

ROLE OF SAINDHAV LAVAN JAL AVAGAH SWED IN POST-FISTULECTOMY WOUND MANAGEMENT.***¹Dr. Kshama S. Dhamankar, ²Dr. Dnyaneshwar D. Chavan**¹P.G. Scholar, First year (Department of Shalya Tantra), ²Associate Professor, (Department of Shalya Tantra)

Dr.G.D.Pol Foundation's Y.M.T. Ayurvedic Medical College and Hospital, P.G.Institute-Research Centre, Kharghar, Navi Mumbai, Maharashtra, India.

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***Corresponding Author****Dr. Kshama S.
Dhamankar**P.G. Scholar, First year
(Department of Shalya
Tantra) Dr.G.D.Pol
Foundation's Y.M.T.
Ayurvedic Medical College
and Hospital, P.G.Institute-
Research Centre, Kharghar,
Navi Mumbai, Maharashtra,
India.**ABSTRACT**

Wound is the discontinuation of skin or mucous membrane. Mostly post-fistulectomy wound is an open wound and heals by second intention so factors like contamination of wound; slough, infection and foreign body affect the normal process of healing. Avgaha swed one of the types of swed described in ayurveda treatise will be choice of modality for perianal region. according to acharya charak sauvarchal, saindhav, vidam, audhabhid and samudra lavan, carrying the properties like snigdha, ushna, tikshna and dipaniya in nature, used for alepan, snehan and swedan. saindhav lavan is selected for the study in avagah sweda. Combined action of Swedankarma and saindhav lavan will gives soothing and cleansing effect, and thus will help to minimise the inflammation, desloughing the devitalised tissues. Avagah swed will cover all the deeply sited cavities of the wound area and helps to heal wound.

KEYWORDS: post-fistulectomy wound, Avgaha swed, Saindhav lavan, cleasing effect, desloughing, devitalised tissues.**INTRODUCTION**

Wound is the discontinuation of skin or mucous membrane due to an injury or other factor to living tissue. Post-operative wound healing normally follows distinct bodily reaction, the inflammatory response, the proliferation of cellular and tissues that initiate healing and final remodelling. Practically management of fistula wound is challenging and demands special

attention. Mostly post- fistulectomy wound is an open wound and heals by second intention so factors like contamination of wound; slough, infection and foreign body affect the normal process of healing. Due to moist anal region, slough and pus in the form of discharge, the wound gets recurrently soiled and infected due to daily act of defecation ultimately resulting into decelerated, delayed and impaired healing. Thus for these type of wound special management is necessary for uncomplicated wound healing. Modality of the drug administration should be one of the suitable and accepted routes of administration. Avgah swed¹ one of the types of swed described in ayurveda treatise will be choice of modality for perianal region. Jala(salil), kwath, taila can be used for avagah swedan for anal region. helps to minimise the inflammation, supporting or acting as a debridement agent, accelerating the process of healing. Lavan according to acharya charak sauvarchal, saindhav, vidam, audhabhid and samudra, carrying the properties like snigdha, ushna, tikshna and dipaniya in nature, used for alepansnehan and swedan. So as said above easy availability and familiarity to everyone and cost effective, saindhav lavan is selected for the study in avagah sweda. It has properties⁵ like madhura vipak, natiushna, avidahi, bhedak, snigdha, shoolaghna and natipittalam. It also acts as vrana shodhak, dahashamak, bhedak, shoolshamak, shleshmvardhak, sukshma, sarak and vishyandi in nature. So as mentioned in above description saindhav lavan has such properties and used in avagah swed selected for the study. Combined action of Swedankarma and saindhav lavan will give soothing and cleansing effect, and thus will help to minimise the inflammation, desloughing the devitalised tissues. It will provide suitable environment for healing of the wound so that time period taken by the healing process will be reduced. Avagah swed will cover all the deeply sited cavities of the wound area and helps to heal wound from the base avoiding premature healing which leads the recurrence of the disease fistula. Keeping the above references in view the above said topic that dose of 'saindhav lavan' per litre is decided according to the normal saline which is already used for cleaning of the wound.

AIMS AND OBJECTS

To study the efficacy of 'saindhav lavan' jal avagah swed in post-fistulectomy wound.

To study avagah sweda and sitz bath as per ayurvedic and modern texts respectively.

