

An effective use of Ayurvedic management in case of Nail Bed Infection- A case report

Case Report

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Abstract

Background: A Nail bed infection viz. also known as paronychia is very common condition found in people due to trauma, bacterial infection to the nail. This can be treated with systemic Anti-inflammatory and anti-biotic with Local anti-microbial ointment. In Ayurveda this condition is explained as *Kunakha*. This can be treated with use Leech therapy and various internal medicine and local application of various drug formulations. **Objective:** a. To use leech therapy in Nail bed Infection b. to apply *ayurvedic* treatment principle in Nail bed Infection (*kunakha*). **Method:** A case report of Nail bed infection cause due to Trauma to nail. Patient visited to *ayurvedic* clinic as her wound didn't heal properly even after 45 days of conventional treatment. In *Ayurvedic* treatment management, 3 cycles of *Raktamokshan* and *vrana dhoopna* and *Vrana ropan tail pichu* were done on alternate day for 30 days. This local treatment supported with some internal medicine. **Result:** All this included treatment shows effective result in this patient. **Conclusion:** This case report concludes that Leech therapy and *ayurvedic* topical and internal medicine are found to be effective in case of Nail bed infection.

Key Words: *Dushta vrana*, Leech therapy, Nail bed infection, Paronychia, *Vrana dhoopana*, *Vrana ropana*.

Introduction

A Nail bed infection viz. Also known as Acute Paronychia may results from trauma, infection or irritation. (1) It can develop when bacteria enter through broken skin near cuticle or nail fold and causing the infection. It is most commonly found Nail Bed infection and treated with Antibiotics and sometimes with a draining of Pus. Paronychia has two types Acute and Chronic. Acute Infection can easily treated and resolve within 6 weeks while chronic condition may last for more than it. In *Ayurvedic* reference book this condition can co-relate with '*Kunakha*' one of the *Kshudra vyadhee* explained in *Sushruta samhita*. There are many treatment modalities available to use in this condition. *Raktamokshan* especially *Jalaukavacharan* shows promising role it with *Vrana dhoopana* and *vrana ropana Chikitsa*. In this Particular Case report, a female of Age 20 years came to clinic with c/o Pustulated left toe nail bed since 2 months due to trauma to the Left toe nail. Her outer nail was initially removed for dressing etc. After taking modern medicinal treatment for 2 months, the wound was not healed properly, so she visited to *Ayurvedic* clinic for further treatment.

Case Report

A student Age of 20 years came to clinic with following complaint

- Left toe Nail Pustulated Wound
- Severe tenderness
- Pain
- Difficulty in walking and wear footwear.(These all Symptoms were present since 2months in progressive Nature)

History

Previous history of treatment

Patient had history of trauma to the left toe. After Trauma, Patient immediately visited to general surgical department of Hospital. For local cleaning and dressing of wound, patient's outer nail covering was removed. Local cleaning and dressing of wound were done and she was administered with Systemic Anti-inflammatory and Anti- biotic drugs. Patient was prescribed with modern medicinal treatment for more than 45days. Eventually, wound got infected and accumulation of pus was observed. Thus Patient visited to *Ayurvedic* Clinic for further treatment.

Medicinal History

Systemic anti-biotic therapy for 21 day

Examination

General Examination, General Condition –good and afebrile; Pulse – 92/min; Blood Pressure 110/70 mmHg; Icterus- Not present; Pallor- Slightly. Local Examination of wound site is described in Table 4. The examination of wound was done on Day 1st, Day 8th, Day 15th and Day 30th.

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Ashtavidha pariksha

(This is general examination in view of Ayurvedic Principles.)

