# SWAMI RAMANANDTEERTHA MARATHWADA UNIVERSITY, NANDED

(Faculty of Ayurveda Ph.D. Section)

# "ROLE OF KUKKUTA PURISHADI MALAHARA AND SIDDHA TAILA IN BAHYA ARSHA (EXTRNAL HEAMMORHODS)"

DISSERTATION SUBMITTED FOR THE AWARD OF PH.D. (AYU.)

> IN SHALYATANTRA

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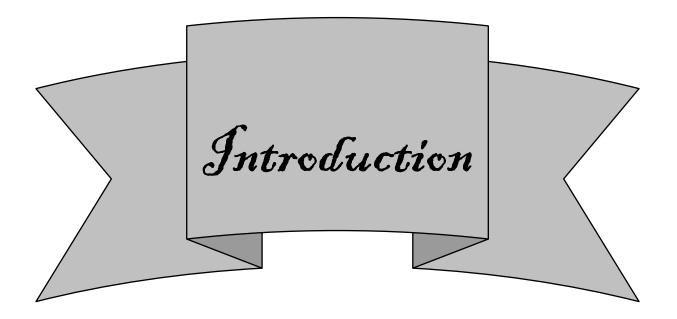
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# I. INTRODUCTION

Piles are certainly one of the commonest ailments that afflict the mankind. Clinically it is seen that many people of both sexes suffer from hemorrhoids and that even more perhaps have piles in a symptom less form. It is a frequent experience to find hemorrhoids on routine rectal examination in a patient who have never had any complaints referable to them.

Overall prevalence is stated to be 4.4% worldwide<sup>1</sup> and 17% of Indians may experience hemorrhoids<sup>2</sup>. In both sexes peak prevalence is noted from age 45 - 65 years. Thus it is seen that incidence of piles apparently increases with age, however the disease is by no means confined to older individuals and piles are encountered in people of all ages, including young people of all ages, including occasionally young children. Men seem to be affected roughly twice as frequently as women.

To grade the severity of disease, ayurveda says

अरिवत् प्राणिनो मांसकीलका विशसन्ति यत्। अर्शासि तस्स्मादुच्यन्ते गुदमार्गनिरोधत:। अ.ह्र.नि.७/१

It is a pitiful condition because piles are very common and may cause considerable distress and depression. Stating its complications, indirectly indicating the urgency of its treatment Ayurveda says

ते ते च वातजा रोगा जायन्ते भृशदारुणा।। दुर्गाग्नामित्युदावर्त परमोऽयमुपद्रवः।। अ.ह्र.नि.७/५०—५१ अर्शसां प्रशमे यत्नमाशु कुर्वीत बुध्दिमान्। तान्याशु हि गुदं बद्ध्वा कुर्युबुध्दगुदोदरम्।। अ.ह्र.नि.७/५९ सर्वाःस्युर्वलयो येषां दुर्नामभिरुपद्रवाः। तैस्तु प्रतिहतो वायुरपानः सन्निवर्तते। ततो व्यानेन सङग्म्य ज्योतिर्मृद्गति देहिनाम।। सु.चि.२/२७ Prominent amongst the symptoms of hemorrhoids are bleeding, prolapse during defecation, occasional pain, excessive mucus discharge and pruritus around the anus. Despite careful techniques many subjects experience pain and discomfort, therefore any pharmacological agents leading to effective and rapid noninvasive control of sign and symptoms is of immense clinical value. Besides in this digitalized age where many advance invasive techniques are emerging, still in a developing country like ours, a conservative, cost effective, non-invasive treatment has its own significance. Although many drugs(xylocaine jelly, dobesinate calcium..) are available in the market, still they fail to provide complete relief from all the symptoms

Ayurveda, though being an ancient science, the great Ayurvedic surgeon Sushruta Acharya, 2000 years back has described the fourfold treatment in the management of hemorrhoids.

चतुर्विधोऽर्शसां साधनोपाय:। तद्यथा—भेषंज क्षारोऽग्नि: शस्त्रमिती। सु.चि.६ / ३ Bhaishjya chikitsa medicinal treatment Kshar chikitsa chemical cauterization Agni chikitsa cauterization Shastra chikitsa surgical intervention

Besides these, Sushruta has also mentioned few lepas for local application over external heamorrhoids. While mentioning the various complications of Shastra, Kshar, Agni chikitsa Sushruta says,

# परं चं यत्नमास्थाय गुदे क्षारअग्निशस्त्राण्यवचारयेत्षाण्ढय शोफदाह मदमूर्च्छाऽऽरोपानाहातीसारप्रवाहणानि भवानति मरणं वा। स्.चि.६/३

Thus without hesitation one can say that Ayurveda mentions the bhaishajya chikitsa in the form of lepa (local application of medicine) which is the best available alternative treatment for the subject suffering from Arsha roga.

So in an attempt to make an effective, long lasting, cost effective, easily available, non invasive treatment for relieving the signs and symptoms of external piles so as to make life free of distress and depression, scholar, under the precious guidance of his guide, **Dr.G.S. Lavekar**, has selected following lepa for local treatment of external piles.

```
कुक्कुट पुरीष गुञ्जा हरिद्रा पिप्पली चूर्णमिती गोमुत्रपितापिष्टो.....
अभ्यञ्जनेनार्श: शातयति।।
```

सु.चि.६/१२

While stating the qualities of Lepa Ayurved Says,

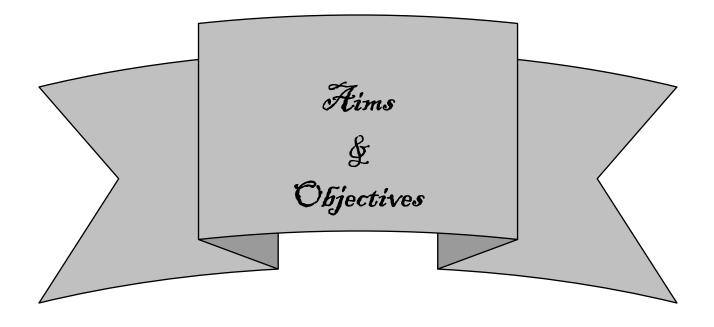
तत्र रक्तपितप्रसादकृदालेप: प्रदेहो वातश्लेष्मप्रश्मन: शोधनो रोपण: शोफवेदनापहश्च तस्योपयोग.....

सु.सू.१८/७

त्वकप्रसादनमेवाग्रयं मांसरक्त प्रसादनम्। दाहप्रशमनं श्रेष्ठं रुजा कण्डुविनाशनम्।। मर्मदेशेषु ये रोगा गुहयेष्वपि तथा नृणाम्। संशोधनाय तेषां हि कुर्यादालेपन भिषक्।।

सु.सू.१८/९-१०

After reviewing the entire Ayurvedic Literature on the treatment of Bahya Arsha in the form of Lepa Chikitsa, easy availability of the drugs mentioned in the reference above and studying today's scenario of life style of the subject suffering from the above ailment, the scholar decided to take this topic, "ROLE OF KUKKUTA PURISHADI MALAHARA AND SIDDHA TAILA IN BAHYA ARSHA (EXTRNAL HEAMMORHODS)" for the Ph-D studies.



# **II. AIMS AND OBJECTIVES**

 To evaluate the effects of local application of Kukkuta Purushadi Malahar and Siddha Taila on Bahya Arsha.

- 2. To make effective, long lasting, cost effective, easily available, non invasive, conservative and alternative treatment of Bahya Arsha.
- To propose the possible mechanism of action of drugs of Kukkuta Purishadi Malahar and Siddha Taila.
- 4. To review the complete literature available on bahya arsh (External Hemorrhoids) (Ayurvedic and Modern).

# III(A). REVIEW OF AYURVEDA LITERATURE

# SHARIR – RACHANA OF GUDA

The large intestine i.e. Sthoolantra is divided into 3 parts – Ascending colon, Transverse colon and Descending colon. The distal part of descending colon is called as 'Sigmoid colon'. The terminal part of sigmoid colon is rectum and Anal canal i.e. "Guda".

#### **UTAPATTI OF GUDA:**

In sharir sthana, Sushrut acharya states that the most sara part of Rakta and Kapha is digested by Pitta with the help of Vayu. This process is completed in the uterine life and the 'Guda' is formed.

Charak acharya has described that UttarGuda and AdharGuda are derived from the maternal source. Vagbat acharya mentioned that soft organs like Guda, Basti are formed by source of maternal origin.

#### **SHARIR RACHANA OF GUDA:**

तत्र स्थूलान्त्र प्रतिबध्दमर्धपंचागुलं गुदमाहुः। तस्मिन् वलयस्तिस्त्रोऽध्यर्धाड्गुलान्तर सम्भूताः। प्रवाहणी विसर्जनी संवरणी चेति।। चतुरड्.गुलायताः सर्वास्तिर्यगेकाड्.गुलोच्छ्रिताः। शड्खावर्तनिभाश्चापि उपर्युपरि संस्थिताः।। गजतालुनिभाश्चापि वर्णतः सम्प्रकीर्तिताः। रोमान्तेभ्यो यवाध्यर्ध्दो गुर्दोष्ठः परिकीर्तितः।।

सु.नि. ५—७

Guda is the terminal part of sthoolantra. Colour of Guda resembles the palate of elephant means it is of pink colour.

Guda is four and half anguli in length. (One angula is equal to width of index figure of a person).

#### The division of Guda is

- 1. Three Guda walies
- 2. Gudoushtha

# **GUDA WALIES**

A unique concept in Ayurveda, are the circular inner folds of Guda, arranged one upon another like whirls of counch. They are having different functions. The walies from top to bottom of Guda are as follows.

- I. **Pravahani** The wali which propels the contents of Guda
- II. Visarjani The wali which excrets or expels ther contents of Guda.
- III. Sanwarni The wali which holds the contents of Guda

#### A) **PRAVAHANI**:

It is inner most (proximal) fold of Guda which is attached to the rectum. It is one and half angul i e about 2.5cm in length.

तत्र मलप्रवाहणादन्ते स्थिता वलि: प्रवाहणीति कथ्यते।

#### अरुणदत्त

# प्रवाहयतीति प्रवाहणी।

The main function of Pravahani wali is to propel the contents of Guda downwards from rectum.

#### **B) VISARJANI :**

It is the second and middle part of anal canal, which also measures one and half anguli. Anguli i.e about 2.5cm in length.

# मध्यस्थिता मलस्य प्रवहतो बहिर्विसर्जनाद् विसर्जनीति कथ्यते।

#### अरुणदत्त

# विसृजतीति विसर्जनी।

The main function of this fold is to release the Guda ostha and defecates the fecal matter. Meaning of the visarjani is to give up i.e. to pass out the contents.

#### C) SANWARNI :

It is the third and distal wali which situated below the visarjani and above the Gudoustha. Its length is one angul i.e. near about 2cm.

# गुदस्य बाहये स्थिता मलस्य संवरणात् संवरणीत्युच्यते।

#### अरुणदत्त

# संवृणोतीति संवरणी।

It covers the anal sphincter

#### • GUDOUSTHA :

# प्रथमा तु गुदौष्ठादंगुलामात्रे स। सु.नि. ५/७

It is outer most part of anus, lies below the sanwarni wali. Its length is1/2 angul goes about 1 cm. It spreads up to romanta ( up to peri-anal hair). The widh of it is equal to ½ yawa. (Half of the barley.)

#### • According to Charakacharya, Guda is described in to two parts

1) UttarGuda ( Upper or proximal part of Guda )

```
उत्तरगुदं – यत्र पुरिषमवतिष्ठते ।
```

#### चक्रदत्त

There is temporary storage of faecal matter in uttarguda.

2) Adhar Gudam ( Lower part of Guda )

```
येन तु पुरिषं निष्क्रामति तदधरगुदम्।
```

#### चक्रदत्त

From where the fecal matter is defecated is termed as adharGuda.

#### • STROTASA :

Guda is one of the Bahirmukha stroas i.e. external opening. It is the basic organ of mala purishwaha strotas with pakwashaya. Purishwaha strotasa is the system in body related with formation and excretion of purisha.

