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EFFECT OF VANGA BHASMA ON SHWETPRADAR (LEUCORRHOEA); AN RANDOMISEDCONTROL CLINICAL TRIAL

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ABSTRACT

Swetpradar (Leucorrhoea) means unusual excessive vaginal discharge, commonly known as white discharge. It is a thick, whitish or yellowish vaginal discharge. It is a Kaphaja disorder along with rasa dhatu dushti (vitiation) and Apana vayu vaigunya (vitiation). There are many causes of leucorrhoea, the usual one being estrogen imbalance. According to Modern Science this discharge should fulfil the following criteria- the excess secretion is evident from persistent vulva moistness, non-purulent and non- offensive, non-irritant and never causes pruritus, which is due to unhygienic toilet habits, impaired immune functions, pelvic inflammatory disease, psychosomatic cause, hormonal imbalance, genital wound etc. The excessive secretion has 3 main causes- physiological excess, cervical cause and vaginal cause. As per ayurvedic text, Vanga bhasma a herbomineral preparation was prepared in Rasashastradepartment of sri Ayurveda college Nagpur.

In this clinical trial there is one control group and other is trial group. Age group varies from 20-55 yrs in which girl, housewives, working, middle aged women's are included. Different doses were given according to age, severity of disease. All were treated by Shamanatherapy for 1 month, and it shows significant result. The patients were followed up on 7th, 14th, 21st, 28th days. Reduction in clinical parameters in non-specific group patients was statistically significant whereas in specific groups was statistically non-significant. The action of vanga bhasma in both nonspecific and specific groups in Shwetha pradara is effective in variation with duration of treatment.

KEYWORDS: Shwetpradar, Discharge, Vanga bhasma, Katishool, Daurbalya.

INTRODUCTION

Shweta pradara is a very common lakshana (Symptom) in females during reproductive period of life. Shweta pradara is not considered as a disease in brihatrayees, but as a symptom in kaphaja yoni vyapad. Shweta srava from genital organs along with yoni kandu, kati shola (Lower back ache), yoni daha (Burning sensation in vagina) are the clinical symptoms of shwetapradara. Detailed description of this disease is found in later books like laghutrayi, i.e. after the medieval period. Indians were the first to use metals for their therapeutic values. Vanga, knownas pootiloha (Which melts easily) is one among loha and was in use during samhita period.

Vanga bhasma is one of the medicines described to have the action of "Shweta asrugdhara nasha" by Rasataranginikara.

The properties of Vanga bhasma are tiktarasa, laghu, teekshna, sheeta guna and shleshmahara, and it is indicated in uro-genital system as stambaka. Shwetapradara is not mentioned as an independent disease in great trios, but can be seen as a symptom in many yonirogas, especially kaphaja yoni rogas.

'Yonigata pichchila sheeta panduvarnayukta srava' along with kandu and alpavedana are the classical symptoms of shweta pradara as per Acharya Charak.

Leucorrhea is strictly defined as an excessive normal vaginal discharge. The excessive secretion is due to either Physiologic excess, Cervical causes or Vaginal causes which include high estrogen levels during puberty or during menstrual cycle pregnancy; non infective cervical lesion; uterine prolapse, chronic pelvic inflammation, pill use and vaginal adenosis.

AIMS AND OBJECTIVES

- Preparation of vanga bhasma as per classical method
- To evaluate efficacy of vanga bhasma on shwetapradara.

MATERIALS AND METHODS

A. Source of data

1. Literary source

All classical, Contemporary text books, National and international journals websites pertaining

to the study.

2. Drug source

Raw vanga purchased from the local market, Nagpur, identified, according to classical reference. Samanya shodhana, Vishesha shodhana, jarana of shodhitavanga and maran, was carried out. Seventeen puta was required to attain the bhasma siddha lakshana.

3. Sample source

50 patients were selected from the gynaec opd from Pakwasa Rugnalaya Nagpur.

B. Method of collection of data

Study design

It was randomised controlled clinical study.

Sampling technique

The subjects who fulfilled the inclusion and exclusion criteria and complying with the informed consent (IC) were selected by random sampling technique.

Sample size

A clinical study where in 50 females were randomly assigned into two groups i.e., Group A, Group B, each comprising of 20 patients. 10 patients leaved the treatment in between the trial.

- Patients were diagnosed on the basis of clinical findings.
- General examination, per-vaginal, per speculum examinations were carried out
- For vaginal smear, discharge was taken with sterile cotton swab and collected in a sterilized bottle. This was tested as per need for candidiasis and T.V (Trichomonas Vaginalis) by usingnormal saline and 10% potassium hydroxide solution respectively.

Inclusive criteria

- Patients aged between 20-55 years.
- signs and symptoms mentioned in Ayurvedic classics

Exclusive criteria

- Patients with other systemic diseases like madhumeha, karkatarbuda, samsargajavyadhi Sujak, Upadansha, Balika, Garbhini etc. which interfere with the cause of diseases and treatments will be excluded.

Intervention

50 female patients with leucorrhoea were selected and Divided randomly into two groups, as Group-A and Group-B.

10 patients left the treatment.

Group-A- It is clinical group.20 Patients were given *vanga bhasma* 125mg1-1 Orally for 30days, after meals with madh.

Group-B - It is control group. 20 Patients were given empty capsules orally for30 days twice daily after meals.

INVESTIGATION

Blood examination

1. Complete Blood Count
2. Random Blood Sugar (RBS).
3. VDRL
4. Pap smear

Urine

Sugar, albumin and microscopic examination.