1. Nadi –Vata-pittadhya
2. Mala- Asamyak (grathit mala)(unsatisfactory bowel movement)
3. Mootra- Samyak Pravatana

4. Jivha- Sama
5. Shabda- Spashta
6. Sparsha- Samasheetoshna
7. Druka- Prakruta
8. Aakruti- Madhyam

Table 1: Grading for Pain, Tenderness and swelling

Patient Assessment					
Parameter	Gradation				
	Grade 0	Grade 1	Grade 2	Grade 3	Grade 4
Tenderness(2)	Absent	Tenderness with no physical response	Tenderness with grimace, wince, and/or flinch	Tenderness with withdrawal (positive jump sign)	Non-noxious stimuli
Consistency of Swelling	Swelling Absent	Soft	Mild hardness	Moderate Hardness	Severe hardness
Pain (VAS Scale)					

Table 2: Treatment given to the Patient (Local Treatment)

Local treatment			
1	<i>Jalaukavacharana</i>	On 1 ST Day, 8 th day and 15 th day	
2	<i>Sthanika Vrana Dhoopana Karma</i>	Ingredients-Haridra, Triphala, Vacha, Yashtimadhu, guggul and Ghrita	Alternate Day since Day 1 to Day 30
3	<i>Sthanika Vranaropana taila Pichu</i>	Formulation Used – <i>Vranaropana taila</i>	Alternate Day since Day 1 to Day 30
4	Local Application of Oint. Pentaphyte P5 (Market Preparation)	Market preparation	After 30 day In morning and Night Time
P.S. – <i>Dhoopana Karma and Vranaropana Taila pichu</i> were halt during day of <i>Jalaukavacharana</i> . After <i>Jalaukavacharana</i> <i>Haridra Churna</i> was applied locally.			

Internal Medicine-For internal *Nija dosha dushti*, following internal medicine were prescribed to the patient.

Table 3: Treatment given to the Patient (Internal Medicine)

Internal Medicine			
1	<i>Triphala + Musta+ Guduchi Churna</i> Combination	5 gm. with warm water At Morning and Evening (<i>Ananna Kal</i>)	For 7 days
2	<i>Triphala Guggul</i>	2 tabs After Meal (<i>vyanodana Kal</i>)	For 15 days
3	<i>Avipattikar Churna</i>	5 gm. at Bed time	For 15 days
4	<i>Tab. Sanshamani Vati</i>	2 tabs At Morning Rasayana Kal	After 15 days (for 15 days)

Table 4: A Clinical presentation table on day 1st, 8th, 15th and 30th

Sr. No.	Sign and Symptoms	Day 1	Day 8	Day 15	Day 30
1	Pain	Grade 4	Grade 2	Grade 0	Grade 0
2	Tenderness	Grade 3	Grade 2	Grade 0	Grade 0
3	Swelling on Nail Bed	Moderate Hardness	Mild Hardness	Absent	Absent
5	Colour of Nail bed	Reddish	Reddish	Reddish White (Appearance of Healthy Nail bed)	White soft healthy Nail Bed
6	Pussy Appearance	Present	Reduced	Nil	Nil
7	Oozing from Nail bed	Present	Reduced	Nil	Nil
8	Skin around Nail	Blackish	Blackish	Blackish appearance reduced	Blackish appearance reduced

<p>Figure 1: A Picture of wound taken on Day 1st of treatment</p>	<p>Figure 2: Picture of Wound taken on day 7th of treatment after Leech therapy</p>	<p>Figure 3 and 4: Pictures of wound Taken on day 15th of treatment</p>		<p>Figure 5: A Picture of wound Taken on day 30th of treatment (Appearance of soft and healthy nail bed is seen)</p>
				

Result

All combination of *Ayurvedic* treatment such as Leech therapy, internal Medications and Local wound healing procedure had positive result in this particular case report.

Discussion

According to *Ayurvedic Siddhanta*, *Nija dosha* are always involved in any pathological condition occur in body including *Aagantuja hetu* (trauma) which causes imbalance in between *vata-pitta-kapha* harmony and *Shaarir Dhatus* especially *Rakta dhatu*. (3) In *sushruta samhita*, there is *shlok* which explained involvement of *Vata* in *shoola*, *pitta* in *paka* and *kapha* in *pooya* formation along with pre-dominantly *dushti of Rakta Dhatu*. (4) In this Particular case of *Kunakha* which ultimately turned into *Dushta vrana*, *Aagantuja hetu* i.e. trauma to toe affects the balanced in between *Nija dosha* harmony with indulgence of *aahariya hetu* by patient. Patient was regularly consumed hotel food, junk food, spicy and *vidahi* food. These cause the imbalanced *nija dosha*. For Local i.e. *sthanika chikitsa*, *Jalaukavcharana* was used 3 times with interval of 7 days in each session. This helps to drain *dushta rakta* and increase flow of blood supply at wound site as *jalauka* always helps to remove *dushta rakta* (5)