CASE REPORT

A 42 yrs old male presented with pus discharge from opening lateral to the anal canal since 8 months along with complaint of mild itching at anal region. He gave history of constipation

intermittently since 12yrs. On examination there was fibrosed fistulous tract external opening at 9 o'clock position and internal opening at 6 o'clock position with pus discharge. The diagnosis was confirmed as Fistula in Ano. was decided fistulotomy as a choice of treatment and post operative saindhavlan yukta jal avgaha swedan for study the healing effect.

PLAN OF STUDY

Prior to the commencement of the therapy in the selected patients, general information of patients and the disease were given as below:

- 1) A complete history of the disease along with complaints were recorded as per the specially prepared proforma for the ano-rectal disorders.
- 2) Classification of the disease as well as diagnosis on local examination was made both from modern and Ayurvedic lines including Prakriti of the patients.
- 3) In all the patients, general systemic and localexamination was carried out. The findings of the local examination were studied under thefollowing headings –

1. Inspection

Condition of the perianal skin includingthe colour.

Other associated lesions like fissure, fistula, piles.

2. Palpation It includes tenderness, indurations, swelling etc.

3. Laboratory investigations: - CBC & Bleeding time and clotting time.

TREATMENT SCHEDULE

- a) Before the dressing, sit'z bath given to the patient.
- b) Time-15-20 minutes.
- c) Quantity- 4 liters of luke warm water istaken in bath tub.
- d) Drug-saindhav lavan is added according tothe dose.
- e) Dose-9gm/litre.
- f) Procedure-patient is asked to sit in bath tub with relaxing the anal area in the tub.
- g) Care- Anal and perianal area along with wound area is remains immersed in the water for the time given.

MATERIAL

- 1) Saindhav lavan
- 2) Sitz bath tub
- 3) Koshn jal
- 4) Transparent and Graph paper and marker
- 5) Magnifying lens

METHOD

Preparation of the saindhav lavan jal Isotonic solution of salt do have all concentration of salt and minerals about equal to blood plasma do have and it will not cause irritation to wound when it expose to the solution where saturated and hypersaturated solutions may have. So dose should be decided according to maintain the isotonicity of the solution as equal as blood plasma. That's why dose of the saindhav lavan is decided to 9gm/litre which is near about to normal saline (NS) which is frequently used as isotonic solution for dressing of wound. Quantity of the koshna jal in this case is decided 4 litres. So the packet of 36 grams of saindhav lavan will be given to the patient and asked to use in 4 litres of lukewarm water for avagah sweda per day before dressing and every time after defecation. Quantity may change from person to person with increase or decrease in water. Before the dressing, sit'z bath given to the patient.

Patient is asked to sit in bath tub with relaxing the anal area in the tub. Anal and perianal area along with wound area is remains immersed in the water for the time given.

WOUND MEASUREMENT ON GRAPH PAPER

Wounds measuring on a post-operative day 1st, 4th, 7th, 14th & 21th day basis should be adequate for post-fistulectomy wound.

- Wound tracing: A marker or pen is used to trace the outline of the wound directly onto a sterile transparent plastic graph paper sheet or film.
- It is then a simple matter to compare one measurement to the next.
- Tracing is relatively painless. Sometimes, it can be hard to identify where the wound boundaries lie, making this method less reliable and accurate. one large square is equal to 1cm^2 and one small square is resembled to 25 mm per small square, so that four small squares together itself measuring 1cm^2 .
- It is important to measuring changes in the wound size.
- Wound measurement should be a routine part of wound assessment as the size of a wound is regarded as one of the main indicators of progress or deterioration in wounds (although post-fistulectomy wounds may get bigger sometimes as Infected/Unhealthy tissue track is removed).

CRITERIA FOR ASSESSMENT

The criteria of assessment will be done on subjective & objective parameters respectively in post-operative fistulectomy wound.

1. Pain
2. Discharge
3. Granulation
4. Size of the wound

Pain

- 0 - No pain
- 1 - Mild Pain
- 2 - Discomforting Pain
- 3 - Distressing Pain

Discharge**0 - No discharge**

- 1- Scanty serous discharge & little wet dressing
- 2- Often discharge & pus on dressing
- 3- Profuse pus discharge which needs frequent dressing

Size of wound**0- Less than 1 Sq. Cm..**

- 1- 1 To 2 Sq. Cm.
- 2- 2 To 3 Sq. Cm.
- 3- 3 to 4 Sq. Cm.\

Granulation

- 0 - Complete granulations
- 1 - More granulations (>75%) & less pus(25%)
- 2 - Equal granulations and pus
- 3 - Less granulations (75%)

OBSERVATION AND RESULT**Pain**

Distressing pain at grade 3 on 1st day of trial Grade 3 and grade 2 patients had pain on 4th day of the trial.