#### • PURISHDHARA KALA

Purishdhara Kala is the part in body related to assimilation of mala. Dalhan describes that it spreads from whole of the Pakwashaya up to guda.

# पत्र्चमी पुरीषधरा नामः याऽन्तः कले मलं विभजते पक्वाश्यस्थाः।

सु.शा.४/७

# • IMPORTANCE OF GUDA :

- Guda is a marma vital organ in body. On which if injury or trauma occurs, it leads to sudden death
- 2) Charakacharya has mentioned Guda as one of the "Dash Pranayatana" Guda is also one of the five Karmendriyas.

दशैवायतनान्याहुः प्राणा येषु प्रतिष्ठिताः। शंखौ मर्मत्रयं कण्ठो रक्तशुक्रौजसी गुदम्।।

च.सु.३०

# NIDAN – PANCHAKA OF ARSHA.

A detailed description of Various Guda Vikaras has been dscribed in Sushruta Samhita. In Bruhatrayi (Charka, Sushruta and Vagbhata Samhita) we come across the detail description of Arsha i.e. haemorrhoid. The word Arsha comes in connection with abnormally fleshy growth found particularly in Guda region.

Due to this Arsha, the patient feels a pricking sensation around the anus. The exact meaning of the Arsha is a fleshy root like morbid growth of muscle tissue. When it occurs in anus is called Guda Arsha.

 But some times this growth also occurs at different Sthana like Shishna (Penis) called Shisanarsha, Apatyapatha (Vagina) called Yoniarsha, Mukha (Mouth) called Mukharsha, Nasika (Nose) called Nasarsha, Karna (Ear) called Karnarsha, Netra (Eye) called Netarsha

#### **DEFINITION**

Acharya Charka, Sushruta, Vagbhata have described it as a muscular projection (Mansa kila) which troubles the patient like an enemy with pricking pain around the anus. Also Madhav Nandita has described it as enemy troublesome and fatal in nature.

गुदवलिमांसप्ररोहन्जनयन्ति तान्यर्शासि त्याचक्षते।

सु.नि. २/४

अरिवत् प्राणिनो मांसकीलका विशसन्ति यत्। अर्शासि तस्स्मादुच्यन्ते गुदमार्गनिरोधत:।

अ.ह.नि.७/१

### **GRAMMATICAL DERIVATION OF ARSHA.**

It is derived from the root "Ru-Gato" after adding suffix "Arana "As per Vagbhata, it is discribed as "Guda – kila" The critics of Madhav Nidana also agree with Vagbhata.

From this it is clear that amongst all the anorectal disorders, Arsha is an entity clearly known to the ancient Ayuravedic Authorities.

# SYNONYMS OF ARSHA

Vagbhata	-	Hatnama, Mansakilaha, Mansankura
Sushruta	-	Arsha, Mansarsha
Charak	-	Mulvyadhi , Gudkil, Durnama

Charka has clearly stated that all the fleshy growth at the site other than Guda are called Adhimansa.

# **ETIOLOGY OF ARSHA (HETU)**

• In charak Samhita (Chikista sthan 14/7) dietary factors as well as factors related to life style are described in detail.

# **DIETARY FACTORS:**

#### 1) GURU, SHEETA FOOD:

Guru means which is difficult to digest. Sheeta property is responsible for Stambhan (Restriction of movements and secretion) these two properties are described as etiological factors for arsha.

# गुरु चिरपाकी।

सु.सू. ४५/२०२ डल्हण। ल्हादनं जीवनं स्तंभं प्रसादं रक्तपित्तयोे:। अ.ह्व.सू.९/१९

# 2) VIDAHI FOOD

During digestion, the food which aggravates Pitta and doesn't get digested for longer time is called as Vidahi. It creates vidaha, irritation of body tissues.

```
जाठराग्निसंयोगाद्यः पाकमगच्छन् मध्यमायामेव पाकावस्थायं विदह्यमानः
```

```
पित्तं कुर्वशिचरकालमवतिष्ठते न शीघ्रं जरा याति...।
```

विदहि विदाह संतापकारि।

```
सु.सु.४५/२०२ डल्हण।
```

#### **3) VIRUDHANNA:**

The food should nourish and improve quality of body tissue. But Virudhanna means the food doesn't nourish body tissues. In fact this food injures normal body tissues, reduces immunity of body tissues and can create abnormal body tissues. Charak Samhita describes – Eighteen types of Virudhanna – Desh viruddha, kaal viruddha, Agni viruddha, Matra viruddha etc.

#### 4) AJEERNA:

Due to Agni mandya, hampering of power of digestion occurs; the eaten food cannot be digested and metabolized properly. This leads to formation of aama which generate various diseases in body in spite of nourishing body tissues. The process is called Ajeerna.

# अविपक्वो अग्निमांद्येन यो रस: न निगधते।

रोगाणां प्रथमो हेतुः सर्वेषामामसंज्ञया।।

# यो.र.अजीर्णनिदानम्

# चिन्ताशोकभयक्रोध.....। च.वि.२/९

#### Various reasons of ajeerna are described in texts:

- a) Excessive water or liquid intake.
- b) Imbalanced diet Ayurveda describes in details about rules and regulations of diet. If these are not followed, the diet, becomes imbalanced – Visham aahar.
- c) Anger, fear, jealousy, sadness

These are the reasons which are described as causes for ajeerna

# 5) **PRAMITAASHANA**:

There are following meanings of parmitaashana-

प्रमितम् अल्पतमम्, अल्पं मात्रहीनमशनम्।

जेज्जटस्त्वाह—प्रमितमततीतकालभोजनम्।

प्रभृत इति पाठे. नष्टशक्तिकं धान्यादिकमाहु:।

प्रमिताशनमेकरसाभ्यास:।

# मा.नि.मधुकोष टीका अर्शोनिदान ३/४

- a) Insufficient diet.
- b) Diet taken after proper or due time
- c) Food stuffs, grains, which are very old and denatured.

To have such food is called as Pramitaashana

d) Pramitaashana also means taking food of single taste ( in large quantity, for longer time )

# 6) PARYUSHITANNA

The food which isnot cooked freshly.

# 7) POOTI ANNA

The food having abnormal smell.

#### 8) KRUSHA , SHUSHKA, POOTI MAMSA –

Malnourished, thin meat having abnormal smell.

#### 9) SANKEERNANNA –

The food prepared by mixing various ingredients having different properties Rasa, Virya, Vipaka.

# मिलितनानाद्यव्यस्याभ्यवहारात्।

#### च.चि.१४

# FACTORS RELATED TO LIFE STYLE

#### **1. ASAMSHODHNAAT :**

Various procedures e-g. Vaman, Virechana are described in Ayurvedic texts to purify human body by eliminating aggravated doshas in body to maintain health of body tissues. If these are not practiced, it can lead to arsha formation.

#### 2. BASTIKARMAVIBHRAMAAT :

'Basti' is the procedure described in Ayurveda in which various medical preparations, decoctions and oils etc. are administered per rectum, to maintain normal health and to cure diseases. If the rules and regulation of this Basti procedure described in texts are not followed, it can be a causative factor for arsha.

#### **3. AVYAYAAMAAT** :

The movement of body which improves health and strength of body tissues are called as Vyaayam (Exercise). Lack of exercise, excessive exercise or exercise in abnormal manner can lead to arsha.

व्यायाम – शरीरचेष्टा या चेष्टा स्थैर्यार्थाबलवर्धिनी।

#### च.सू.५

#### 4. AVYAVAAYAT :

Vyavaay means sexual activities. Lack of sex, excessive sex or abnormal sex can lead to arsha,

#### अव्यवायातिव्यवायविषमव्यवाया ज्ञेया:।

#### च.चि.१४/७ चक्रपाणी

#### 5. DIWAASWAPNAAT:

Sleep during day time is described as a cause.

#### 6. SUKHA SHAYANA, AASANA, STHAN SEVANAM:

Asana is the style of sitting/chair used for sitting indicating sedentary lifestyle.

#### 7. UTKAT, KATHINA, VISHAMA AASANA:

The meaning is, if chair used for sitting is heighted, hard and irregular it can lead to arsha. Another meaning of 'Utkat' aasana is squatting position

उत्कट – उकुडु इति लोके।

सु.नि.२/४ न्याण चं.

#### 8. UDBHRANTAYAANAT:

The vehicles which are difficult to ride are called as 'Udbharantayyan'. The example given in texts is 'Ashwa' ie. Horse and 'Ushtra' i.e. Camel.

उद्भ्रान्तयानं दुर्दम्याश्वादियानम्।

सु.नि.२/४ न्या चं

#### 9. GUDAKSHANANAAT:

This means any kind of trauma to anal region.

गुददेशे क्षतभावात्.....। च.चि.१४/७ चक्रपाणी

This is due to –

- a. Bastinetraasamayakpranidhaanaat Improper use of catheter for basti.
- b. Sheetambusamsparhaat Recurrent contact of cold water with anal region.
- c. Cheladi Gharshanaat It means trauma due to rough substances e.g. grass etc.

# 10. PRATATAADI – NIRVAAHANAAT :

It means straining for stool, urine or flatus.

#### **11. VEGODEERANAAT:**

It means strain to pass the stool, urine or flatus even though there is no urge to pass them.

# 12. SAMUDEERNAVEGA – VINIGRAHAAT :

The meaning is to hold the urge to pass stool, urine or flatus.

# **13.** FACTORS RELATED TO GARBHA (FETUS):

- a. Aamagarbha bhramshaat i.e. abortion or preterm labour
- b. Garbhotpeedannat Irritation of growing fetus to anal region.
- c. Vishamaprasuti The process of labour is not smooth. Excessive staining or abnormal presentation of fetus can lead to injury to anal region.

FACTORS AFFECTING	GUDAWALI
a) Utkat Aasan	b) Kathin Aasan
c) Visham Aasan	d) Udbharant Yaan
e) Basti Netra Asamyak Pranidhan	f) Cheladigharshana

- In sushruta Samhita Nidan sthan 2/4 similar factors are described.
- In ashtang Hridaya Nidam Sthan 7/10 14 following additional factors are described Jwar, Atisaar, Grahani, Pandu, Gluma, Shofa etc.

# **CLASSIFICATION OF ETIOLOGICAL FACTORS:**

<b>Etiological Factors</b>	Vitiation of Dosha	<b>Etiological Factors</b>	Vitation of Dosha
Guru Food	Kapha	Ativyayamat	Vaata
Sheeta Food	Kapha.	Visham Vyayamat	Vaata
Avyaayamat	Kapha	Ati Vyavaayat	Vaata
Avyavaayat	Kapha	Visham Vyavaayat	Vaata
Sukha Shayan Aasan	Kapha	Pramitaashana	Vaata
Sevana			
Krusha Mamsa	Vaata	Shuksha Mamsa	Vaata
Pooti Mamsa	Vaata	Pratataadi	Vaata
		Nirvaahanaat	
Vegodeernaat	Vaata	Samudeernavega	Vaata
		Vinagrahaat	
Factors related to	Vaata	Factors related to	Vaata
Garbha		injury to Guda	
Vidahi Food	Pitta	Ajeerna	Tridosha
Samkeernanna	Tridosha	Asamshodhanaat	Tridosha