Jalaukavcharan (leech therapy)

In this case of *Dushta vrana*, *Jalaukavcharan* were done 3 times after every 7 days. After 1st session of *jalaukavcharan*, pus formation reduced significantly. Swelling and tenderness gradually reduced after every session. In *charak samhita* there is reference for use of *raktamokshan chikitsa* in various conditions. In this Particular chapter, there is list of many *shonitashya vyadhi*. This list content many skin related conditions in which *Raktamokshana* is indicated. *Acharya* also explained use of *raktamokshana* where *rakta dhatu* is involved as vehicle. (5) In *sushruta samhita*, there is indication of *raktamokshana* especially *jalaukavcharana* in *vrana chikitsa* (6) Principles for treatment in *kunakha* are as same as *shleshmavidradhi*. There is reference for *Jalaukavcharana* in *shleshma vidhradi*. (su chi 7). *Jalaukavcharan* helps to drain *dusht rakta* from wound site as in *asthang hrudaya*

sutrasthana the principle of *raktamokshan* is “*agre stravati dushtasram*”(8)

Vrana dhoopana and Vrana Ropana tail Pichu

Jalaukavcharan was followed by *vrana dhoopana karma* with *Haridra*, *musta*, *vacha*, *yashtimadhu*, *Guggul* and *Vrana-ropan taila pichu* alternate day for next 7 days.

Vrana Dhoopana – It is process in which smoke of various medicinal drugs given to the affected site. This process is similar to fumigation process. In *shashti upakrama* of *vrana*, *vrana dhoopna* is mentioned as one of the *upakrama*. (6) For *vrana dhoopana* many drugs can be used along with *guggul* (*Commiphora wightii*). In this case, turmeric, *yashtimadhu* (*Glycyrrhiza glabra*) were used.

Vranaropana Tail Pichu (6)- In this particular process, a market preparation of *Vrana ropana tail* was used. In the *pichu* process, a sterilized cotton swab is dipped with medicated oil and applied over affected area and covered with bandage for better result and bandage will removed after particular time. In this case, bandage was removed after 24hrs of application.

VRANA DHOOPNA and *VRANA ROPANA TAIL PICHU* were continued for 30days on alternate day. After 30 days, a market preparation of oint. Pentaphyte P5 for local application was done.

Internal Medicine

For Internal Medicine, the combination of *triphala*, *Musta* and *Guduchi churna* in dose of 5 gm. of combined dose in morning and evening empty stomach with warm water. This *churna* combination is used for *pachana* as there is need of balancing internal *dosha due to Nija dosha dushti*. All drugs in this combination are already proved to anti-inflammatory in action in various studies. *Triphala Guggul* is given to patient in dose of 2 tabs (500mg) after meal twice a day with warm water. *Avipattikar Churna* 5 gm. was given at bed time with warm water. This all medicines were continued for 30 days. These all preparation of medicine was used to balanced harmony *dosha*. After 15 days of all above medicines, tab *Samshamani Vati* (2 tabs) early morning with warm water given to the

patient. This is a classical preparation of *tinosporia cardifolia* used as rejuvenation i.e. *Naimitika rasayana*. After 1 one month of above all treatment used in patient, wound healed properly. There was formation of healthy soft nail bed. The outer nail covering took next 45-50 days to completely reappear.

Conclusion

Ayurvedic treatment modalities are very commonly used in chronic pain, metabolism related condition but there is various treatment modalities are explained in wound healing and related conditions also. This treatment modalities can be used efficiently in patient with help of various *chikitsa sidhhanta* and *yukti pramana* explained in *samhita*. This case report shows the effective use of *jalaaukavcharana*, *vrana dhoopna* and *vrana ropan karma in dushta vrana*.

Conflicts of Interest - None

Declaration of the Patients Consent

Author certify that they have obtained the patient's consent form where the patient/caregiver has given his/ her consent for reporting the case along with the images and other clinical information in the journal. The patient/ caregiver understand that his name and initials will not be published and due efforts will be made to conceal his/ her identity but the disease cannot be guaranteed.

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