

HOLISTIC APPROACH TO HIDRADENITIS SUPPURATIVA WITH SPECIAL EMPHASIS ON *NADI VRANA*: A CASE STUDY

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ABSTRACT

Hidradentis Suppurativa (HS) has always been neglected even though it causes great sense of discomfort and affects the health of the patient greatly. Besides pain, purulent discharge, and destruction of skin texture, HS patients experience metabolic, musculoskeletal, and psychological disorders. The prevalence of HS is about 1% to 4% in Europe. Scarring and suppuration of axilla and groin region are main features. Onset is typically after puberty. Disease becomes chronic only after subcutaneous extension which leads to indurations, sinus and fistula having a serious impact on the quality of life. Etiology is still not known. The characteristic features can be correlated with *nadi vrana* stated in classical texts. Management of *nadi vrana* mainly includes *taila pooran*(pooling), *dhavan*(douching) and oral medications for *shodhan*(cleansing) and *ropan*(healing). A case report of 18years male came with complaints of multiple sinus, pus discharge,

throbbing pain and burning sensation in axilla who had taken treatment from allopathic, homeopathic physicians but got minimal relief. Then patient received ayurvedic treatment for 6 months which has gradually reduced his symptoms like sinus discharge, pain and burning sensation gradually. *Varunadi kshaya* and *saptanga guggul* were given orally for 6 months. *Varunadi kshaya douching* and *nirgundi taila pooling* was given locally for 3 months. Disease has cured without scarring, quality of life and professional activity has been restored. 6 months follow shows no signs of recurrence.

KEYWORDS: Hidradentis Suppurativa, HS, *nadi vrana*, sinus, *varunadi kshaya*, *nirgundi taila*.

INTRODUCTION

HS (Acne Inversus) is chronic, recurring, inflammatory disease of intertriginous areas affecting axillae, perineum, groin, breast and buttocks region. The disease is predominantly pilosebaceous and does not majorly involve apocrine gland.^[1] The HS symptom that has the biggest impact on a patient's daily life is pain. Additionally, patients' quality of life is severely disturbed by offensive purulent discharge, aesthetic modifications, and scarring with contracture formation, which limits mobility. Therefore, untreated HS causes humiliation, social isolation, low self-esteem, and deterioration of one's sexual life. It impacts not just interpersonal relationships but also academic and professional pursuits, resulting in a population that is severely socioeconomically disadvantaged. Hypertriglyceridemia and hyperglycemia are among the metabolic and endocrinologic diseases that HS patients experience. The lifespan of people with HS is drastically shortened as a result of cardiovascular events like myocardial infarction or stroke.^[2]

As per ayurveda text inappropriate and misleading of inflammation leads to abscess formation and pus discharge through solitary/ multiple sinuses (*nadi vrana*) which is *kaphavata* predominating disease.^[3] Male to female ration is 1: 2 to 5, which suggests it is more common in females and appears to affect genitofemoral areas immensely.^[4] The disease usually develops in 20s and average duration patients have to suffer is 18.8 years. 1/3 patients of HS gave a positive family history.^[5]

Diagnostic criteria

Diagnosis is based on clinical features like presence of recurrent painful nodules, abscesses, foul odor, scarring and draining sinus tracts in axilla, groin and genital area that persist for longer duration; and imaging studies such as ultrasound and magnetic resonance imaging.^[6]

Grading/stages

Hidradentis Suppurativa is a recurrent, chronic, skin disease that progresses through three stages.^[7]

Stage 1: Recurrent, painful nodules/abscesses that may be misdiagnosed as folliculitis or boils.

Stage 2: Recurrent, painful abscesses that can rupture and form sinus tracts. Skin may become thickened and scarred, and the area may have a foul odor.

Stage 3: Widespread, deep-seated abscesses and sinus tracts that can lead to the development of extensive scarring and disfigurement. The affected skin may fuse together, leading to the formation of a single lesion.

MATERIAL AND METHODS

Case report: A 18years male citizen of Pune, student by profession came to surgery OPD with complaints of pus discharge from both axilla, intermittently, increased gradually associated with burning sensation and throbbing pain on and off since 3years.

History of present illness: Patient was ostensibly well 3 years ago. Then he developed painful swelling which erupts after few days and pus started coming out. Gradually he noticed the swelling and pus discharge in right axilla and after 2 months in left axilla. He visited various physicians and surgeon took various treatments according to the investigations, sonography axilla and C&S in allopathy and homeopathy.