# VARIOUS FOOD STUFFS DESCRIBES IN SAMHITA

# AS ETIOLOGICAL FACTORS

Food Stuff	Properties	Action	Vitiation of	
			Doshas	
Gavya Mamsa	Madhur, Guru, Vishtambhi, Snigdha, Sheeta	Agnimadya	Kapha	
(Meat of Cow)				
Mahish Mamasa	Madhur, Guru, Vishtambhi, Snigdha, Ushna	Agnimadya	Kapha	
(Meat of Buffalo)				
Aja Mamsa	Madhur, Guru, Vishtambhi, Snigdha, Sheeta	Agnimadya	Kapha	
(Meat of Goat)				
Avik Mamsa	Madhur, Guru, Vishtambhi, Snigdha, Sheeta	Agnimadya	Kapha	
(Meat of Sheep)				
Varaha Mamsa	Madhur, Guru, Vishtambhi, Snigdha, Ushna	Agnimadya	Kapha	
(Meat of Pig)				
Pindalu (Sweet Potato)	Madhur, Sheeta, Guru, Vishtambhi	Agnimadya	Kapha	
Shrungataka	Madhur, Sheeta, Vishtambhi, kashaya, Guru	Agnimadya	Kapha	
(Fruit of Trapa Natans)				
Paishtika	Madhur, Sheeta, Guru, Vishtambhi	Agnimadya	Kapha	
(Substances prepared from rice)				
Paramanna (Substances	Madhur, Sheet, Guru, Vishtambhi	Agnimadya	Kapha	
prepared from wheat, jaggery,				
milk etc.)				
Kshira (milk)	Madhur, Sheeta, Guru, Vishtambhi	Agnimadya	Kapha	
Guru Fruits (e.g. Mango, Dates)	Madhur, Sheet, Vishtambhi, Guru	Agnimadya		
Vasa (Animal Fat)	Madhur, Sheet, Vishtambhi, Guru	Agnimandya	Kapha	
Mandak (Substance prepared	Madhur, Sheet, Vishatambhi, Guru	Agnimandya	Kapha	
from curd by eliminating watery				
content)				
Bisa, Mrinal (root and stem)	Tikta, Kashaya, Sheeta, vishtambi	Agnimandya	Vata	
Shaka (Green leafy vegetables)	Tikta, Kashaya, Sheeta, Vishtambi	Agnimandya	Vata	
Tarut (Root of nymhaea	Madhur, Sheet, Vishtambhi	Agnimandya	Vata	
nouchali)				
Nava Dhanya (fresh grain)	Guru, Vishtambi	Agnimandya	Pitta	
Virudha Dhanya	Vidahi	Vidahi	Pitta	

Aama Mulak (Raphanus Sativus	Katu, Tikshna, Vishthambhi	Vidhai	Pitta
Haritaka (Food Stuff used in	Katu, tikshna, Ushna, Vidahi, Ruksha,	Vidahi	Pitta
fresh form for improving the			
taste)e.g. Shrungavera (Zinzi			
ber officinale)			
Yawani			
(tachypermum ammani)			
Atikranta madya(old beverages	Katu, Tikshna, Ushna Vidahi, Ruksha	Vidahi	Pitta
Lashuna	Katu, Tikshna, Ushna, Vidahi, Ruksha	Vidahi	Pitta
Shukta (Beverages prepared by	Katu, Tikshna,Ushna, Vidahi, Ru ksha	Vidahi	Pitta
mixing root, fruits, oil, salt, etc.)			
Matsya mamsa (Fish)	Madhur, Guru, Vishtambhi	Agnimandya	Tridosha
Raag (Spicy salads prepared	Aamla, Lavan, Ushna, Tikshna	Vidahi	Pitta
from sour fruits, e.g.			
Vrukshamla(Garcinia indica),			
pickles)			

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सु.सुत्रस्थान ४५/६६/९१

राजनिघंटु

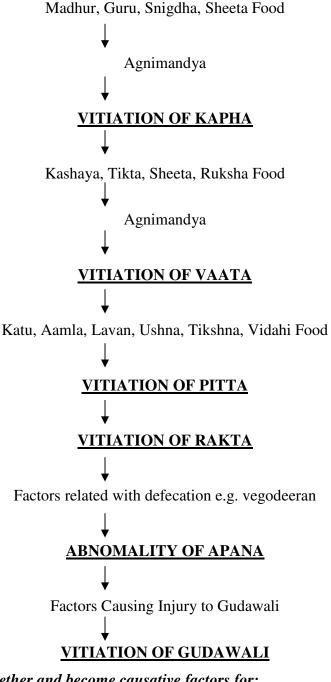
धन्वंतरी निघटु

भावप्रकाश

अ.ह.सुत्रस्थान ७/४७,१६१,१६२

# **SAMPRAPTI OF ARSHA**

Samprapti means vitiation of Dosha and Abnormalities in Dhatu which come together to form arsha.



Above processes come together and become causative factors for:

- 1. Vitiation of Tridosha
- 1. Agnimandya Accumulation of mala and Aama in Koshtha (Bowels)
- 2. Vitiation of Rakta
- 3. Vitiation of Gudawali

Vitiation of Tridosha with Rakta dhatu affects already vitiated gudwali. There is Agnimandya and creation of saama purisha which affects the function of Apanna. Thus all above factors become responsible for formation of arsha.

- Vitiated Doshas Tridosha
- Adhisthan (Structural Elements)
  - Twak
  - Mamsa
  - Meda
  - Rakta
- Kshetra (Position) Gudawali

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# **POORVA RUPA OF ARSHA**

These are the signs and symptoms which appear before appearance of Arsha, i.e. full blown disease. These are described in Ashtang Hridaya.

1. Vishtambha	: Food remains for longer time in bowels, without
	digestion.
2. Sakthisadana	: Pain over thigh region.
3. Pindiowesthana	: Pain in legs, over calf region.
4. Bhrama	: Vertigo.
5. Anga-Saad	: Generalised body ache.
6. Netra shofa	: Periorbital swelling.
7. Shakrut – bheda	
or Shakrat- graham	: Diarrhea or constipation.
8. Antrakoojanam	: Audible gurgling sound in bowel.
9. Aanaha	: feeling of distention of abdomen, or heaviness of
	abdomen.
10. Aatopa	: Pain in abdomen.
11. Kshaamata	: Emaciation.
12. Udgrabhoorita	: Excessive belching.
13. Prabhuta Mootrata	<b>n</b> : Excessive Urination.
14. Alpa Vit	: Less or hard stool.
15. Ashradha	: Reduced appetite.
16. Amlika	: Regurgitation of acidic gastric contents.
17. Shoola	: Pain over shira (head), ura(chest), prushtha(back).
18. Dukkhopacharata	: Patient feels sad.
19. Patient suspects tha	t
He is having these	
Diseases	: Viz. Grahani, Pandu, Gulma etc.

In addition to above points Acharya Charak describes Karshnya i.e. blackishness of skin.

#### In addition, Acharya Sushruta describes-

- 1. Gudparikartanam : Cutting pain over anal region.
- 2. Tandra : Drowsiness.
- 3. Nidra : Excessive sleep.

4. Indrivadaurbalya : Weakness of various organs.

These symptoms appear before Arsha and it is describe in Samhita that these become more predominant with appreance of Arsha. Even though the symptoms are of all three doshas, it shows predominance of vitiation of Vata particularly Apana and Agni Mandya. These are the two basic causes which lead to formation of Arsha of various types according to etiology.

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# **TYPES OF ARSHA**

Criteria	Charak Samhita	Ashtanga Hridaya	Sushruta Samhita
1) Origin	Sahaja	Sahaja	Six types
	Jaatasyottarkaalija	Jaatasyottarkaalija	a) Vaatja
2) Strava	Shushka	Shushka	b) Pittaja
	Strvai Arsha	Strvai Arsha	c) Kaphaja
	a) Vaatolbana	a) Vaataja	d) Raktaja
	b) Kapholbana	b) Kaphja	e) Sannipatika
			<u>Nibandha Sangraha-</u>
3) Dosha	a) Vaataja	a) Vaataja	a) Dwidoshaja
	b) Pittaja	b) Pittaja	b) Tridoshaja
	c) Kaphaja	c) Kaphaja	
	d) Dwandwaja	d) Dwandwaja	
	e) Tridoshaja	e) Tridoshaja	

# In various Ayurvedic Samhita, Ashra is classified on different criteria-

# THE DESCRIPTION OF CLASSIFICATION OF ARSHA:

# 1. ACCORDING TO ORIGIN :

- a) The Arsha which exist from birth and arises due to beeja dosha (defect in embryogenesis cells) is called **Sahaja** Arsha.
- **b**) The Arsha which develops after birth due to abnormality in food habits and lifestyles is called as **Jaatasyottarkalaja**.

# 2. ACCORDING TO VITIATION OF DOSHA-

- a) **Vaataja** Having predominance of Vaata.
- b) **Pittaja** Having predominance of Pitta.
- c) **Kaphaja** Having predominance of Kapha.
- d) Dwandwaja It is combination of two dosha
  - ✤ Vaata Pittaja
  - ✤ Vatta kapaja
  - ✤ Kapha pittaja
- e) Sannipaatika (Tridosha)- It is combination of three doshas.

# 3. ACCORDING TO STRAVA-

a) Sushka Arsha

In this type there is no discharge. There is predominance of Vaata and Kapha.

b) Straavi Arsha-

This type of arsha is having discharge particularly of blood. It shows predominance of

vitiation of Rakta and Pitta. It is again divided in two types:

- ✤ Vaatolbana- Straavi Arsha with vitiatrion of Vaata
- \* Kapholbana- Straavi Arsha with vitiatrion of Kapha.

# 4. ACCORDING TO POSITION -

- a) Originating from first Gudawali.
- b) Originating from second Gudawali
- c) Originating from third Gudawali.

# **TYPES OF ARSHA-**

# THEIR ETIOLOGY, SIGNS AND SYMPTOMS

# VAATAJA ARSHA:

If the following dietary factors and lifestyle followed in sheeta desha and sheeta kaala (e.g. winter season and Polar countries) it leads to Vaataja Arsha.

# **ETIOLOGY:**

- 1. Kashaya food
- 2. Ruksha food
- 3. Katu food
- 4. Sheeta food
- 5. Tikta food
- 6. Laghu food
- 7. Pramitaashana
- 8. Alpaashana (food taken in less than required quantity)
- 9. Tikshna madya sevana (Beverages which are more strong)
- 10. Langhana (fasting)
- 11. Shoka (sadness)
- 12. Vaat sevana (contact with wind )
- 13. Aatapa Sevana (contact with sunrays)

#### SIGNS & SYMPTOMS:

#### (a) Gudankura (pile mass)

Sushka	- Dry
Parusha	- Rough
Mlaana	- Lusterless
Shyawa	- Blackish
Aruna	- Reddish

Mitho-visadrusha	- Size of two pedicles cannot be compared
Similar to	The piles are similar to seeds of – Bimbi
	(Coccinia indica), Karkand (Zizyphus nummularia),
	Carpaas(Gossypium herbaceum),
	Khrajura(Phoenix sylvestris) etc.

## (b) Vedana (pain over following regions)

# (c) Generalized signs & Symptoms.

Kshawathu	- sneezing
Udagaar	– Excessive belching.
Arochaka	– Tastelessness.
Kaas	– Cough
Shwass	– Dyspnoea.
Karna	– Naad-Tinnitus
Bhrama	– Vertigo
Vishtambha	– Food remains in bowels for longer time without
	digestion.
Hridgraha	- Tightness over pericardial region.
Agnivaishmya	– Irregularity of digestion

#### • Blackish discolouration of-

Twak	– Skin
Nakha	- Nails
Vit	– Stool
Mutra	– Urine
Netra	– Eyes
Vaktra	– Face

• Patient feels that he is having these diseases – Gulma, Pleeha, Uadra Ashthila etc.

# PITTAJA ARSHA:

If the following dietary factors and life style is followed in Ushna Desha

(e.g. Tropical countries) and Ushna Kaala (E.g Summer) Pittaja arsha occurs-

# Etiology : Katu food

Ushna food

Lavan food

Tiksna food

Madya- Beverages

Vidahi food

Aasuya- Jealousy

Kshar (The drug prepared by combination of various medicines which is ushna,

tikshna in nature).

Agni sevana – contact with heat

Aatapa sevana – contact with sunrays.

