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## EFFECT OF PALASH KSHAR PRATISARAN COMPARED WITH ARKA KSHAR PRATISARAN IN TREATMENT OF ARSHA – A CONCEPTUAL STUDY

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#### **ABSTRACT**

Introduction: In Surgical branch of *Ayurveda*, *Acharya Sushruta* has described *Shastrakarma*, and *Anushastra* Karma in detail along with its indications. As per Sushruta, Kshar is superior than *Shastra* and *Anushastra karma* because of its properties like *Chhedya*, *Bhedya*, *Lekhya* (i.e., excision, cutting, scrapping, mitigates) and *Tridoshaghna* (decreases vitiated *Doshas*). Kshar is an alkaline caustic obtained from the ashes of medicinal plants. It is milder procedure compared to surgery and thermal cautery. It is versatile, because even such places that are difficult in approach by ordinary measure can be used safely on the patients who are afraid of surgery. **Methodology:** It will be a prospective conceptual study in which objective were formulated for

reduction of pile mass(*Arsha*)comparising of total 60 patients randomly allocated in two groups(30 in each group). In group A (n=30), application of *Palashkshar* takes place over diagnosedwith 2<sup>nd</sup> and 3<sup>rd</sup> degree haemorrhoid(*Arsha*), In group B (n=30), application of *Arkakshar* takes place over diagnosedwith 2<sup>nd</sup> and 3<sup>rd</sup> degree haemorrhoid(*Arsha*). After procedure observation will be done on both group during follow up on 7<sup>th</sup> and 14<sup>th</sup> day. A standard case record form will be used for data collection. Thus the effect of *Palashkshar* and *Arkakshar* application on *Arsha* will be established at the end of this clinical trial.

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**KEYWORDS:** Arsha, Palashkshar, Arkakshar, Haemorrhoid.

#### INTRODUCTION

Ayurveda serving the mankind since long time with the aim to provide healthy status to healthy individual and to cure the diseases. Many diseases cause due to our daily day to day changing lifestyle, our dietary habit, *Vegavarodh* and increase stress etc. which leads to 'Agnimandya'. Agnimandya is the major causative factors for Arsha.

Arsha was described in detail in our *Bruhatrayi*. According to *Aacharya Vagbhattä* well known definition of *Arsha* is an entity in which muscular projections in anal canaltrouble the patients like enemy.<sup>[4]</sup> It is included in *Mahagada*i.e. major illness as it occurs at *Guda* which is *Sadyopranaharamarma* it may create life threatening condition.<sup>[5]</sup> *AacharyaSushruta* the father of surgery had described the six types of *Arsha*: *Vataj*, *Pittaj*, *Kafaj*, *Raktaj*, *Sannipataj* and *Sahaj* in detail.<sup>[6]</sup> He described four types of treatment of *Arsha* – *Bheshaj* (medical management), *Kshar* (alkaline preparation of medicinal herbs), *Agni* (cauterization), and *Shastra* (surgery).<sup>[7]</sup> *Arsha* can be correlated with haemorrhoids in modern science.

Haemorrhoids are the dilated vein within the anal canal in sub-epithelial region formed by radicals of the superior, middle and inferior rectal veins. [8] Most frequent symptoms leading to surgical intervention for haemorrhoidal sufferers are bleeding, protrusion, ano-rectal discomfort and pain. Haemorrhoid has been a disease which has no single uniformly accepted surgical treatment. Therefore different methods and researches are under clinical trial. At present the treatment can be classified as minimal invasive surgery and conventional haemorrhoidectomy. There are some other method also which are Lord's anal dilation, Injection of Sclerosant Barron's band application, and cryosurgery. There are some newly invented techniques like Doppler guided haemorrhoidal artery ligation (DGHAL), LASER haemorrhoidoplasty, infrared coagulation (IRC), Radio frequency ablation etc. Above said treatment are invented to reduce pain in postoperative period, to reduce bleeding and stay in the hospital. All these treatment depend upon the degree or prolapse of haemorrhoids, butstill there are many drawback, recurrence chances and highly expensive instrumentation which increases the cost of these treatments. There are some method in Ayurveda which are good optional for minimal invasive techniques in the treatment of haemorrhoid. Ksharkarma or Kshar Partisan is one among them. Aacharya Sushruta mentioned 'Kshar karma' is superior among Shastra (sharp instrument) and Anushastra (accessory instrument)<sup>[10]</sup>, as it perform function like excision, cutting, scrapping, mitigates (decreases vitiated *Doshas*) all *three dosha*. [11]