Past history: No history of chronic illness like Diabetes Mellitus (DM), skin infection, drug allergy or surgical history.

Personal history: Patient is non-vegetarian, lives in proper hygienic condition and normal bowel habits. No history of alcohol consumption or smoking.

Family history: No relevant is present.

On examination

Vitals

Table 1: Vitals on admission.

BP (left arm)	110/70mmhg
PR	80/-
RR	16/-
TEMP	97.2F
WEIGHT	48kgs

Systemic Examination

Table 2: Systemic examination on admission.

Central nervous system	Patient is conscious and oriented to time, place and person
Cardiovascular system	S1 and S2 normal
Respiratory system	Bilateral air entry equal

General examination: No edema/ icterus/ cyanosis/ pallor/ clubbing was seen.

Local examination of axilla

Inspection

Multiple sinuses openings

Pus discharge

Palpation

Tenderness

Pus discharging nodules

Fibrosed sinus tracts

Investigation

Table 3: Summarized investigations.

Hemoglobin	15.4 gms
Red Blood Cells	4.40 cu/mm
White Blood Cells	5800 cu/mm
Fasting Blood Sugar/ Post Prandial	92/ 102 mg/dl
C Reactive Protein	4.73 mg/L
S. Creatinine	0.82 mg/dl
Tuberculin test	Negative
Culture and sensitivity for pus	Staphylococcus epidermidis isolated.



Diagnosis

Hidradentis suppurativa.

Differential diagnosis

Few conditions like folliculitis, acne, pilonidal cysts, infectious abscesses and pyoderma gangrenosum may mimic HS but none of them persist for longer time.^[8]

Treatment

All ayurvedic medicines were taken from authentic pharmacy.

External/ Local medications

S. No.	Procedure	Duration (months)
1.	<i>Varunadi Kshaya dhavan</i> (douching)	OD for 3
2.	<i>Nirgundi</i> oil(pooling)	OD for 3

Oral medications

S. No.	Medicines	Dose	Duration (months)
1.	<i>Saptanga guggul</i>	750mg BD	6
2.	<i>Varunadi kshaya</i>	20ml BD	6

Statistical Analysis

Factors like pain, discharge, sinus formation are considered.

Table 4: Observations and results of 6 months.

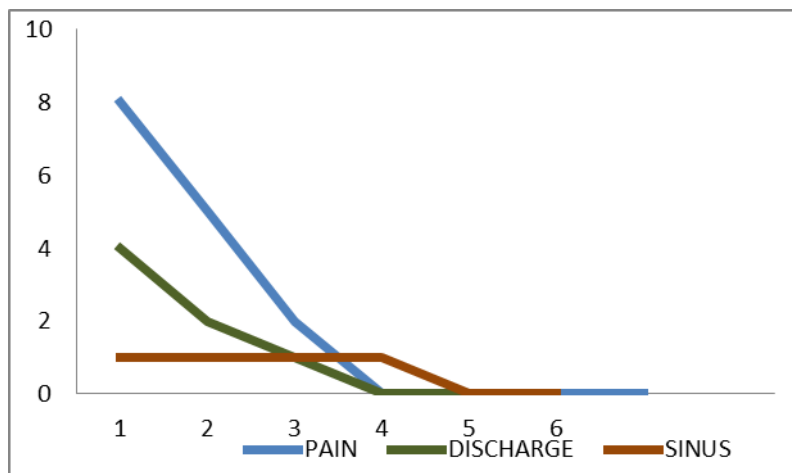
Month	Pain(VAS)	Discharge(Grade) Table 5	Sinus Table 6
1	8	4	1
2	5	2	1
3	2	1	1
4	0	0	1
5	0	0	0
6	0	0	0

Table 5: Grading of discharge.

S. No.	Discharge	Grade
1.	Absent	0
2.	Serous	1
3.	Serosanguinous	2
4.	Seropurulent	3
5.	Purulent	4

Table 6: Grading of sinus.