# SIGNS & SYMPTOMS

**(b)** 

(c)

(**d**)

# (a) Gudankura (pile mass):

1		
Neelamukh	-	Bluish
Rakta	-	Reddish
Peeta	-	Yellowish
Shweta	-	Whitish
Mrudu	-	Smooth
Shlatha	-	Loose
Yawamadhya	-	Bulky in middle region
Shook jivha	-	Pile mass is similar to beak of parrot
Yakruta khanda	-	Piece of liver
Jalauka Vaktra	-	Mouth of leech
Discharge:		
Tanu	-	Thin
Vistra	-	having foul smell
Purisha (Stool)-		
Ushna		
Drava	-	liquid
Neela	-	Bluish
Rakta	-	Reddish
Aama	-	Having symptoms of saama mala
Generalized signs &	& symp	toms –
Daaha	-	Burning
Paaka	-	Inflammatory changes

Jwara	-	Fever
Sweda	-	Sweating
Trushna	-	Thirst
Murchha	-	Unconsciousness
Aruchi	-	Tastelessness
Moha	-	Fainting

# KAPHJA ARSHA:

If the following dietary factors and lifestyle is followed in Sheeta Desha (e.g. winer) Kaphaja Arsha occurs-

#### ETIOLOGY -

# SIGNS & SYMPTOMS-

# a) Gudankura- Pile mass-

Maha Moola	-	Pedicle of pile mass is big
Utshoona	-	Pedicle of pile mass is deep seated
Ghana	-	Bulky
Mandarjuna	-	Mild pain
Upachita	-	Bulky
Sita	-	Whitish
Snigdha	-	Unctuous
Stabdha	-	Numb Stiff
Vrutta	-	Spherical
Guru	-	Heavy
Sthira	-	Stable

Picchila	-	Slimy
Shalakshna	-	Smooth
Na Bhidyante	-	No laceration
Na Stravanti	-	No discharge
Kandwadhya	-	Excess itching sensation
Sparshanapriya	-	Patient feels relief when he touches the piles

#### b) Similar to-

The shape of pile mass is similar to Go-stana (Breast of Cow), Karira – Asthi (Seeds of Capparis decidua), Panasa – asthi (Seeds of Artocarpus integra) etc.

c)	Vedana	-	Pains over
	Vankshanaa	-	Inguinal region
	Payu-vikrtan	-	Cutting pain over anal region
	Basti- vikrtan	-	Cutting over hypogastric region

# d) Generalized signs & symptoms:

Kaas	-	Cough
Shwaas	-	Dyspnoea
Hrullas	-	Nausea
Praseka	-	Excessive salivation
Aruchi	-	Tastelessness
Peenasa	-	Cold

# e) Panduta (Whitishness), Snigdhata -

Twak	-	Skin
Nakha	-	Nails
Netra	-	Eyes

# f) Purish (Stool)-

Vasaabha	-	containing fatty contents
Sakapha	-	Sticky
Pravahika	-	Patient passes sticky stool with straining

#### g) Associated diseases –

Patient may have these diseases viz. Meha, Mutrakruchra, Shiriojadya, Klaibya, Agni mandaya, Chhardi, Aamaj vikara etc.

# **RAKTAJA ARASHA:**

# EITOLOGY – The etiology is similar to pittaja Arsha.

#### SIGNS AND SYMPTOMS -

a)	Gudankura	-	(Pile mass)
	Pittakritisamanwita	-	similar to Pittaja Arsha
b)	Purisha	-	(Stool)
	Gadhvit	-	Hard Stool
	Rakta Pravruti	-	Stool with P-R. Bleeding
	Ati-Raktapravriutti	-	Excessive P-R. Bleeding

#### c) Generalized signs and symptoms

Heena bala	-	Weakness
Heena Verna	-	Paleness
Bhekaabha	-	Colour of skin is like that of frog (Whitish)
Hatauja	-	Reduced vitality of body tissues
Kalushendriya	-	Weakness of various organs

#### d) Associated diseases-

Patient may have diseases which are related to shonitakshaya.

# **DWANDWAJA ARSHA:**

When the signs and symptoms described above get combined in case of two dosha it is calloed as 'Dwandwaja'

# SANNIPATIKA ARSHA (TRIDOSHAJA):

When signs and symptoms of all tridoshajas are expressed together it is called as 'Sannipatika Arsha'.

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ग. सु.सं.नि.२/१०,११,१२,१३

# **UPADRAVA**

These are the consequences of arsha i.e. when arsha is expressed in body with its signs and symptoms these additional symptoms occur later.

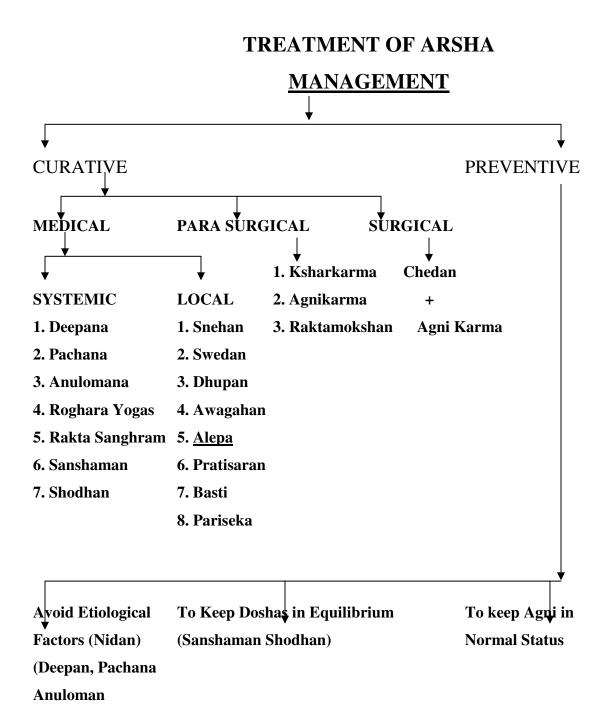
- a) Aadhmanam Feeling of distention of abdomen.
- b) Hrullas Nausea
- c) Bastau-kartanam Feeling of cutting pain over hypogastric region
- d) Ganda- shwayathu Swelling or puffiness of face
- e) Chhardi Vomiting
- f) Aaruchi Tastelessness
- g) Jwara Fever
- h) Various diseases

These also can occur as consequences of arsha viz. Hridroga, Grahani, Mutrasanga, Pravaahika,

Badhirya, Timira, Shwaas, Trushna, Raktapitta, Gulma, Udara, Vaata- roga, Udaavertaq etc.

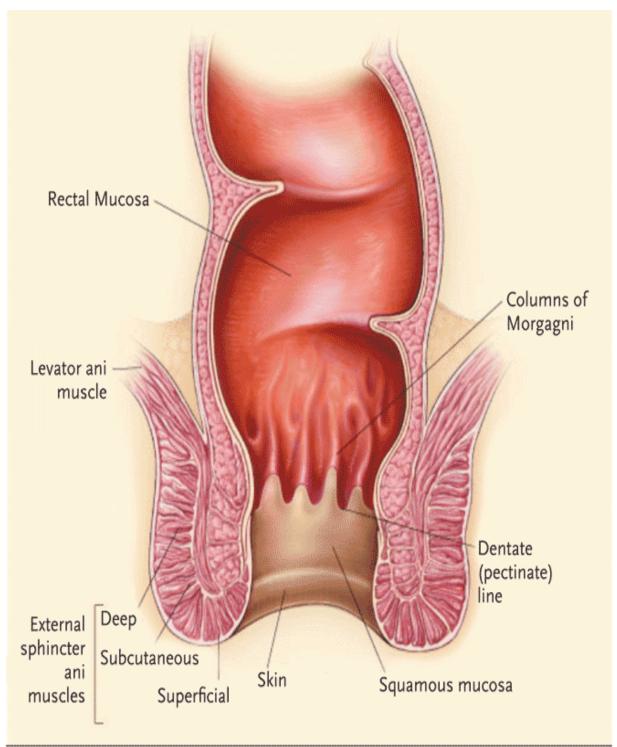
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# III(B). REVIEW OF MODERN LITERATURE

## ANATOMY OF ANO RECTAL REGION



## PERINEUM

The region at the lower end of the trunk, in the interval between the two thighs, where the external genitalia are located, is called the Perineum. A transverse line joining the anterior parts of the Ischial tuberosities and passing into two triangular areas, a posterior and anal region and an anterior urogential region.

The anal region contains the termination of the anal canal in the median plane an Ischio rectal fossa on each side.

## ANAL CANAL

Anal canal is the terminal portion of large intestine, situated below the level of diaphragm. It has voluntary and involuntary sphincters at the outlet of rectum.

The three cardinal features of large intestine i.e. Appendices Epiploicae, Taeniae coli and Sacculations are absent in anal canal. Embryologically, it develops partly from ectoderm and partly from endoderm. Anal canal is situated in the perineum in between two ischio- rectal fossae which allows its free expansion during passage of faeces.

## LENGTH AND DIRECTION

Anal canal is 3 - 8 cm long. It extends from ano-rectal junction to the anus directed downwards and backwards.

The anus is the surface opening of the anal canal situated about 4 cm. below and in front of tip of coccyx in the cleft between the two buttocks. The surrounding skin is pigmented and thrown into radiating folds.

#### **LUMEN**

The sphincter keeps the lumen closed in the form of an antero posterior longitudinal slit. It expands only during the defecation.

#### **RELATIONS:**

#### A Anteriorly-

- 1. In both Sex Perineal body
- 2. In Male Membranous urethra and bulb of penis
- 3. In Female Lower end of vagina

#### **B.** Posteriorly

- Ano coccygeal ligament
- Tip of coccyx
- C. Laterally Ischio Rectal fossae
- D. All around –

Anal Canal is surrounded by the sphincter muscle, the tone of which keeps the anal canal close.

## **INTERIOR OF ANAL CANAL**

It can be divided into three parts

## A. Upper Part (Mucous)

- 1. It is about 15 mm long and is limited below by the pectinate Line.
- 2. It is lined by columnar epithelium of endodermal origin.
- 3. The mucous membrane is pale pink and semitransparent. So the branching pattern of the rectal vessels has been visible through it. It shows
  - a. 6 8 anal columns, the vertical mucosal folds containing terminal radicals of the superior rectal artery and vein.
  - b. Anal valve The small crescent folds of mucous membrane.
  - c. Anal sinus (crypts) the small pocket above the anal valves.
  - d. Pectinate line the circular line of the attachment of the anal valves. Significance of this line lies in the fact that internal piles are situated above this line, as the rectal mucosa above this line is insensitive and that's why internal piles are painless and external piles are situated below this line.

## **B.** Middle part (transitional zone or pecten)

- 1. It is also called transitional zone. It is about 15 mm long lies between the pectinate line below and upper part above.
- 2. It marks the upper limit of stratified squamous epithelium which is thin pale and glossy and devoid of several glands.
- 3. The mucosa has a bluish appearance because of a dense venous plexus that lies between it and the muscle coat.

## C. Lower part

It is also called "cutaneous part". It is about 8 mm long and lined by true skin containing the sweat and sebaceous gland.

## MUSCULATURE OF ANAL CANAL

## A ANAL SPHINCTER

## 1. External Anal Sphincter

It is under voluntary control. It is supplied by inferior rectal and perennial branch of 4<sup>th</sup> sacral nerve. It surrounds whole length of anal canal. It has three parts

## a) Subcutaneous part :

It is in the form of a flat band and lies below the level of internal sphincter.

## b) Superficial part

It is elliptical in shape. The fibers surround the lower part of internal sphincter and inserted into the perineal body.

## c) Deep part

It surrounds the upper part of internal sphincter and is fused with puborectalis

## 2. Internal Sphincter

It is involuntary. It is formed by 8 mm thickened circular muscular coat of this part of gut. It surrounds the upper  $\frac{3}{4}$  (30 mm) of anal canal.

## **B.** CONJOINT LONGITUDINAL COAT

It is formed by the fusion of puborectalis with the longitudinal muscle coat of rectum at ano - rectal junction. It is fibro elastic.

## C. ANO – RECTAL RING

It is muscular ring at the ano – rectal junction formed by fusion of puborectalis deep external and internal sphincters. It is easily felt by finger in per rectal examination.

## D. SURGICAL SPACES RELATED TO ANAL CANAL

## 1. Ischio Rectal Space

It is in each lateral side of anal canal

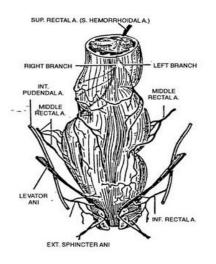
## 2. Peri Anal Space

It surrounds the anal canal below the white line. It contains the external rectal venous plexus and terminal branches of inferior rectal vessels and nerves.

