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“HIDRADENITIS SUPPURATIVA: AYURVEDIC APPROACH”

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**“HIDRADENITIS SUPPURATIVA: AYURVEDIC APPROACH”****GEETANJALI HIREMATH¹, POORNIMA JALAWADI², SIDDAYYA ARADHYAMATH³****¹ ASSISTANT PROFESSOR, ² ASSISTANT PROFESSOR, ³ READER,
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MYSURU, KARNATAKA, INDIA.****ABSTRACT:**

Hidradenitis suppurativa is a chronic, recurrent, debilitating disease that presents with painful, inflamed lesions in the apocrine gland bearing areas of the body. It is characterized by the formation of abscesses and sinuses due to primarily an infection of the apocrine group of sweat glands. Hidradenitis suppurativa cures after puberty, the majority of patients being in the second or third decades of life. In the early stages the disease appears as a firm subcutaneous nodule, afterwards suppuration occurs that causes persistent discharge and the affected region may show numerous sinus openings. Nadivrana of which cardinal symptom is continuous pus discharge. On the basis of its sign and symptoms Nadivrana can be correlated with hidradenitis suppurativa. Management of Hidradenitis suppurativa requires complete surgical excision of the lesion in single or multiple stages, the resulting raw area may be very extensive which was difficult to heal with secondary intension and commonly requires skin graft. Hence, surgical excision for Hidradenitis suppurativa may become challenge and there is a scope for alternative ayurvedic treatment for hidradenitis suppurativa. Sushruta advised Ksharasutra therapy along with some internal medications in the treatment of Nadivrana for complete excision and epithelialization of tract.

KEY WORDS: *Acne inversa, Hidradenitis suppurativa, Ksharasutra, Nadi*

INTRODUCTION

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Hidradenitis suppurativa is a chronic inflammatory skin disease with recurrent boil¹. These boils often get in a larger size and turn into localized collection of pus which ultimately ruptured and discharge pus known as sinus which become difficult to heal². Hidradenitis suppurativa most commonly affects areas bearing apocrine sweat gland or sebaceous gland such as the underarms, under the breasts, inner thighs, groin and buttocks³. Hidradenitis suppurativa is due to dysfunctional apocrine glands or hair follicles⁴ and some aggravating factors should be taken into consideration like obesity, irritation, rough and tight clothing, deodorants, humid climates, oral contraceptive pills. Hidradenitis suppurativa area of involvement in female is axillary

which is 70% and in male is perianal and perineal which is 56%³.

Hidradenitis suppurativa often goes undiagnosed for years because patients are too ashamed to consult physician earlier so that persistent lesions may lead to scarring and the formation of sinus tracts or communicating abscesses or infection under skin⁵. At this stage complete cure of the disease is not possible by only medicinal management and requires surgical excision followed by skin graft to live comfortably⁴ but it may be very expensive and complicated for patients physically as well as psychological status of body. Therefore there is a scope for parasurgical therapy of *Sushruta* to help patients suffering from axillary hidradenitis suppurativa.

SIGNS AND SYMPTOMS:

Hydradenitis suppurativa is also known as Acne inversa. The disease starts with inflammatory nodules and abscesses followed by tissue fibrosis. Typical areas affected include axillae, groins, anl fold and sub-mammary region. Over time, sinus tracts and fistulas develop. Hypertrophic scarring can often seen. This can be accompanied by mucopurulent discharge.⁶ Pain is a major symptom of AI. The quality of pain described by patients was hot, burning, pressure, cutting,

HIDRADENITIS SUPPURATIVA: AYURVEDIC APPROACH

sharp, taut, splitting, sore, throbbing and aching to sometime during their disease or as a chronic symptom in others.⁷

AI is a chronic, recurrent, inflammatory disease with major negative impact on quality of life, with pain as just one of contributing factors.⁸

Sushruta, the father of ancient surgery described *Nadivrana* of which cardinal symptom is continuous pus discharge⁹. On the basis of its sign and symptoms *Nadivrana* can be correlated with hidradenitis suppurativa.