#### **Criteria for Inclusion of Patient**

- 1. Diagnosed patients of 2nd and 3rd degree haemorrhoids from Shalyatantra OPD and IPD within age groups 18 to 60 years.
- 2. Selection will be irrespective of gender, religion, education and socio-economic status, were included in this study.

#### Criteria for exclusion of Patient

- i. Patients suffering from CA rectum.
- ii. Patients with uncontrolled DM and HTN.
- iii. Patients with 1st and 4th degree haemorrhoids and interno-external haemorrhoids.
- iv. Known cases of portal hypertension will be excluded.

#### **Selection of Patients**

Patient diagnosed with Arsha(Haemorrhoids) will be selected from OPD and IPD of Shalya Tantra department, Shri Ayurved Mahavidyalaya, Nagpur. Irrespective of gender, occupation, religionetc. The registered patients were randomly allocated into two groups. The study was approved by Institutional Ethics Committee(IEC), before starting the clinical trial.

#### **MATERIAL**

Among 60 registered patient in group A (n=30) patient of Arsha of  $2^{nd}$  degree and  $3^{rd}$  degree will be treated with palash ksharpratisaran, and in group b (n=30) patient of Arsha of  $2^{nd}$  degree and  $3^{rd}$  degree will be treated with Arkakshar pratisaran, and in group b(n=30).

#### METHODOLOGY

GROUP A: Palashkshar pratisaran will be done on patient of Arsha (2<sup>nd</sup> and 3<sup>rd</sup> degree haemorrhoid) on operative day and observation will be done on 7<sup>th</sup> and 14<sup>th</sup> day. Conclusionand Result will be drawn.

GROUP B: Arkakshar pratisaran will be done on patient of Arsha (2<sup>nd</sup> and 3<sup>rd</sup> degree haemorrhoid) on operative day and observation will be done on 7<sup>th</sup> and 14<sup>th</sup> day. Conclusion and Result will be drawn.

Trial drug

Trial drug i.e. Palash kshar and Arka kshar was prepared and analysed on parameter like morphological evaluation, rancidity, weight/ml, refractive index, viscosity, saponification value, acid value, peroxide value in the pharmacy of Shri Ayurved Mahavidyalaya, Nagpur.

#### **Standard operating procedure**

GROUP A: 1.Underall aseptic precautions, under anaesthesia, the patient will take lie down in lithotomy position.

- 2. Painting and draping of perianal area will be done.
- 3. Then, a slit proctoscope lubricated with the help of LOX2% jelly and it will be introduced in the anal canal.
- 4. The pile mass fixed at the suitable place into the aperture.
- 5. Pile mass will be identified firstly and then cleaned with dry gauze and remaining mucosa will be covered with gauze to avoid Kshar application on normal tissue.
- 6. TikshnaKshar will be applied over it, in 1-2 gm. quantity.
- 7. AppliedKshara will be kept for 2 minutes approximately or Shatamatra i.e., Till the time taken to count no. from 1 to 100.
- 8. The Kshara will be then washed with the help of fresh lime juice.
- 9. After application of the Kshara, the pile mass will be changed into Bluish black (PakwaJambuphalavat) in appearance.
- 10. The procedure will be repeated for each pile mass separately in the same sitting patient was observation will be done on 7<sup>th</sup> and 14<sup>th</sup> day.

