



AYURVEDIC INSIGHTS INTO MANAGING PITTA SHOTH W.S.R TO CELLULITIS: HOLISTIC APPROACHES FOR CELLULITIS, A CASE STUDY.

Ayurveda

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ABSTRACT

The ancient science of life, Ayurveda, is centered around the concept of holistic well-being. Cellulitis, characterized as a bacterial infection of the deeper layer of the skin, has the potential to become life-threatening if left untreated. The infection, can spread into the blood, bones, and lymph nodes, ultimately resulting in shock or even death. At D. Y Patil School of Ayurveda in Nerul, Navi Mumbai, a 43-year-old male patient exhibiting symptoms suggestive of cellulitis. The patient presented with swelling, pain, fever, tenderness, local temperature, and erythema in the skin of the lower left leg. Based on the presenting complaints, a diagnosis of cellulitis and pittaj shoth was made in accordance with Ayurvedic principles. The patient underwent a comprehensive treatment regimen that included the administration of Gandhak Rasayana, Sarivadiasav, and Arogyavardhini vati and sukshma triphla. The subjective assessment of parameters such as pain, local temperature, and color was conducted using the gradation method. These medications, possessing properties like Rakta shodan (blood purifier), shothhar (reduce oedema), Vranaropan (healing property of wound), and krimighna (anti-bacterial), played a crucial role in achieving the ultimate objective of reversing cellulitis. Remarkably, the treatment successfully altered the course of the disease.

KEYWORDS

Pittaj Shoth, Cellulitis, Gandhak Rasayan, Arogyavardhini vati, Sarivadiasav, Sukshma triphla.

INTRODUCTION-

Cellulitis is an acute inflammatory condition of the skin that is characterized by localized pain, erythema, swelling and heat^[1]. According to modern science, Cellulitis is spreading type of inflammation of subcutaneous tissue generally associated with bacterial infection. Characteristic features of inflammation i.e., Pain, Redness, Tenderness, Swelling are landmarks of Cellulitis^[2]. Inflammation, it is a part of the complex biological response of body tissue to harmful stimuli, such as pathogens, damaged cells or irritants and is a protective response involving immune cells, blood vessels and molecular mediator^[3]. Cellulitis is characterized as a bacterial infection of the deeper layer of the skin and underlying tissue. Once bacteria enter through the skin break, inflammation occurs. Common bacteria found in the skin and mucous membranes of the mouth and nose, such as Streptococcus and Staphylococcus, can lead to infection when they enter^[4]. Symptoms of cellulitis include redness, swelling, tenderness, warm skin, pain, fever, and weakness. If the infection spreads into the blood, bones, and lymph nodes, it can result in shock or even death. While there are systemic antimicrobial drugs available for managing cellulitis, they are not always sufficient for eradication. In this regard, the external (local) application of herbal drug formulations over the affected area can also be beneficial in managing cellulitis. Cellulitis is an inflammation of the skin and subcutaneous tissues that can occur suddenly and potentially lead to life-threatening complications. It is commonly caused by Streptococci, Staphylococci, or Clostridia organisms. In modern medicine, cellulitis is typically treated with antibiotics, anti-inflammatory, antipyretic, and analgesic drugs, along with other supportive measures based on symptoms^[5]. However, it may take several days or more to see the desired results with these drug management approaches. Many physicians and surgeons recommend using glycerine and magnesium sulfate dressing, as it helps minimize edema, reduces inflammatory changes, and provides pain relief due to its warming properties. Cellulitis, a skin and subcutaneous tissue disease, can be compared to Pittaj Shoth (oedema due to Pitta dosha) in Ayurveda. According to Acharya Charak the symptoms of pitta janya shoth are as follows^[6]

Mrudu- swelling is soft to touch
Sagandha-emits odour
Asita peeta raagavan-black, yellow or red in colour
Bhrama, jwara-giddiness, fever
Ushyate-local rise of temperature
Sparsha ruk-local tenderness
Daha, pakvan-excess burning sensation
These symptoms are similar to symptoms of cellulitis disease.

AIMS AND OBJECTIVES-

To estimate efficacy of ayurvedic management in pittaj shoth w.s.r to cellulitis.

MATERIAL AND METHODS-

Case Report

A 43-year-old male patient came to D.Y Patil School of Ayurveda hospital with complaints of pain, swelling and discoloration of left leg. Patients also have raised local temperature and tenderness of skin. From previous 4 days patient have symptoms but from 1 day the severity of symptoms were increased.

General condition of patient was good and afebrile.

Pulse-72 / min

Blood pressure-150 / 100 mmHg

Respiratory rate-20 / min

Pallor-Absent Systemic examination-CVS- S1 S2 normal

CNS -Well oriented, conscious

RS -AEBE clear

P/A -Soft, non-tender

On Examination Table

1: Ashta vidha parikshan

Nadi - Samyaka (regular)

Mala- Malavshamba (occasionally)

Mutra - Samyak pravritti

Jivha - Sama

Shabda - Spashta

Sparsha - Ushna

Aakruti - Madhyam

Present Illness -

Patient was having above complaints Since 4 months. But from 1-day symptoms were increased. For this complaint he attended hospital for treatment.