## 3. Submucous Space

It is the space of anal canal which lies above the white line between the mucous membrane and the internal sphincters. It contains the internal rectal venous plexus and lymphatics.

## **ARTERIAL SUPPLY**



- 1. Above the pectinate line, the anal canal is supplied by the superior rectal artery.
- 2. Below the pectinate line, the anal canal is supplied by inferior rectal artery

## VENOUS DRAINAGE

## 1. Internal Rectal Venous plexus (Haemorrhoidal plexus)

It lies in the submucosa of the anal canal. It drains mainly into superior rectal vein. Veins are present in the three anal columns situated at 3,7,11 O'clock position (as such in lithotomy position) are large and constitute the potential sites for the formation of primary internal hemorrhoids.

## 2. External rectal venous plexus

It lies outside the muscular coat of the rectum and anal canal. Its lower part is drained by the inferior rectal vein into the internal pudendal vein and the upper part is drained into the inferior mesentric veins.

3. Anal veins are arranged radically around the anal margin and excessive straining during defecation may cause varicosity and rupture of these veins, forming external hemorrhoids.

## LYMPHATIC DRAINAGE

- Above the pectinate line, the lymphatic's drain into the internal iliac nodes
- Below the pectinate line the lymphatics drain into the medial group of the superficial inguinal nodes.

## **NERVE SUPPLY**

- Above the pectinate line, the anal canal is supplied by the autonomic sympathetic L<sub>1</sub> L<sub>2</sub> and parasympathetic S<sub>2</sub> S<sub>3</sub> S<sub>4</sub>
- Below the pectinate line, it is supplied by somatic nerves S<sub>2</sub>S<sub>3</sub>S<sub>4</sub>
- Internal sphincter is contracted and relaxed by sympathetic nerves
- Anal External sphincter is supplied by inferior rectal and perineal branches of fourth sacral nerve.

## PHYSIOLOGY

#### **ABSORPTION OF DIGESTED FOOD & FAECES FORMATION**

The chyme remains in the large intestine for 3 to 10 hours. It has become solid or semisolid as a result of absorption principally of water and is known as faeces. Chemically, faeces consist of water, inorganic salts, sloughed off epetheial cells from the mucosa of the gastrointestinal tract, bacteria products of bacterial decomposition and undigested parts of food.

Although most water absorption occurs in the small intestine, the large intestine absorbs enough to make it an important part in maintaining the body's water balance. The large intestine also absorbs electrolytes including sodium and chloride and some vitamins.

#### **PHYSIOLOGY OF DEFECATION**

Mass peristaltic movements push fecal material from the sigmoid colon into the rectum. In response to distension of the rectal wall, the receptors send nerve impulses to the sacral spinal cord. Motor impulse from the cord travel along parasympathetic nerves back to the descending colon, sigmoid colon, rectum and anus. Contraction of the longitudinal rectal muscles shortens the rectum, thereby increasing the pressure inside it.

The pressure along with voluntary contraction of the diaphragm and abdominal muscles and parasympathetic stimulation open the internal sphincter and the faeces are expelled through the anus.

# **HEAMORRHOIDS**

## ORIGIN

By common consent the terms 'Heamorrhoids' and 'Piles' are used quite interchangeably, but etymologically. The words have entirely different meaning. The term heamorrhoid is derived from the greek adjective *haimorrhoides*, meaning bleeding (haima=blood, rhoos = flowing) and emphasizes, the most prominent symptom in the majority of cases.

The term pile on the other hand, derived form the latin word *pila*, a ball can be aptly used for all forms of heamorrhoids, a piles, for literally every such conditions does produce a swelling of some kind, even though it may or may not show externally. Heamorrhoids are a disease which is a consequence of human beings erect posture and continuous standing work.

## **DEFINITIONS**

- 1. Heamorrhoids are the varicosed veins of the anus, occurring in relation to the pectinate line either above it or below it.
- 2. A varicosity of the Heamorrhoidal plexus of vein situated in the loose sub mucus coat of anal and lower part of sections is known as piles.
- 3. These are dilated veins between the anal canal in the sub epithelial region formed by radicals of superior middle and inferior rectal veins.

## **ETIOLOGY**

#### There is no definite cause except some predisposing factors

- Hereditary Piles are often seen in some families
- Congenital weakness of wall of anal veins
- Abnormally increased blood supply in rectal plexus may explain to some extent familial tendency.
- The radicals of superior rectal vein are unsupported in loose sub mucous connective tissue of rectum anatomically.
- Erect posture of human beings
- Absence of venous valve in superior heamorrhoidal veins
- Obstruction to venous return (portal hypertension)
- Straining in constipation, a harder stool during defecation

## SECONDARY CAUSES

- 1. Carcinoma of rectum
- 2. pregnancy
- 3. Chronic Constipation
- 4. Severe straining while micturition

5. abdominal growth like pelvic tumors

## PATHOLOGY OF HEMORRHOIDS

Heamorrhoids are caused by anything which promotes varicosity in rectal area. Due to the number of causative factors the veins usually become plugged by a thrombus and it cause more or less acute inflammation which causes much pain and discomfort. The heamorrhoid then undergoes organization and fibrosis. The fibrous tags are produced mostly in perianal region. Histological hemorrhoid cosists of thin walled dilated veins

## **CLASSIFICATION OF HEMORRHOIDS.**

#### 1. According to Bleeding

OPEN – It is bleeding piles.

BLIND – It is non bleeding piles.

## 2. According to Anatomical Position

Internal

External

Interno-External.

#### 3. According to Symptoms

- 1°. The pile mass remains in the canal and bleeds on straining which isfresh, bright red blood comes from fixed position (Splash in pot) and is pain less
- 2°. Here mass comes out during defecation but soon reduces after defecation Bleeding is not marked
- 3°. Here pile prolapses during defecation but digital reposition possible.Bleeding is not marked here
- 4°. Piles are permanently prolapsed. Usually infection supervenes & there may be thrombosis of vein.

## 4. According to Cause

- 1. Primary
- 2. Secondary

## 5. According to Site

## Primary

#### Secondary

- 1. Left Lateral 1. Anterior
- 2. Right Anterior 2. Left Anterior
- 3. Right Posterior 3. Left Posterior

#### PRIMARY

Sites are expresses in relation to the dial of watch when the piles occur at 3, 11 & 7 O' Clock position is called primary piles. They are also classified as left & right anterior & Right posterior respectively.

#### SECONDARY

When the piles occur at other than 3, 7, 11 o'clock position, they are called secondary piles

## **EXTERNAL HAEMORRHOIDS**

- External Haemorrhoids arise at or just beyond the anal orifice and are covered by skin unlike internal haemorrhoids which are covered by mucous membrane.
- Two varieties of external haemorrhoids are recognized acute and chronic

#### 1. Acute external hemorrhoids / Acute Thrombosed external piles or Anal Heamatomas

This condition is in reality an acute Heamatoma that results from rupture of a dilated anal vein, commonly during passage of a constipated stool.

A dark blue tense swelling in seen at the anal margin which, if not evacuated, shrinks gradually until only a fibrous external tag remains. There is a history of a sudden pain with the appearance of a lump at the anus.

#### 2. Chronic external haemorrhoids/chronic anal skin tags.

They are actually anal skin tag, which result from organization of an acute heamatoma or from prolong irritation of anal pruritus.

In any individual case they may be single or multiple and may vary from a slight excressence of the skin to grossly projecting skin tag. Idiopathic skin tags are secondary skin tag in relation to fissure in ano and pruritus ani and are the two types included in this category.

Idiopathic tags may possibly represent a legacy of resolved heamatomas. Usually idiopathic tags are soft and pliable and are covered by normal skin. A secondary skin tag found in relation to the fissure in ano is normally stiff with oedema when fissure is open, but after healing has taken place it becomes more flaccid like any ordinary skin tag.

Some tags are associated with pruritus ani, they are to be regarded as simply oedematous infected skin rugae and the anal and perianal skin in these cases shows the typical changes of pruritus ani.

#### 3. Hypertrophied Anal Papillae

These may be conveniently considered here. Anal papillae are the fine points of projection of the extreme upper end of the anal canal skin at the mucocutaneous junction seen in 50-60% of the cases examined usually they are small and just sufficiently prominent to give pectinate line its characteristics serrated appearance on proctoscopy. They cause no symptoms and are to be regarded as normal structure.

In certain patients, however one or more of papillae become hypertrophied and elongated possibly to a length of 1 cm or more. Such a papilla is liable to undergo considerable fibrous thickening and to acquire a rounded expanded tip at third stage it is usually termed a fibrous polyp.

## 4. Associated with internal Haemorrhoids –

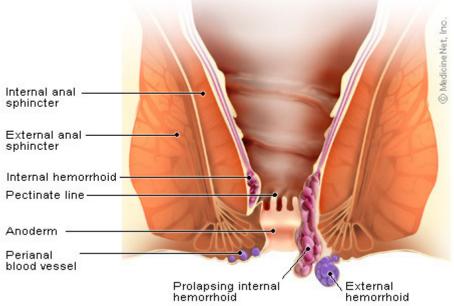
Intero external Heamorrhoids lies between dentate line and anal margins. It is covered by skin through which blue veins can be seen unless fibroses has occurred and is present only in well established cases.

a. Dilatation of veins of anal verge becomes evident only if patient strains when a bluish cushion like ring appears. This variety of external heamorrhoids is almost a perquisite of those who lead a sedentary life.

The only treatment required is an adjustment in habit of patient.

## **INTERNAL PILES**

Internal piles arise in the upper two thirds of the anal canal which is lined by columnar epithelium



# Formation of hemorrhoids

## Each Principle Hemorrhoid can be divided into three parts

## 1. Pedicel:

It is situated in rectum just above anorectal ring. As seen through the proctoscope, it is covered with pale pink mucosa through which large tributaries of superior rectal vein can be seen.

2. Body :

After the Pedicle, the body of internal Hemorrhoid continues distally & ends at dentate line. It is covered by bright red or purple mucous membrane.

## 3. Associated External Hemorrhoid :

Present in long continued cases of internal hemorrhoids

## **INTERNO- EXTERNAL PILES**

Interno External piles means the piles which start internally from above the anorectal ring as internal piles then grows downwards to involve anal Skin.

## **COMPLICATIONS**

There are two main complications of haemorrhoid excessive bleeding and thrombosis.

## 1. BLEEDING

This is the main symptoms of haemorrhoid particularly in the 1 ° and early stage of second degree piles. In fourth degree bleeding is not present bleeding always occur externally only when the piles is retracted, it bleeds internally into rectum.

## 2. THROMBOSIS

In external piles thombosis is common. The patient notices an acute swelling at anal verge which is extremely painful. This possible occurs due to high venous pressure during excessive straining efforts. Internal pile thrombosis is comparatively rare the affected haemorrhoids becomes dark purple or black and feel solid. It is very painful conditions.

## 3. STRANGULATION

One or more the internal haemorrhoids prolapse and gripped by the internal sphincter when the venous return is impaired, piles becomes congested. In this way strangulation of haemorrhoid is very painful.

## 4. GANGRENE

When the strangulation is very tight and the arterial supply of haemorrhoid is hampered, gangrene occurs. Gangrene is usually superficial and localized very occasionally massive gangrene extends to the mucous membrane within anal canal and rectum.

## 5. FIBROSIS

After thrombosis internal heamorrhoids, some times become fibrosed. The fibrosed piles firstly are sessile, gradually on straining becomes peduncaled like adenoma and appear greyish white.

## 6. SUPPURATION.

## 7. PYLEPHLEBITIS

## **TREATMENT OF HAEMORRHOIDS**

## **EXTERNAL PILES**

## **\*** TREATMENT OF THROMBOSED EXTERNAL PILES

This may be expectant or by operation. Expectant treatment is based on the experience that the majority of anal haematomas soon become painless and are usually absorbed without incident. Frequent hot baths will be found very soothing, motions be kept soft by mild aperients.