Pain at grade 1 on 14th day of trial.

Total relief of pain at the end of trial on 21st day.

Trial showed effective result when Pain was considered as one of the criteria to be assessed (fig.1).

Size of wound

Very less changes in size of wound at grade 0 on 1st day.

Grade 1 and grade 2 of reduction in size of wound on 7th day.

Grade 2 and grade 1 had reduction size of wound on 10th day.

Grade 2 and grade 3 had reduction in size of wound on 14th day.

Grade 3 had significant reduction in size up-toor more than 3-4 cm on 21th day.

Trial showed effective result when size of wound was considered as one of the criteria to be assessed (fig.4).

Granulation

Grade 3 on 1st day

Grade 3 on 1st day

Grade 3 on 4th day

Grade 2 had granulation tissue on 7th day

Patient at grade 2 and grade 1 had granulation on 10th day

Patient at grade 1 granulation on 14th day

Grade 0 had complete granulation tissue on 21st day.

The trial showed effective result when granulation tissue was considered as one of the criteria to be assessed (fig.2).

Discharge

Discharge at grade 3 on 1st day.

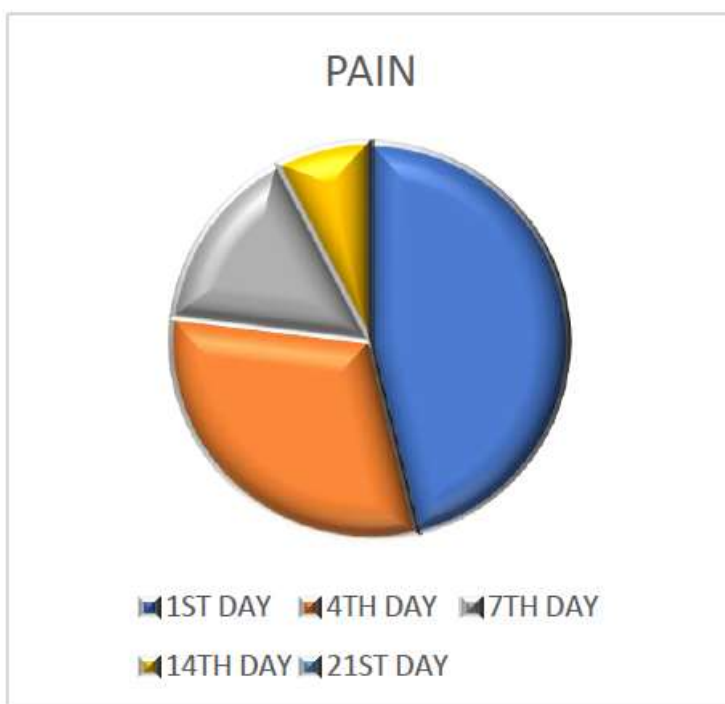
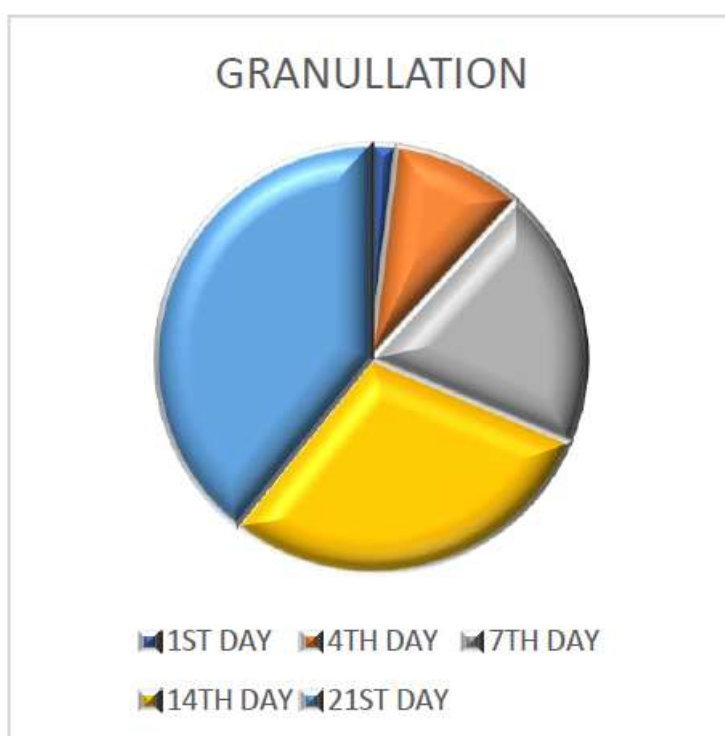
Discharge at grade 3 and grade 2 on 4th day.