GROUP B: Same procedure will be repeated for group b also and patient was observation will be done on 7<sup>th</sup> and 14<sup>th</sup> day.

**FOLLOW UP PERIOD:** 0,7<sup>TH</sup>, 14<sup>TH</sup> day.

#### STATISTICAL TESTS

Two independent samples are there, hence t test will be used and chi square test will be used to acess the significance of proportion between the two groups within the group.

#### COMPARISON

Before and after treatment comparison will be done by paired t test in each group separately.P value <0.05 will be considered statistically significant for all comparisons.

Formula: for sample size

 $N={Z1-\alpha \ sqrt[2p(1-p)]+Z1-\beta sqrt[p1(1-p1)+p2(1-p2)]}2/(p1-p2)2$ 

Where, p=mean of two proportion,p1=Group A, p2=Group B

#### Assesment criteria

A) Subjective Criteria: The patients will be assessed on the subjective and objective parameter & the relevant data will be collected for analysis.

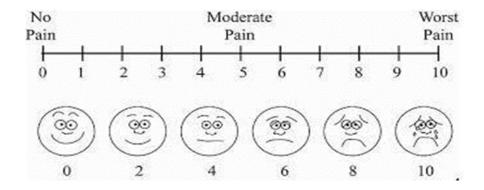
- I. P R Bleeding(*Raktasrava*)
- II. Pain (Shula)

The grading was made based on patient's version. Attempts were made to have a gross quantitative analysis of bleeding in terms of drops. Grading is listed below.

Table 1: assessment criteria for. P.R. Bleeding.

Symptoms	Grading
No Bleeding	0
Bleeding during defecation up to 10 drops	1
Bleeding during defecation 10 to 20 drops	2
Splash in a pan	3

II. Pain (Shula): Assessment of post-operative pain will be done by visual analogue scale (VAS).



#### **B) OBJECTVE CRITERIA**

Size of pile mass

Table 2: Assessment criteria for size of pile mass.

Signs	Grading
75% and above reduction size of pile mass	0
50% to 74% reduction in size of pile mass	1
25% to 49% reduction in size of pile mass	2
Below 24% reduction in size of pile mass	3

Overall assessment criteria: Criteria of assessment will be based on improvement in subjective and objective parameters after the treatment.

#### **RESULT**

Result will be drawn according to observation and discussion.

#### **DISCUSSION**

Kshar has properties such as Chhedya, Bhedya, Lekhya (i.e., excision, cutting, scrapping, mitigates) and also it is *Tridoshaghna*(decreases vitiated *Doshas*). Kshar is a caustic, alkaline in nature obtained from the ashes of medicinal plants. Pratisaraneeya tikshna kshar causes coagulation of haemorrhoid plexus, necrosis of tissue followed by fibrosis of plexus, adhesion of mucosal, submucosal coats helps in prevention of further dilatation of vein and prevents prolapsed of regional mucosa of anus. This makes permanent radical obliteration of haemorrhoid.

In present day practise, application of Kshar is found to be a safe, efficacious and cost effective method for management of internal haemorrhoid. After Kshar is applied in haemorrhoids it creates chemical burn of the pile mass. Later it sheds off after necrosis. Simultaneously the wound of Kshar daghda heals spontaneously as Kshar possess wound healing property.

In previous study, we had seen the efficacy between the Arka kshar and Apamarga kshar hence Arka kshar found more effective. Both drug were same but the superiority might be due to individual drug potency also Arka kshar was found more alkaline so, it causes coagulation of haemorrhoidal plexus, necrosis of tissue followed by fibrosis of plexus, adhesion of mucosal, sub mucosal coat which helps in prevention of further dilatation of veins and also prevents prolapsed of regional mucosa of anus. So, In this study observation and conclusion will be drawn to known efficacy of palash kshar and arka kshar pratisaran in treatmant of Arsha.

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