**Operative** treatment consists of evacuation of the clot either under a short general anesthetic or with the aid of local anesthesia. A short incision is radically placed over clot which then be squeezed out between finger and thumb.

#### ANAL SKIN TAGS

Idiopathic anal skin tags require no treatment as a rule exceptionally they may be so large as to become something of a nuisance to the patient in cleansing the anal region after defecation and so patient may ask for removal. This is a simple operation which can if necessary be performed under local anesthesia, care being taken to leave a flat pear shaped or triangular open wound which cannot fail to heal satisfactorily by granulation. The treatment of secondary skin tags is bound up with the treatment of the causal fissure or pruritus.

## Modern treatment of piles can be divided into 3 parts

- 1. Palliative
- 2. Para Surgical
- 3. Surgical

## **1. PALLIATIVE TREATMENT.**

The conservative treatment includes use of dietary modification, proper anal hygiene correction of constipation or diarrhea and application of local fomentation by sitz bath. Dietary manipulation to prevent constipation and straining is widely recommended because increased venous pressure in haemorrhoids is related to straining during defection

Use of high fiber diet including fruits and vegetables and whole cereals leads to soft stool and improved bowel status. Laxatives and stool softeners may be added to relieve constipation.

## 2. PARA SURGICAL / NON SURGICAL

## a. Sclerosing injection

## Complications

1. If it is injected IV in the Heamorrhoidal vein, can cause serious complication including anaphylactic shock.

- 2. If not given in proper plain and in large volume causes thrombosis, burning abscess and bacteremia
- 3. If injected anteriorly into prostate can cause prostatitis which can be crippling.

## b. Cryosurgery

The main disadvantage is profuse watery discharge which starts within 3 hours of procedure and lasts for 3 - 4 hrs.

## c. Rubber Band Ligation

- d. Maximal Anal Dilatation (Lords Procedure)
- e. Infra red Photocoagulation
- f. Electro Coagulation
- g. Lasers

## 3. OPERATIVE TREATMENT

## There are three types of Hemorrhoidectomy

- 1. Dissection and Ligature Operation
- 2. Submucosal Hemorrhoidectomy
- 3. Clamp and cautery Operation

# III(C). LITERATURE REVIEW OF DRUGS

## १. गोमुत्र

- 77,

गोमुत्र कदु तिक्तोष्ण सक्षारत्वान्न वातलम्। लघ्वाग्निदीपन मेध्य पिततल कफवातजित्। शूलगुल्मोदरानाह विरेकास्थपनादिषु। मुत्र प्रयोग साध्येषु गव्ये मुत्रं प्रयोजयेत्।।

सु.सू.४५

रस — कटु तिक्त कषाय वीर्य — उष्ण विपाक— कटु

- तीक्ष्ण, उष्ण, क्षार, लघु अग्निदीपक कफवातशामक शूल, गुल्म, उदररोग, कण्डु कुष्ठ शोथ नाशक प्लीहा रोग, मलावरोध, अनाह तथा पाण्डु रोग नाशक.
- It contains various vitamins (A,B,C,D & E) enzyme and various minerals like Iron, Copper, Sodium, Phosphate, Manganese, Nitrogen and urea. Along with minerals it also contains hipuric acid and AuOH which act as germicidal.

Book Aryabhishak states that is reduces inflammation.

## २. गोपित्त

पर्याय — गोरोचन मांग्डल्या गौरी गोपित्त शीतला विषदोषघ्नी रुच्चा पाचनी कृमी कुष्ठघ्नी। भूतग्रह शान्तीकरी शृंगार मंग्डलकरी जनमोहिनी च ।।

रा.नि

गोरोचना हिमा तिक्ता वश्योमंगल कांतिदा। विषलक्ष्यी ग्रहोन्माद गार्भस्त्रावक्षतास्त्रऱ्हत।। रस तिक्त

गुण लघु रुक्ष

वीर्य उष्ण

विपाक कटु

वातकफ शामक दीपन अनुलोमन लेखन

शोथघ्न

आमयिक प्रयोग

बाहय :	शिवत्र निलिका न्यच्छ वैवर्ण्य शुष्कार्शात
	लेपनार्थ
आभ्यंतर	उन्माद अपस्मार आक्षेप पिताश्मरी
	शोथ विषविकार यकृतविकार

बालरोगात उपयुक्त

## ३. कुक्कुट पुरीष

गुणधर्म :	उष्ण तीक्ष्ण असल्यामुळे कफवातशामक असुन		
	बाहयतः शोथ शूले प्रयोग		
रस	कटु		
वीर्य	उष्ण		
विपाक	कटु		
РН	Alkaline		
कुक्कुट पुरीष में	पानी राख नत्र स्फुरद पालाश केलशियम Magnesium, Sulphur,		

Magnenses, Iron, Boron, Copper, Zinc, Melebedinum घटक कम अधिक प्रमाण में मिलते है।

## 4. GUNJA

Gunja consists of dried root of Abrus precartorius Linn. (Fam. Fabaceae); a climber, all along Himalayas ascending to 900m, spreading throughout the plains; flowering in August – September, fruits ripen during winter.

## **SYNONYMS**

Sansk.: Raktika Kakananti, Assam: Rati, Beng.: Kunch, Shonkainh, Eng.: Jequirity

Guj.: Rati, Chanothee, Chonotee, Hindi.: Ratti, Ghungchi, Kan.: Guluganji, Guylagunja, Mal. : Kunni, Cuvanna Kunni, Mar. : Gunja, Ori. : Kainch,

Punj. :Ratti, Tam. :Kunrimani, Kundumani, Tel.:Guriginga, Gurivinda,

Urdu. : Ghongchi, Ratti

## DESCRIPTION

## A. MACROSCOPIC

#### Seed

Globose hard measuring 6 -8 \* 4 – 6 mm short along hilum surrounded by a ring like structure, seed surface smooth and shining having 4<sup>th</sup> portion black towards the hilum and rest <sup>3</sup>/<sub>4</sub> th portion seed with endosperm and two cotyledons attached by an embryo having plumule and radicle near hilum

## **B. MICROSCOPIC**

#### Seed

Transverse section of the seed shows single layered epidermis consisting of macrosclercids having radically thickened walls and narrow lumens, subepidermal layers of thick pitted and wavy walled compact cells several layers of thin walled parenchyama cells of various sizes and shapes last two zones are filled with black or red pigments in the black and red regions of seed respectively.

## POWDER

Greyish-brown; shows fragments of cork, stone cells, groups of sclerenchymatous cells, numerous xylem fibres, xylem vessels with pitted walls, rounded to oval simple starch grains measuring  $5.5 - 13.75 \mu$  in diameter.

## **IDENTITY, PURITY AND STRENGTH**

Foreign matter	-	Not more than 2 %
Total ash	-	Not more than 9 %
Acid-insoluble ash	-	Not more than 2.5 %
Alcohol-soluble extractive	-	Not more than 4 %
Water-soluble extrative	-	Not more than 2 %

## CONSTITUENTS

Seeds contain poisonous proteins a fat splitting enzyme, a glucosid abrussic acid, haemagluttinase a quantity of urease and an albuminous substance named abrin. The active principle which is of the nature of a toxa albumin

- 1. Like all albuminous seeds, it loses its activity when boiled.
- 2. Shell of seeds contains a red coluring matter
- 3. Abrin contains two fractions a globulin and an albumose the former being more powerful.

#### **Cell contents**

Needle like crystals calcium oxalate are present in the cells of the cotyledons.

Pigment. Coloring pigment like dark violet and red are present in black and red regions of the seed coat respectively.

## **DIAGNOSTIC CHARACTERS**

#### Seeds

Characteristics combination of black and red colors on the seed coat, macrosclerids forming the epidermal layer of seed coat consisting of radically elongated quadrangular cells with heavily thickened walls and narrow lumen, long regular wavy thin walled and pitted cells under the macrosclerid.

## CHEMISTRY

- Seeds contain a brine hypahorine choline trigonelline precatorine and methyl ester of N2-Ndimethyl trapffphan methocation
- Alcoholic extract of seeds showed presence of carbohydrates and amino acids whereas ammonium oxalate extract showed presence of sugars. Two anti tumor proteins abrin –A, Abrin –B were isolated from seeds

Two steroids abricin and abridin 67°C temperature were isolated from seeds.

#### Parts used: Roots, Seeds & Leaves

## Action : Seeds are purgative emetic tonic antiphlogistic aphrodisiac.

## PHARMACOLOGY

Alcoholic extract of seeds showed parasympathomimmetic effect on smooth muscular and skeletal muscle of guinea pig and rabbit and skeletal muscle of frog. (Anti Microbial activity of this plant has also been reported by Basu)

#### **PROPERTIES AND ACTION**

Rasa	:	Madhura, Tikta
Guna	:	Ruksa, Sita
Virya	:	Sita
Vipaka	:	Madhura
Karma	:	Vatahara, Pittahara, Kesya
Important Formulation	:	Nili Bhrngadi Taila
Therapeutic Uses	:	Indralupta, Mukhasosa Sula
Dose	:	1 - 3 g of the drug in powder form.
Pharmacognosy of ID – vol	. III	2005 edition Page No. 1181

श्वेता गुञ्जोच्चटा प्रोक्ता कृष्णला चापि स्मृता। रक्ता सा काकचित्रृची स्यात्काकणन्तीच रक्तीका।। काकदनी काकपीलुः सा स्मृता काकवल्लरी। गुंत्रजाद्वयन्तु केश्यं स्याद्वातपितज्वरापहम्।। मुखशोष भ्रमश्वास तृष्णामद विनाशनम्। नेत्रामय हरं वृष्यं बल्यं कण्डू व्रण हरेत्।। कृमीनद्रलुप्त कृष्णनि रक्ताचं धवलापि च।।

#### भा.प्र

श्वेत और लाल दो प्रकार की गुञ्जा है। दोनों में से श्वेत गुज्जा औषधी में वापरते है। गुणधर्म

बीज	रस	_	तिक्त कषाय
	वीर्य	_	उष्ण
	विपाक—	कटु	
	गुण	—	लघु रुक्ष तीक्ष्ण
	दोषघ्नता	_	कफवात शामक (बीज)

कुष्ठन वेदनास्थापक व केश्य होने के कारण कुष्ठ जीर्णव्रण खालित्य इंन्द्रलुप्त इन विकारों में बीज लेप का प्रयोग

## 5. HARIDRA (Curcuma longa)

#### **SYNONYMS**

Sans :Rajni, Gauri, Varnavat, Haridra, Nisha Eng :Saffron, Turmeric,
Hindi :Haldi, Marathi:Halad, Guj :Halder, Ben :Halud, Mal :Manjal,
Tel :Pasupa haridra,

#### HABITAT

Extensive cultivated all over India. In Bombay presidency there are two varieties (i) with hard rich colored oval rhizomes, chiefly used in dyeing, known as lokhandi halad and the other with softer layer, light coloured long rhizomes which are useful for eating.

#### **PROPERTIES AND USES**

Haridra is being used in India since time immemorial in religious festivals and as a medicine. It is considered as aromatic, stimulant, cooling and is used in Ayurvedic siddha and Unani system of medicine. The drug is considered as carminative in cases of diarrhea and intermittent fever, in disorders of blood. A decoction of rhizome is applied to relieve catarrh, scabies and certain skin disease. The drug is applied externally in pains and bruises and to indolent ulcers and a paste made from powdered rhizome along lime is beneficial for inflamed joints

#### CHEMISTRY

The important coloring matter of curuma longa is curcumin. It also contains aromatic oil, turmeric oil. Analysis of Indian turmeric gave the following values

Moisture	13.1
Protein	6.3
Fat	5.1
Mineral matter	3.5
Fiber	2.6
Carbohydrates	69.4%

The essential oil contains d-phellanderene, d-sabinere, 0.6cincol, 1 borneal, 0.5 zingiberene

#### CONSTITUENTS

An essential oil IPC resin an alkaloid curcumin. The yellow coloring matter, Turmeric oil or Turmerol. Turmeric oil is thick yellow viscid oil.