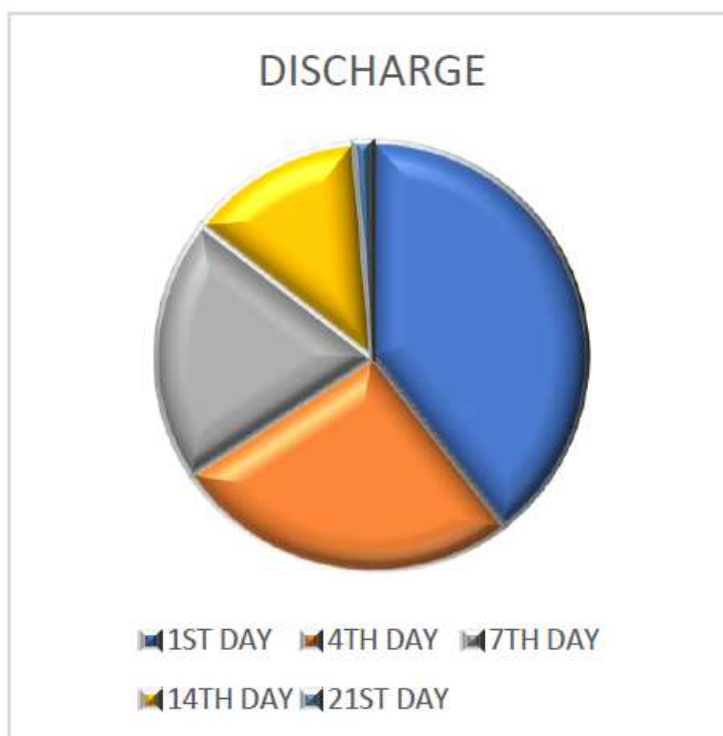
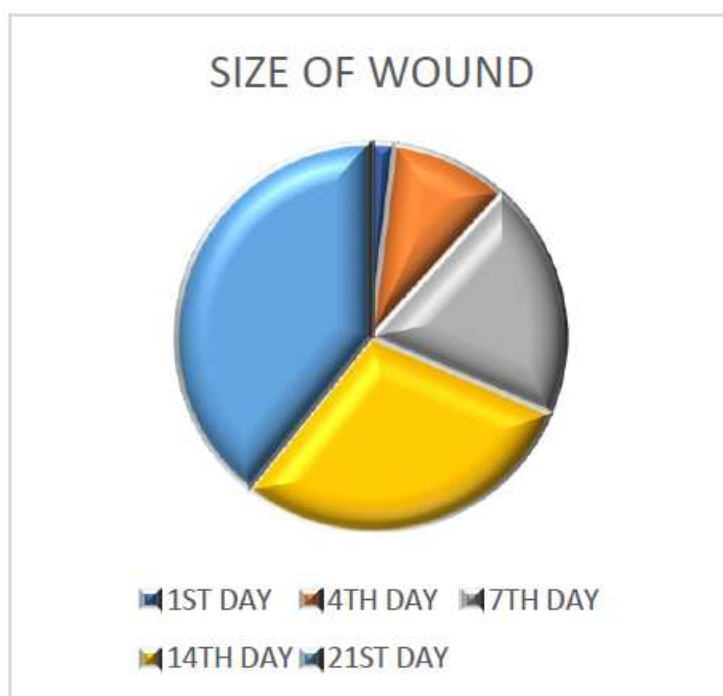
Discharge at grade 2 grade 3 on 7th day.

Mild serous discharge at grade 1 on 14th day.

No discharge at grade 0 on 21th day.

