psophocarpus tetragonolobus*. A previous study showed that the methanol extract of leaf of *Psophocarpus tetragonolobus* had potent antimicrobial activity against *Pseudomonas aeruginosa* (common skin pathogen) and it altered the morphology and complete collapse of bacterial cell.^[10]

Another ingredient of *18-Karappan oil* is juice of the leaf of *Clerodendrum inerme*. Preliminary phytochemical analysis revealed that petroleum, chloroform, ethyl acetate,

methanol and aqueous extracts of the leaf of the plant showed the presence of flavonoids.^[11] Flavonoids are the bio active agents which possess wound healing process.^[12]

Hence *18-Karapan oil* would prevent the infection of the wound and facilitate the wound healing process.

CONCLUSION

Chronic wound in diabetic patient showed good response to combination of medicines of *Karuvanga Paspam, Dhathri Churna* and *18-Karapan Oil*.

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