# ACTION Aromatic, stimulant, tonic and carminative internally juice is antihelmentic

#### PHARMACOLOGY

Curcuma long linn is reported to posses **Anti Inflammatory** activity and its dried rhizomes have been widely used in indigenous medicines.

Arora et al (1969,1971) reported the anti inflammatory activity of petroleum ether extract of rhizome. An active compound curcumin has been isolated from the yellow coloring matter and its pharmacology has been worked out by srimal and Dhawan.

Further studies revealed that the extracts of petroleum ether alcohol water showed significant anti inflammatory activity in both exudative and proliferative inflammation. All the three extracts showed the presence of steroids and it is likely the steroids are responsible for **anti inflammatory** activity. Presence of curcumin may also be contributing to their anti inflammatory of activity.

Lutomski et al (1974) reported that alcohol extract from curcuma longa showed **bactericidal** activity whereas curcumin rated as a **bacteriostatic** agent with respect to staphylococci.

#### **ACTION & USES IN AYURVEDA AND SIDDHA**

Ras	Katu tikta
Veerya	Ushna
Guna	Ruksha Varnya
Therapeutic uses	Prameha, Pandu, Rakta Dosham, krimi, Varnam, Pinasam
Preparations	Powder, Paste, ointment, oil, lotion, inhalant & confection.

#### TESTS

Good Turmeric should be of a reddish orange appearance when broken or cut in two and should also have a moist feeling.

#### हरिद्रा

हरिद्रा कात्रचनी पीता निशाख्या वरवर्णिनी। कृमिघ्नी हळदी शोषितप्रिया हटटविलासनी।। हरिद्रा कटुका तिक्ता रुक्षोष्णा कफपित्तनुत्। वर्ण्या त्वग्दोषमेहास शोथ पाण्डु व्रणापहा।।

भा.नि

पर्याय : कांचनी पीता वरवर्णिनी योषित प्रिया

## हटटविलासनी वर्ण्या रजनी निशा गौरी

गण : (सु) हरिद्रादी मुस्तादी श्लेष्म संशमन

(च) कुष्ठघ्न लेखनीय कण्डुघ्न विषघ्न

गुणधर्म

गुण लघुरुक्ष रस तिक्त कटु वीर्य उष्ण विपाक कट्

हरिद्रा यह तिक्त कटु रसात्मक व रुक्ष होने के कारण क्लेद का शोषण करनेवाली, वण्रशोध, व्रणरोपण करने वाली है। हरिद्रा यह कमिघ्न कार्य करनेवाली है।

रक्तशोधक त्वग्दोषहर शोथहर वातकफघ्न कण्डु पामा दद्व पर अधिक उपयुक्त।

## 6. PIPPALI

Pippali consists of the dried, catkin-like fruits with bracts of Piper longum Linn. (Fa,. Piperaceae), a slender, aromatic climber with perennial woody roots, occurring in hotter parts of India from central Himalayas to Assam u to Lower hills of West Bengal and ever green forests of western ghats as wild, and also cultivated in North East and Many parts of the south.

#### SYNONYMS

Sansk : Kana, Magadhi, Magadha, Krsna, Saundi Assam : Pipali,

Beng. : Pipul, Eng. : Long pepper, Guj. : Lindi Pepper, Pipali,

Hindi : Pipar, Kan : Hippali, Mal : Pippali, Mar. : Pimpali, Lendi Pimpali,

Ori. : Pipali, Pippali, Punj.: Magh, Magh Pipali, Tam. : Arisi Tippali, Thippilli,

Tel. : Pippalu, Urdu.: Filfil Daraz

#### DESCRIPTION

#### a) Macroscopic

Fruits greenish-black to black cylindrical, 2.5 to 5cm long and 0.4 to 1cm thick, consisting of minute sessile fruits, arranged around an axis; surface rough and composite; broken surface shows a central axis and 6 to 12 fruitlets arranged around an axis; taste, pungent producing numbness on the tongue; odour, aromatic

#### b) Microscopic

Catkin shows 6 to 12 fruits, arranged in circle on a central axis, each having an outer epidermal layer of irregular cells filled with deep brown content and covered externally with a thick cuticle; mesocarp consists of larger cells, usually collapsed, irregular in shape and thin-walled; a number of stones cells in singles or in groups present; endocarp and seed coat fused to form a deep zone, outer layer of this zone composed of thin-walled cells and colorless, inner layer composed of tangentially elongated cells, having reddish-brown content; most of endocarp filled with starch grains, round to oval measuring 3 to 8  $\mu$  in diameter.

#### Powder

Deep moss green, shows fragments of parenchyma, oval to elongated stone cells, oil globules and round to oval, starch grains, measuring 3 to  $8 \mu$  in diameter

#### **IDENTITY, PURITY AND STRENGTH**

Foreign Matter	-	Not more than 2 percent
Total Ash	-	Not more than 7 percent
Acid-insoluble ash	-	Not more than 0.5 percent
Alcohol-soluble extractive	_	Not less than 5 percent
Water- soluble extractive	-	Not less than 7 percent

## T.L.C. (Thin Layer Chromatography)

T.L.C. of alcoholic extract of the drug on silica gel 'G' plate using Toluence : Ethyl acetate (90:10) as mobile phase. Under U.V. (366nm) six fluorescent zones are visible at Rf. 0.15, 0.26, 0.34, 0.39, 0.50 and 0.80. on Exposure to Iodine vapour seven spots appear at Rf. 0.04, 0.15, 0.26, 0.34, 0.39, 0.50 and 0.93 (all yellow). On spraying with Vanillin-Sulphuric acid reagent and heating the plate at 105° for ten minutes five spot appear at Rf. 0.04, 0.22, 0.35, 0.43 and 0.82.

#### **CONSTITUENTS-**

Essential Oil, alkaloids, resin volatile oil, starch, gum, fatty oil, inorganic matter piperine 1-2%.

#### **PROPERTIES AND ACTION -**

Carminative, also aphrodisiac, diuretic, vermifuge and emmenagogue. Externally rebefacient in action.

Rasa	:	Katu, Tikta, Madhura
Guna	:	Snigdha & Laghu
Virya	:	Anusna
Vipaka	:	Madhura
Karma	:	Vatahara, Kaphahara, Dipana, Ruchya, Rasayana Hrdya,

## Vrsya, Tridosahara, Recana

#### THERAPEUTIC USES

Svasa, Kasa, Pliha Roga, Gulma, Jvara, Prameha, Arsa, Ksaya, Udara Roga, Hikka, Trsna, Krmi, Kustha, Sula, AmaVata, Amadosa

Dose 1-3gm.

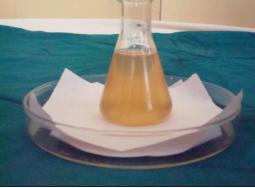
From the literature review of the drugs it can be said that the drug do have **anti inflammatory**, **analgesic, bactericidal and bacteriostatic effect** 

The drugs are also easily available in the market and are cost effective. Thus the selection of the preparation





gopitta



gomutra

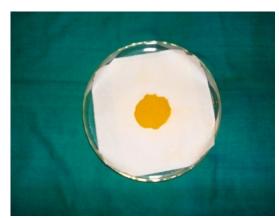


Teel-tailam





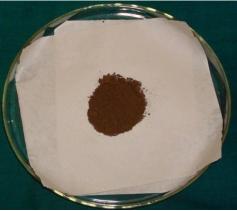
Honev bee wax ...ukkuta purisha



Haridra - churna



Gunja churna



Pippali – churna





Photograph showing preparation of the Kukkutpurishadi Malharam

## Monograms of the contents

#### 1. HARIDRA

## Image @ 254 nm after development

Image @ 366 nm after development

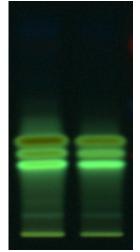
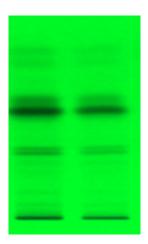


Image @ white R after Derivatization



## 2. PIPALI

Image @ 254 nm after development



## Image @ 366 nm after development

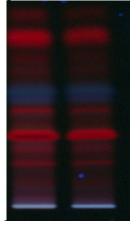


Image @ white R after Derivatization



## 3. Shwetgunja

Image @ 254 nm after development



## Image @ 366 nm after development

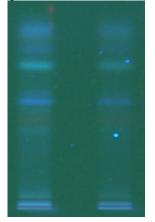


Image @ white R after Derivatization



#### 4. Gomutra

Image @ 254 nm after development

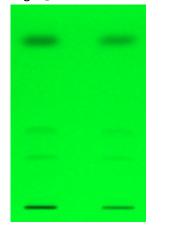


Image @ 366 nm after development

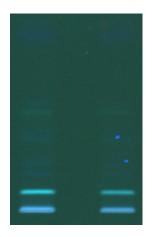
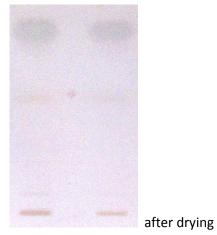


Image @ white R after Derivatization





before drying

## 5. Gopitta

Image @ 254 nm after development

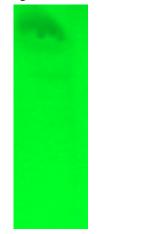


Image @ 366 nm after development



Image @ white R after Derivatization



# Waxoil

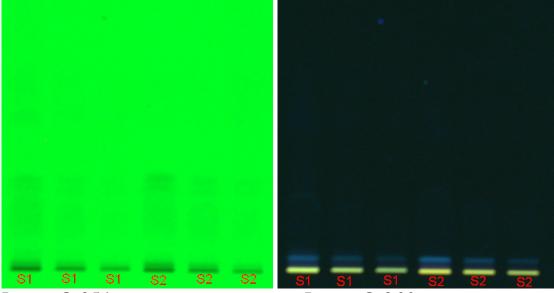


Image @ 254nm

Image @ 366nm

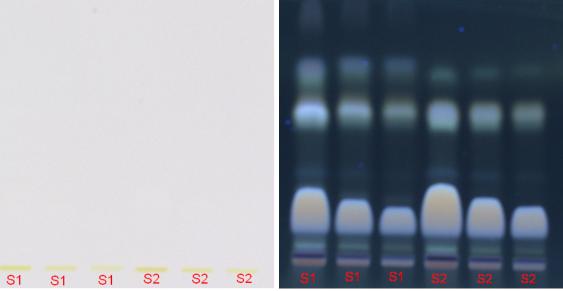


Image @ Visible R

Image @ 366nm after Derivatised

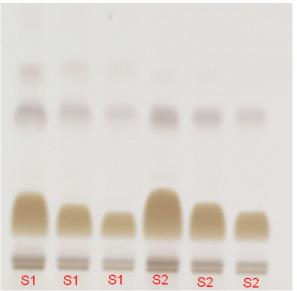
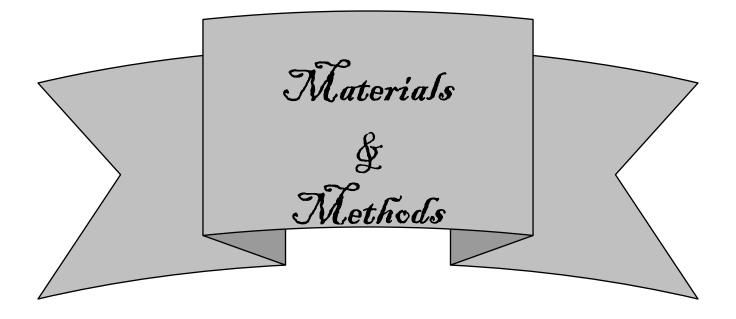


Image @ Visible R after Derivatised

S1 – Green Oil S2 – Black Oil



# **IV. MATERIALS AND METHODS**

A. MATERIALS

#### LITERATURE

All available Ayurvedic classics and modern available texts, magazines, journals & M.d. Dissertation and Research Papers

<b>No of Patients:</b> 30 in Each group		30 in Each group
Group A	:	30 patients with Kukkuta purishadi malhar
Group B	:	30 Patients with Kukkuta Purishadi Siddha Taila
Drugs	:	Kukkuta purishadi malhar and siddha Taila with help of the Ras shashtra and Bhaishya kalpana department of R.A.Podar medical college, as per the method of preparation of snehapak and malhar, mentioned in Sharanghadhar samhita kalpana

## **B.** METHODS

#### **TYPES OF STUDY**

It was a *Randomized experimental study* in which patients were divided randomly in two groups

- Group A : Kukkuta purishadi malhar
- Group B : Kukkuta Purishadi Siddha Taila

#### PLAN OF CLINICAL TRIAL

Ethical Clearance	:	Ethical clearance was taken from the ethical
		committee of GAC, Nanded.