Trial Showed effective result when Discharge was considered as one of the criteria to be assessed (fig.3)

**Fig.1****Fig.2**

**Fig.3****Fig.4**

DISCUSSION AND CONCLUSION

PROBABLE MODE OF ACTION OF SAINDHAV LAVAN

➤ Lavan Rasa— Snigdha guna, Kledvardhan, Sookshmasrotogami properties. Probable

mode of action is Shodhan of Dushta Vrana is achieved, so that it will convert later into Shuddha Vranavastha ➤ it is clear that to cure a disease, state drug is important and it should act through its Rasa, Veerya, Vipaka and Prabhav.

PROBABLE MODE OF ACTION OF 'SAINDHAV LAVAN JAL AVAGAH SWED' IN POST-FISTULECTOMY WOUND

Saindhav lavan jal Avagah swed- Reduces the inflammation by probable 'Kledavahan' action as it acts as a chemical debridement, helps to flush irritants, pus plaques, microorganisms (bacteria) and gives soothing effect.

- Isotonic solution of salt does have all concentration of salt and minerals about equal to blood plasma and it will not cause irritation to wound when it exposes to the solution
- The PH of Koshn Saindhav lavan jal is 7.75 which is easily acceptable for wound.
- Salt temporarily increases the PH balance of the wound site, creating an alkaline environment in which bacteria (organisms) struggle to survive. In such environment it is difficult to bacteria to breed and stops their proliferation.
- Retention of water in the tissue which liquifies the pus plaques on the wound surface, thus the hydrolysis of this pus plaques is easy to get away from the wound surface.
- So, it is better and beneficial to use sea salt water because it is safest because it is a home-made solution. Warm water increases the effectiveness of salt & it just helps it dissolve faster so it doesn't accumulate at the bottom of sitz-bath-tub.

Effect of 'Saindhav lavan jal avagah swed' in post-fistulectomy wound

- Saindhav Lavan in a form of Avagah sweda, there are many properties which have gain, So Saindhav Lavan jal Avagah sweda in post fistulectomy wound gives tremendous effect which has shown precisely below.
- A sitz bath is a warm, therapeutic bath that used to heal and cleanse the perianal area. For post-fistulectomy wound, by taking Saindhav Lavan jal Avagah sweda that helps to speed up the healing process by boosting the blood flow to the affected area.
- There is no any disturbance in normal healing rather than wound healing gets faster because of all slough or discharge easily comes out from the cavity and wound remains clean.
- It promotes relaxation of the sore muscles in the pelvic region.
- It also helps to soothe the irritation and promotes healing of that specific area, so helps in relieving the discomfort of post-operative wound.

- So as well the drug in the management of post-fistulectomy wound is 'Saindhav Lavan' has qualities like cleansing, helps to minimise the inflammation, supporting or acting as a debridement agent, accelerating the process of healing.
- By adding Saindhav Lavan in Koshn Jal and taking Avagah swed is very helpful for reducing pain, inflammation and act as desloughing agent.
- Lavan according to Acharya Charak 'Saindhav Lavan' carrying the properties like snigdha, ushna, tikshna and dipaniya in nature, used for Alepan, Snehan and Swedan.
- As per Sushruta it has properties like Madhura vipak, Natiushna, Avidahi, Bhedak, Snigdha, Shoolaghna and Natipittalam. It also acts as Vrana shodhak, Dahashamak, Shleshmvardhak, Sukshma, Sarak and Vishyandi in nature.
- Due to moist anal region contamination and infection frequently, present which delays wound healing, hence, so proper modality of treatment and drug minimizes the healing period and outcome of the healing process.
- Avagah swed covers all the deeply sited cavities of the wound area and helps to heal wound from the base avoiding premature healing which leads the recurrence of the fistula.
- Combined action of Swedan-karma and Saindhav lavan gives soothing and cleansing effect, and thus help to minimise the inflammation & DE sloughing the devitalised tissues.
- It is easy to accessible, less time consuming and has excellent result in wound healing with zero adverse reaction.
- The dose of 'Saindhav lavan' per litre was decided accurately for maintaining the isotonicity of wound surface.
- So it is concluded that there was an effect of use of 'Saindhav lavan jal Avagah Swed' to relieve pain, shows Shodhan and Kledvahan effect.