Sinus	Grade
Present	1
Absent	0

**Graph 1: Graphical representation of observations.**

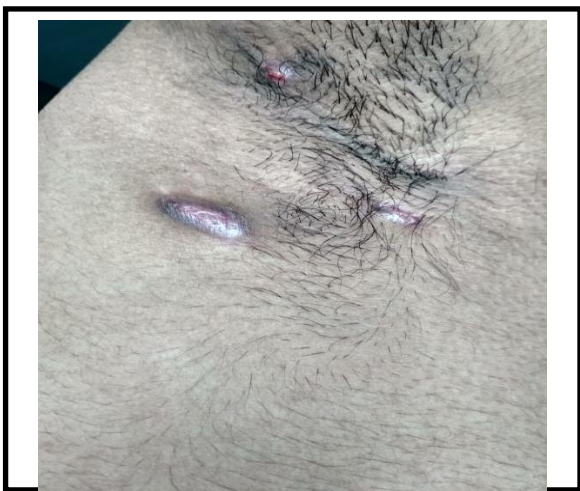
RESULTS AND DISCUSSION

HS is a *vata*kapha predominating disease. *Nirgundi* oil is hot in potency & *vata*kaphahar properties. *Nirgundi* is *katu*(pungent), *tikta*(bitter) & possesses great variety of bioactive molecules and nutrients with extensive pharmacological properties. It has anti toxin properties, helpful in removing worms and foetid discharge. It exhibits anti inflammatory action which prevents oxidative stress, stabilizing of mast cells, suppressing hypersensitivity reactions, prevents inflammation via COX-2 inhibition, combat lipid peroxidation with its carotene & flavonones.^[9,10] *Tila taila* is hot in potency which pacifies *vata*kapha; has scraping, cleansing, anti microbial properties which inhibits abscess formation. Sweet, nourishing properties helps in tissue repair, healthy granulation and wound healing, that's why it is used for oil pooling.^[11]

Varunadi kshaya pacifies *kapha* and *medha*(fats), alleviates internal abscess and helps in digestion. Oral administration helps in proper formation of abscess which is drained manually. All the internal loculi burst open spontaneously.^[12,13]

Saptanga guggul is *vata*kapha shamaka, *aama*pachaka, *medo*hara and *kleda*hara. *Guggul* itself helps in stabilizing the metabolic imbalance, removes blockage in various channels of the body which facilitates easy transportation of nutrition and essentials. *Guggul* is also known for its wound cleansing, healing and antiseptic actions. The mixing of *triphala* and

trikatu with *guggul* will enhance the action of the whole compound. *Triphala* has rejuvenation, immune modulator properties which help in healing. It also acts as an anti-inflammatory agent and also reduces oedema within sinus and fistula tracts. *Trikatu* present in it, is excellent for digestion. It nourishes and supports all the body tissue, combats the vitiated *vata* and relieves pain associated with the condition.^[14]



**Figure 2: Left axilla
(Before)**



**Figure 3: Left axilla
(After)**



**Figure 4: Right axilla
(Before)**



**Figure 5: Right axilla
(After)**

CONCLUSION

HS has high recurrence rate and difficult to cure even after surgeries. This case suggests that it can be cured with alternate para surgical procedures. Based on the observation and results it can be stated that ayurvedic drugs has shown wonderful outcome. Patient got 50% relief from the pain within a month which is prime concern. Burning sensation and sinus tracts has

reduced gradually. No adverse effect or recurrence has been recorded till date. Moreover patient gets better quality of life and return on his daily activities. Further studies need to be conducted on large number of patients for further evaluation as the world is looking towards these systems sanguinely.

Summary

A 18years old male long standing case of HS suffering from symptoms like multiple nodular pus discharging sinuses associated with burning sensation, pain and scarring. It is affecting its routine activity, and patient has to face social embarrassment. We have given treatment which includes *saptanga guggul* with *varunadi kshaya* orally for 6 months and *varunadi kashaya* douching and *nirgundi* oil pooling for 3 months locally which gives relief from symptoms and give better quality of life. Till date no recurrence has been recorded.

Scope of study

This case opens up a fresh line of inquiry for research and development of a clear treatment for the clinical condition. Due to the fact that this study was limited to a single case, additional Hidradentis Suppurativa patients, specifically *Nadi vrana*, must be treated using a comparable treatment strategy in order for the study's scientific and statistical validity to be established.

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Author Contribution Statement

Janesh Gupta and Archana Kukde conceptualized and framed the research study also contributed in definition of intellectual content, discussion and carried out clinical study with manuscript preparation along with observations and results. Sanjay Babar contributed to literature search, data acquisition, out looked the methodology and did analysis of case report. Prathames Kashikar contributed in statistical analysis, researched the previous work and outlined the manuscript with citations. All the authors read and approved the final manuscript.

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