Parameters

a) Per Vaginal examinations

i) Manual

ii) Speculum.

b) Vaginal pH test

c) Vaginal smear test

d) Symptomatic gradation

Treatment schedule

Dosage: 125mg./day, in two equally divided doses.

Anupana: madhu

Duration: 30 days

Follow up

The patients were followed up weekly.

Parameters for the assessment of results:

I. **Subjective parameters:** These are the parameters that were observed before, and after first and second week of treatment i. Shweta srava ii. Yoni kandu iii. Kati shoola iv. Shirashool v. Vibhand vi. Bhrama vii. Daurbalya viii. Agnimandya ix. Panduta.

II. **Objective parameters: Improvements in the signs i,e.** i. Quantity, consistency, colour, and smell of the discharge. ii. Vaginal smear test iii.symptomatic improvement.

These parameters were carried out before and after the treatment. The parameters were gradedbased on the severity as 3,2,1,0.

Shweta srava

- 3 (Severe), denotes excess secretion which wets the undergarments, requires a sanitary padthroughout the month.
- 2 (Moderate), denotes discharge which wets the undergarments and lasts for 10-15 days in amonth.
- 1 (Mild), denotes occasional discharge of 5 days in a month.
- 0 denotes normal secretion.

Kandu

- 3 - Itching throughout the day.
- 2 - Increases particular time of the day/night.
- 1 - Occasional
- 0 - Nil

Low backache

- 3 - Severe continous pain, no relief even after rest.
- 2 - Pain particular after work
- 1 - Particular time concerned with menstrual cycle
- 0 – Nil

Shirshool, Vibhandh, Daurbalya, Agnimandya, Bhrama

- **Yes**
- **No**

OBSERVATIONS

Range of vaginal pH test conducted in the study group

Patients having normal pH range was more in no.56.6

Efficacy of vangabhasma on shwetpradarIn group A

- Total no. of patients with shwetasrava before treatment 40 i.e. (100%)
- Total no. of patients with shwetasrava after treatment 7 i.e. (81.80%)
- Treatment effect in terms of reduction – 18.2%
- Reduction in quantity of srava highly statistically significant at 0.1%
- Level of significance P<0.001;t=9.8.

In group B

Total no of patient with positive result i.e 26.66%.

Efficacy of vangabhasma on KanduIn group A

- Total no. of patients with kandu before treatment 40 i.e. (100%)
- Total no. of patients with kandu after treatment 7 i.e. (81.20%)
- Treatment effect in terms of reduction – 18.80%
- Reduction in kandu due to treatment is statistically highly significant at 0.1%
- Level of significance P<0.001; t=95.

In group B

Total no of patient with positive result i.e 41.60%

Efficacy of vangabhasma on katishoola

- Total patients with katishoola before treatment 40 i.e. (100%)
- Total patients with katishoola after treatment 7 i.e. (81.80%)
- Treatment effect in terms of reduction-(18.20%)
- Reduction in katishoola due to treatment is statistically highly significant at 0.1%
- Level of significance P<0.001; t=9.52.

In group B

Total no of patient with positive result i.e 34.70%

Table 1: Clinical assessment data.

Sr. no.	Symptoms	Clinical group (A)				Control group (B)			
		B.T	A.T	Diff	Releif%	B.T	A.T	Diff	Releif%
1	Vaginal discharge	55	10	45	81.8%	45	33	12	26.66%
2	Katishool	33	6	27	81.8%	23	15	8	34.70%
3	Garbhashaya Shool	17	3	14	82.30%	14	11	3	21.40%
4	Shirshool	20	3	17	85.00%	25	17	8	32.00%
5	Daurbalya	10	1	9	90.00%	16	11	5	31.20%
6	Bhrama	12	3	9	75.00%	13	11	5	15.30%
7	Vibandh	7	2	5	71.40%	7	6	1	14.20%
8	Agnimandya	15	4	11	73.30%	11	8	3	27.20%
9	Yonikandu	16	3	13	81.20%	12	7	5	41.60%

Rest all complaints like shirshool, vibandh, agnimandya, daubalya, etc have 50% relief in clinical group and 25 % relief in control group.

DISCUSSION AND RESULT

In this study 40 patients with shweta pradara lakshana were selected and clinically evaluated. During clinical study, patient of clinical group get 80-90% relief in shwetsrav, kandu, katishool. On keen observation, it is found that patients who are in between age grp 2231, vatkaphaj prakruti, married womens, and those who are below poverty line are sufferingmore from shwetpradar. Anemic patients get 50% result in increasing Hb % during treatment. Patients suffering from pus cell infection in urine get 80 % relief from puss cell infection. Patients suffering from worm infustation get 50% relief from worms. control grouppatients get 25% relief in shwetshrav, katishool, kandu and they didn't get so much result in hb%, urine infection and stool examination.

Patient was treated till the symptoms get completely reduced. At every follow up we observed reduction of symptoms. After 1 month all symptom almost reduced. Medicationwas stopped after 1 month and patient was advised to come after 3 months for follow up.

After 3 months patient came to OPD and reported that she didn't suffered from previous complaints.

The clinical assessment observation reveals that there was significant reduction in srava along with associated complaints like kandu, katishoola which was statistically significant at a rate of $p<0.001$.

CONCLUSION

Swetapradara not only disturbs physical health but also effect the mental state of a patient. There are various Ayurvedic formulation for Swetapradara. In this clinical study the given drugs shows significant result. The action of vangabhasma in group A i:e clinical group is effective during treatment. Reduction in clinical parameters in group A patients is statistically highly significant. No adverse effect of any drug was noticed during treatment. It will help to endure a step towards the use of Ayurvedic drug in the management of Swetapradara (Leucorrhoea) and give relief to the women suffering from this annoying condition.

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