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2. वातहरोत्क्राथक्षीरतैलघृतपिशितरसोष्णसलिल कोष्ठकावगाहस्तु यथोक्त एवावगाहः ॥ (च. सू. 14)
3. सौर्वचल सैन्धवं च विदम् औद्धिदम् एव च । सामुद्रेण सहितनि पन्व स्युर्लवणानि च ॥ (च. सू. 1/88)
4. चक्षुष्यं सैन्धवं हृद्यं रुच्यं लघ्वग्निदीपनम् । स्निग्धं समधुरं वृष्यं शीतं दोषघ्नमुत्तमम् । (सु. सू. 46/315).

5. कुष्ठं त्रिवृत्तिला दन्ती मागध्यः सैन्धवं मधु । रजनी
त्रिफला तुल्यं हितं स्याद्
व्रणशोधनम्॥ (सु. चि. ८/४२)

6. त्रिवृत्तिला नागदन्ती मञ्जिष्ठा पयसा सह । उत्सादनं
भवेदेतत् सैन्धवक्षौद्रसंयुतम् ॥ सु. चि. ८/४०)

7. कासीसे सैन्धवे किण्वे वचायां रजनीद्वये ।
शोधनाङ्गेषु चान्येषु चूर्णं कुर्वीत शोधनम्
॥ सु. सू. 36/२०)

8. स्निग्धानि उष्णानि तीक्ष्णानि दिपनीय तमानि च ।
आलेपनार्थं युज्यन्ते स्नेह स्वेद्ध विधौ तथा । (च. सू.
1/89)

9. तत्र दृष्ट्याणि गुरु खरकठिनमन्दस्थिरविशदसान्द्रस्थू
लगन्धगुणबहुलानि पार्थिवानि, तान्युपचयसङ्घातगौरव
स्थैर्यकराणि: द्रवस्निग्धशीतमन्दमृदुपिच्छिलरसगुणबहु
लान्याप्यानि,

तान्युपक्लेदस्नेहबन्धविष्यन्दमार्दवप्रह्लादकराणि;

उष्णतीक्ष्णसूक्ष्मलघुरुक्षविशदरूपगुणबहुलान्याग्नेया
नि, तानि दाहपाकप्रकाशवर्णकराणि; लघुशीतरुक्ष
खरविशद सूक्ष्म स्पर्श गुण बहुलानि वायव्यानि, तानि
रौक्ष्यग्लानिविचारवैशद्यलाघवकराणि;

मुदुलघुसूक्ष्मश्लक्ष्णशब्दगुणबहुलान्याकाशात्मकानि,
तानि मार्दवसौषिर्यलाघवकराणि ॥ (च. सू. 26/11).

10. किञ्चिद् रसेन कुरुते कर्म वीर्येण चापरम् ॥ 71 ॥
दृढ्यं गुणेन पाकेन प्रभावेण च किञ्चन । (च. सू. 26).

11. तद्व्यमात्मना किञ्चित्किञ्चिद्वीर्येण सेवितम् ।

किञ्चिद्द्रुसविपाकाभ्यां दोषं हन्ति करोति वा ॥
(सु. सू. 40/14).

12. वातपित्तश्लेष्मसन्निपातान्तु निमित्ताशतपोनकोष्ट
ग्रीवपरिस्राविशम्बुकावर्तोन्मार्गिणो यथासंख्यं पञ्च
भगन्दरा भवन्ति । ते तु भगगुदबस्तिप्रदेशदारणाच्च
भगन्दरा इत्युच्यन्ते । अभिन्नाः पिडकाः भिन्नास्तु
भगन्दराः ॥ (सु. नि. 4/3)

13. स्नेहाभ्यक्तगुदस्तपतामध्यासीत सबाष्पिकाम् ॥
नाड्या वाऽस्याहरेत् स्वेदं शयानस्य रुजापहम् ॥
उष्णोदकेऽवंगाह्यो वा तथा शाम्यति वेदना ॥
(सु.चि. 8/36).
14. त्रिभिर्दोषैरनाक्रान्तः श्यावौष्ठः पिडकीसमः ।
अवेदनो निरास्तावो व्रणः शुद्ध इहोच्यते
॥ (सु. सू. 23/18).
15. वृणोति यस्मात् रूढेऽपि व्रणवस्तु न नश्यति ।
आदेहधारणात् तस्मात् व्रण इत्युच्यते बुधैः
॥ (सु.सू. 21/40).
16. तन्त्रायतो विशालः समः सुविभक्तो निराश्रय इति
व्रण गुणाः ॥ (सु.सू. 5/8).

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POD 1st day



POD 4th day



POD 7th day



POD 10th day



POD 14th day



POD 21st day