Table No. 1- Hydradenitis suppurativa v/s *Nadi vrana*

Hydradenitis suppurativa	Nadi vrana (Su. Ni. 10 th Chap.)
Inflammatory nodules and abscesses	<i>Pakwa</i> and <i>apakwa shopha</i>
Discharge -Mucopurulent	<i>Srava- Pooya, Phenanuvidda, Ushna, adhika raktamishrita, shweta, picchila</i>
Formation of sinus tracts	<i>Nadeeva yadwahati tena mata tu nadi</i>
Pain- Hot	<i>Ruja- Ushna, tapa</i>
-Burning	- <i>Sadaha</i>
-Cutting, splitting	- <i>Bhedanavat</i>
-Throbbing	- <i>Todavat</i>
-Itching	- <i>Kanduyukta</i>

Picture No. 1 Axillary Hidradenitis suppurativa



HIDRADENITIS SUPPURATIVA: AYURVEDIC APPROACH

Areas of the body affected by hidradenitis suppurativa-

- Axillae(most common)
- Genitofemoral
- Gluteal folds

- Infraumbilical midline
- Intermammary zones
- Perianal
- Periareolar
- Pubic

Picture No. 2 Axillary Acne inversa.



• **Conditions Associated with Hidradenitis Suppurativa**

- Arthritis (certain forms)
- Crohn's disease
- Down syndrome
- Graves' disease
- Hashimoto's thyroiditis
- Herpes simplex
- Hyperandrogenism
- Irritable bowel syndrome
- Sjogren's syndrome

Picture No. 3 Anogenital acne inversa with secondary vulval edema and scarring.



• **Differential Diagnosis for Hidradenitis Suppurativa**

- Carbuncle
- Epidermoid or dermoid cyst
- Erysepalas
- Furuncle
- Granuloma inguinale
- Lymphogranulom venereum
- Pilonidal cyst
- Tuberculosis

DIAGNOSIS AND CLASSIFICATION

The diagnosis is primarily clinical, and biopsy is rarely required, especially in well developed lesions.¹⁰ The consensus approach indicates that 3 key elements are required to diagnose hidradenitis suppurativa; Typical lesions, Characteristic distribution and Recurrence.

Typical lesions, called primary lesions, include the following:

- Painful and/or tender erythematous papules smaller than 1cm in diameter
- Painful and/or tender erythematous papules larger than 1cm in diameter
- Painful or tender abscesses and inflamed discharging papules or nodules
- Dermal contractures and ropelike elevation of the skin
- Double-ended comedones

-The Axillae and the groin are the 2 areas most frequently affected. These regions are defined by anatomic borders and are called

designated sites. Hidradenitis suppurativa is diagnosed if the patient has 1 of the following:

- Active disease with 1 or more primary lesions in a designated site, plus a history of 3 or more primary discharging or painful lumps in designated sites since age 10 years.
- Inactive disease with a history of 5 or more discharging or painful lumps in designated sites since age 10 years, in the absence of current primary lesions.

Staging- Clinical staging of hidradenitis suppurativa has diagnostic value and is as follows:

- First stage: Solitary multiple, isolated abscess formation without scarring or sinus tracts.
- Second stage: Recurrent abscesses, single/multiple widely separated lesions with sinus tract formation and cicatrization.
- Third stage: Diffuse/broad involvement, with multiple interconnected sinus tracts/abscesses.

COMPLICATIONS

The most common complications of AI are local, such as scarring and infection. Due to the chronic inflammatory process, however systemic complications can develop like anemia, hypoproteinemia, nephritic syndrome,

arthropathies, dactylitis, polyarthritis, secondary lymphedema(scrotal or vulvar), fistulae to rectum, vagina, urethra, peritoneum or bladder.⁶

MANAGEMENT

Medical management is recommended in early stages, whereas surgery should be performed after the formation of abscess, fistulas, scars and sinus tracts.¹

Conservative treatment may include the following:

- Local hygiene
- Weight reduction in patients who are obese
- Use of ordinary soaps and antiseptic and antiperspirant agents(eg. 6.25% aluminium chloride hexahydrate in absolute ethanol)
- Application of warm compresses with sodium chloride solution or burrow solution
- Wearing of loose fitting clothing
- Laser hair removal
- Discontinuation of cigarette smoking
- Medical antiinflammatory and antiandrogen therapy (eg. oral or topical antibiotics, intralesional triamcinolone, spironolactone, finasteroid)
- The following medications are used in the management of Hydradenitis suppur
-Antibiotics(eg. tetracycline, doxycycline, minocycline trimetoprim sulfamethoxazole, clindamycin, erythromycin, dapsone)
- Retinoids (eg. isotretinoin)
- Cortcosteroids (eg. triamcinolone, prednisolone, prednisone)
- Antandrogens (eg. cyproterone acetate, spironolactone)
- Immunosuppressants (eg. infliximab, other biologic agents)
- Estrogen derivatives (eg. ethinyl estradiol)
- 5-Alpha-reductase inhibitors (eg. finasteride)