Past History- H/o Hypertension, DM

No H/O IHD/PTB/BA/Jaundice/Typhoid

Investigation

Blood Sugar Level: fasting= 146mg/dl, Post prandial=92mg/dl

hbA1C- 6.5

Sr. creatinine-2.0

Assessment criteria^[7]

1 -Pain: Assessment was done by visual analog scale on the basis of VAS

Grading for Visual analogue Scale



In visual analogue scale patient can express the intensity of pain on a graph where 0 to 10 numbers are written on an axis of graph. According to number denoted by patient the readings of Visual analogue scale was graded from Grade 0 to Grade 10.

2. Utsedh/ Swelling

3. Sthanik Ushma/ Local temperature

4. Twak Vivarnata / Redness

Assessment criteria of Utsedh/Swelling

Utsedh measured in centimeter by scale or measuring tape before and after treatment.

Assessment criteria for Sthanik Ushma/Local temperature

Local temperature will be measured by infra-red thermometer

Assessment Criteria for Redness

Sr.no	Reduction in percentage	Grade
1	No redness	0
2	Redness upto 25 %	1
3	Redness upto 26-50 %	2
4	Redness upto 51-75%	3
5	Redness upto 76-100%	4

TREATMENT-

After the appropriate Examination and analysis of skin, patient has been prescribed for Ayurvedic medicine for 28 days.

Gandhak Rasayan 250 mg- 2tab TDS

Sarivadiasava - 20 ml BD after food

Arogya vardhini vati 250 mg- 2-tab BD

Sukshma triphala 250 mg- 1tab TDS

RESULTS-

The patient is symptomatically improved. The subjective parameters show improvement in the clinical symptoms. So, we can state that this treatment is effective in cellulitis and study can be done on large scale population.

Pain:

The initial score of pain observed was 7, which come down to 5 at 15th day of treatment and grade 4 at the end of treatment that means significant relief in pain.

Redness-

The initial grade score of redness observed was 2. which come down to grade 1 at 15th day of treatment. that means significant relief in redness.

Swelling-

The initial swelling observed was 28.0cm which come down to 27.01 at 15th day and 28th day 25.60cm .

Change in effect from baseline up to 28th day that means significant relief in swelling.

Local Temperature-

The initial score of local temperature observed was 99.9 which come down to 98.04 at 15th day and 97.0 mean at 28th day of treatment. Change in effect from baseline that means significant relief in local temperature.

Table:1 Subjective parameters before treatment and after treatment

SYMPTOMS	BEFORE T/T	AFTER T/T
Vedana(pain)	grade 7	grade 4
Shoth (Edema)	28.0 cm	25.60cm
Daha (local temperature)	99.9°f	97.0°f
Twak vaivanyata(discoloration)	grade 2	grade1

Patient Before and after the treatment



Figure:1 Day 0th



Figure: 2 Day 14th



Figure:3 Day 28th

DISCUSSION-

The treatment applied for the management of this disease are samprapti vighatan(breaking of pathogenesis) chikitsa(treatment). The probable mode of action of these for mentioned can be explained as follows.

Sarivadiasava^[8] has content sariva which is considered raktashodhak (blood purifier) and raktaprasadak dravya, other drug Mustak Aswath, Nyagrodh, Anant, shati, Usher, Padmaka, Raktachandana ,Yavani, kushtha, katuohini patra have shothhar(reduce the swelling) property, which help in relieving the erythema of disease. Vranaropan(healing of wound) properties is told for Nyagrodha, lodhra, Ashwatth, Patha, and krimighna(anti-bacterial) properties is also told for Padmaka, Guduchi, Sweta Chandana, Patha which cure the disease.

Arogyavardhini vati^[9] has triphala, Shilajeet, kutaki which reduce the kleda and meda, Guggul have quality of anti-inflammatory action.

Gandhak rasayana which has different bhavana dravya like guduchi, haritaki, shunthi, nagkeshar has property of Katu, Kashaya and ushnavirya thus it dos deepan pachan(appetizer,digestive), kledahar and also gandhak have kushthagna (remove skin disease) and kandughna(anti-itching property).

Sukshma triphala which content is kajjali has antimicrobial, yogvahi(synergic) action, Sukshma shrotogami (enter the small channel) action that cure the disease.

CONCLUSION-

Cellulitis is simply defined as an acute infection of the skin involving the dermis and subcutaneous tissues^[10] The overall assessment of the treatment has demonstrated a significant improvement in parameters. These case reports provide guidelines for the successful treatment of cellulitis in Ayurveda. The present case study highlights the effectiveness of Gandhak rasayana, Sarivadiasav, Arogyavardhini vati and Sukshma triphala. The subjective parameters show improvement in clinical symptoms, suggesting the potential for further studies on a larger population. Based on the present study, it can be concluded that the combined effect of Arogyavardhini vati, Gandhak Rasayana, Sarivadiasav, and Sukhama triphala has shown excellent results in addressing pitta-related shoth with respect to cellulitis.

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