SURGERY

Surgery is most valuable in the chronic and recurrent stages of hidradenitid suppurativa. Wide surgical excision, with margins well beyond the clinical borders of activity, remains the most definitive surgical therapy¹. However, although recurrence rates may be

lower with aggressive surgery, recurrence often continue. After radical excision, the disease has been reported to recur in 33% of patients.¹¹ And it may be as high as 50% in the submammary region.¹²

Picture No. 4 Wide excision surgery of chronic advanced acne inversa. a) Before surgery, b) Operation situs



- Incision and drainage
- Exteriorization
- curettage
- Electrocoagulation of the sinus tracts
- Simple excision of the troublesome areas with direct closure
- Placement of local cutaneous flaps, musculocutaneous flaps, pedicled and free flaps or skin grafts.
- Secondary intention healing
- Radiotherapy

More limited surgical interventions may include the following,

AYURVEDIC MANAGEMENT

Sushruta, the father of ancient surgery described *Nadivrana* of which cardinal symptom is continuous pus discharge.⁹ On the basis of its sign and symptoms *Nadivrana* can be correlated with hidradenitis suppurativa.

Treatment of *Nadivrana* includes-

- *Ksharasutra* when *Nadivrana* present in *Krusha*, *Durbala*, *Bhiru*, *Marmashrita* to excise the tract.¹³
- *Upanaha sweda*- Application of warm poultice followed by drainage of abscess.
- *Eshani prayoga* followed by *Nadivran*

chedana- Probing and excision of sinus tract

- *Varti prayoga*
- *Prakshalana* with *Brihat panchamoola kashaya*

Ksharasutra application for complete excision and healthy epithelialization of the sinus tract.

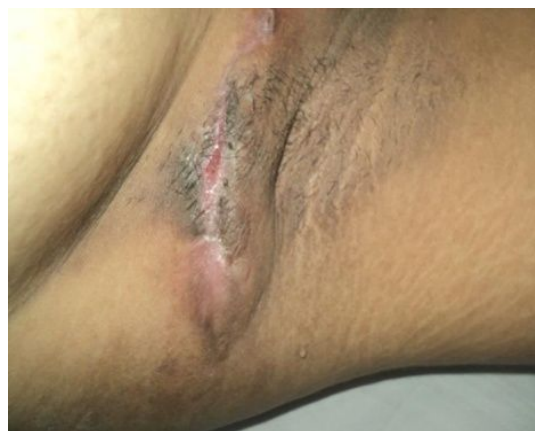
Picture No. 5 Silver probe
Picture No. 6 Kshara sutra





Picture No. 8 After the end of *ksharasutra* treatment

***Ksharasutra* ligation to sinus track**



DISCUSSION

Hidradenitis suppurativa is characterized by the formation of abscesses and sinuses due to primarily an infection of the apocrine group of sweat glands. A long standing hidradenitis suppurativa usually requires surgical excision which commonly perform under general anaesthesia. Etiology traditionally has been contributed to occlusion of the apocrine duct by a keratin plug, however defects of the follicular epithelium also have been noted. contributing factors include friction from axillary adiposity, sweat, heat, tight clothing, genetic and hormonal

components. Multiple treatment regimens are available , including antibiotics, retinoids, corticosteroids, incision and drainage, local wound care, local excision, radiation and laser therapy. However no single treatment has proved effective for all patients. Radical excision of the defective tissue is the most definitive treatment. But the psychological impact on the patients can be great, encompassing social, personal and occupational challenges. According to *Ayurvedic* literature *Nadivrana* can be correlated with hidradenitis suppurativa on

HIDRADENITIS SUPPURATIVA: AYURVEDIC APPROACH

the basis of sign and symptoms. In *Ayurveda Ksharasutra* is the treatment of choice for *Nadivrana* it act as *Chedhana* (excision), *Bhedana* (Incision), *Lekhana* (Scraping), *Shodhana* (Purification)

and *Ropana* (Epithelialization)^{14,15} so that unhealthy granulation tissues and fibrosis tissues are completely removed from tract and completely healed with healthy granulation tissues.

CONCLUSION

- Hidradenitis suppurativa is a chronic inflammatory skin disease with recurrent formation of abscesses and sinuses.
- Hidradenitis suppurativa is due to dysfunctional apocrine glands or hair follicles.
- *Nadivrana* of which cardinal symptom is continuous pus discharge. On the basis of its sign and symptoms *Nadivrana* can be correlated with hidradenitis suppurativa.
- Radical excision of the defective tissue is the most definitive treatment in modern surgical practice.
- *Ksharasutra* therapy is result oriented parasurgical procedure in *ayurveda* without anaesthesia for *nadivrana*(hidradenitis suppurativa).

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