Consent	:	A written informed consent of the patients was taken in
		the language best understood by them
Study Centre	:	M.A.Podar Hospital
	:	GAC, Nanded
Sample size	:	30 in each group
Group A	:	30 patients between Kukkuta purishadi Malahar
Group B	:	30 patients between Kukkuta Purishadi Siddha Taila
ROUTE OF DRUG		
Administration	:	Drugs were applied locally for 15 days
Follow up	:	Daily follow up was taken and findings were recorded on CRF

## Investigation

Following investigation were done

CBC -	HB	-	gm%				
	RBC	-	/cmm				
	TLC	-	/cmm				
	DLC	-	Ν	Е	В	L	М
ESR -	mm at the end of 1 hr.						
BSL -	F	-	mg%				
	PP	-	mg%				
Urine -	R	-					
	М	-					
Stool -	R	-					
	М	-					
B.T	min sec						
C.T	min sec						
HIV -	I & II - Reactive/Non-reactive						
HBsAg-	Positive/Negative						
LFT							
RFT							
VDRL -	Reactive/Non-reactive						

X-ray chest PA view -

Others -

## **INCLUSION CRITERIA:**

- 1. Patients having external piles or associated external piles or sentinel piles including hypertrophied papillae, with following symptoms:-
  - Gudashotha
  - Gudashoola
  - Gudakandu
  - Malavashtamba
- 2. Age group 18 -60 years
- 3. Irrespective of Sex/occupation/marital status
- 4. Primary piles
- 5. Hospitalized/ Ambulant patients
- 6. Patients ready to abide trial procedure and to give informed consent

# **EXCLUSION CRITERIA:**

- 1. Congenital piles
- 2. Secondary piles
- 3. Patients having blood dyscrasiasis
- 4. Severe anemic patients (HB  $\leq 07$ gm%)
- 5. Pregnancy
- 6. Bleeding P/R
- 7. Rectal polyp
- 8. DM/HTN/TB/Ascitic Patients

# **CRITERIA/PARAMETERS FOR ASSESSMENT OF PATIENTS RESULT**

Improvement in symptoms is directly proportional to improvement in patients' conditions. To assess the improvement in symptoms, gradations on the basis of severity have been stated here. The changes in the gradation of symptoms indicate the effect of drug under the clinical trial

These are main criteria for the clinical assessment in this trial which are based on symptomatic relief with their fall gradations or measurement.

	Severe	moderate	mild	absent
A) Guda Shotha 🔿	+++	++	+	0
B) Guda Shool	+++	++	+	0
C) Guda Kandu	≻ +++	++	+	0
D) Malavashtamba	+++	++	+	0

## ASSESSMENT OF EFFICACY OF THERAPY

The effect of therapy was assessed in the terms of cured, markedly improved, improved, unchanged

- 1. Cured: 100% relief, from all the signs and symptoms was considered as totally cured.
- 2. **Markedly Improved:** 50-100% relief from all the signs and symptoms was considered as markedly improved
- 3. Improved: 25 50% relief from all the signs and symptoms was considered as Improved
- 4. Unchanged: Less than 25% relief from signs and symptoms was considered as unchanged.

**Drop outs** : No drop out was seen during the study.

#### ANALYSIS

The patients clinical trial were evaluated clinically

All the above parameters and the findings were recorded by the above parameters and the finding were recorded in the case record form especially designed for this study.

Statistical analysis was done by using appropriate statistical techniques to prove the significance of result.

- A **For objective parameters** (Quantitative data) i.e. improvement in physical parameters and improvement in Haematological parameters parametric tests were applied.
  - 1. Mean = Sum of all observation/ Numbers of observation

$$\overline{\mathbf{x}} = \sum \mathbf{x}/\mathbf{n}$$

- 2. Standard derivation =  $\sqrt{variance}$ 
  - SD =  $\sqrt{(\sum x \overline{x})^2 / n 1}$ Where  $(\sum x - \overline{x})^2$  = Sum of square of deviation or difference of individual measurement from their mean (n -1) =degree of freedom Variance = mean square deviation
- 3. Standard error of mean

$$SE = SD/n$$

 For small samples (n = 30) n < 100 significance of difference between means of small samples by students t – test

#### a. Paired t – test

It is applied to paired data of independence observation from one sample only when each individual gives a par of observations

t = x / SE

Referring t table and find the probability (p) of the calculated t' corresponding to (n - 1) degree of freedom

If the probability (p) is more than 0.05, the difference observed has no significance because such a difference can occur commonly due to chance

Thus the factor under study may have no influence on the variable but if 'p' value is less than 0.05, the difference observed is significant, because such a difference is less likely to occur due to chance. Influence of the factor 2 which the sample is exposed may be accepted as an alternative to null hypothesis.

### **CHI SQUARE TEST**

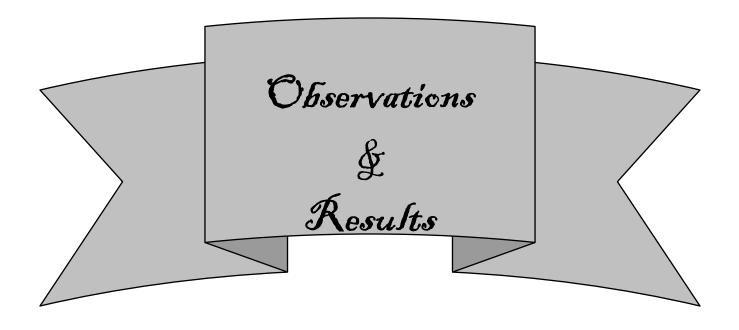
For subjective parameters (Quantitative data) i.e. improvement in symptoms parametric tests were applied.

But as the symptoms were given gradations and data(quantitative) was converted into Qualitative so chi square test was also applied which is a parametric test and has one of main application as test of proportion.

Referring  $\chi^2$  table and find the probability (p) of the calculated  $\chi^2$  corresponding to (r - 1) (c - 1) degree of freedom

If the probability (p) is more than 0.05, the difference observed has no significance because such a difference can occur commonly due to chance

Thus the factor under study may have no influence on the variable but if 'p' value is less than 0.05, the difference observed is significant, because such a difference is less likely to occur due to chance. Influence of the factor 2 which the sample is exposed may be accepted as an alternative to null hypothesis.



# V. OBSERVATION AND RESULTS

The data generated during the study can be grouped under three headings which are as follows:-

- Chemical analysis of the drug used
- Demographic analysis
- Clinical efficacy of therapy during the study

#### The chemical analysis of drug used (Kukkuta Purishadi Malahara and Taila)

The compound used for the management of Bahya Arsha was subjected to various chemical analytical tests at Zandu Pharmaceuticals Ltd., Mumbai with its prior permission and information. These tests are prescribed by CCRAS, the Ministry of health and Family Welfare, India for the standardization of the medicated oils and ointments and they are as follows:-

#### KUKKUTA PURISHADI TAILA

1.	description	oily
2.	Colour	green
3.	Odour	characteristic
4.	Refractive index at 25 <sup>°</sup> C	1.472
5.	Iodine value	106.353
6.	Saponification value	81.57
7.	Acid Value	1.213
8.	Peroxide Value	1.030
9.	Free Fatty Acid	0.610

The identification and authentification of ingredient drugs was done at Zandu Pharmaceuticals Ltd., from its qualified botanists having thorough and sound knowledge of ayurvedic drugs both herbal and of animal origin

#### HPTLC (High Performance Thin Layer Chromatography)

HPTLC of the ingredient drugs and the final product was done at HPTLC conducting laboratory namely Anchrom Laboratory at Mulund, Mumbai. Kindly see the annexure for the images and the monogram of the Kukkuta Purishadi Malahara and Taila. The images and monogram obtained show peak suggestive of peaks of theingredients to being present in the images and monogram of Kukkuta Purishadi Malahara and Taila also. The images and monogram are specific and will be astandard parameter for the evaluation of the compound in the field of research in future.

# **DEMOGRAPHIC ANALYSIS**

## 1. AGE GROUP

Table (01) showing age wise distribution of the 60 patients of Bahya Arsha each in Group A and Group B

Age group	No. of pts. in	Percentage	No. of pts. in	Percentage
(in years)	Group A	(%)	Group B	(%)
11-20	3	10	0	0
21-30	8	26.66	10	33.33
31-40	11	36.66	15	50
41-50	5	16.66	4	13.33
51-60	3	10	1	3.33

Thus it is seen that in Group A 10% of patients belong to age group 11-20 yrs and 10% of patients belong to age group 51-60 yrs, while 16.66% patients belong to age group 41-50 yrs, 26.66% patients belong to age group 31-40 yrs,.

Similarly in Group B, it is seen that 3.33% patients belong to age group 51-60 yrs, 13.33% patients belong to age group 41-50 yrs, 33.33% patients belong to age group, 21-30 yrs and 50% patients belong to age group 31-400 yrs.

## **2. SEX**

Table (02) showing sex wise distribution of the 60 patients of Bahya Arsha each in Group A and Group B

Sex	No. of pts. in	Percentage	No. of pts. in	Percentage
	Group A	(%)	Group B	(%)
Male	18	60	20	66.66
female	12	40	10	33.33

Thus it is seen that in Group A 60% of patients were males and 40% were females. Similarly in Group B, it is seen that 66.66% of patients were males and 33.33% of patients were females.

## 3. RELIGION

Table (03) showing religion wise distribution of the 60 patients of Bahya Arsha each in Group A and Group B

Religion	No. of pts. in	Percentage	No. of pts. in	Percentage
	Group A	(%)	Group B	(%)
Hindu	21	70	29	96.66
Islam	5	16.66	0	0
Christian	3	10	1	3.33
Parsi	1	3.33	0	0

Thus it is seen that in Group A 70% of patients were Hindus, 16.66% of patients were Muslims, while 10% of patients were Christians and 3.33% of patients were Parsis. Similarly in Group B, it is seen that 96.66% of patients were Hindus and 3.33% of patients were Christians.

## 4. EDUCATION

Table (04) showing Education of the 60 patients of Bahya Arsha each in Group A and Group B

Education	No. of pts. in	Percentage	No. of pts. in	Percentage
	Group A	(%)	Group B	(%)
Primary	8	26.66	6	20
Secondary higher secondary	10	33.33	7	23.33
Bachelors	11	36.66	16	53.33
Masters	1	3.33	1	3.33

Thus it is seen that in Group A 3.33% of patients either were doing or had achieved masters, 26.66% of patients had taken primary education, 33.33% of patients either were doing or had completed secondary and higher secondary education, 36.66% of patients either were doing or had achieved bachelors degree.

Similarly in Group B, it is seen that 3.33% of patients either were doing or had achieved masters, 20% of patients had taken primary education, 23.33% of patients either were doing or had completed secondary and higher secondary education, 53.33% of patients either were doing or had achieved bachelors degree.

## 5. MARITAL STATUS

Marital status	No. of pts. in	Percentage	No. of pts. in	Percentage
	Group A	(%)	Group B	(%)
Married	22	73.33	28	93.33
unmarried	8	26.66	2	6.66

Table (05) showing marital status of the 60 patients of Bahya Arsha each in Group A and Group B

Thus it is seen that in Group A 73.33% of patients were married, 16.66% of patients were unmarried. Similarly in Group B, it is seen that 93.33% of patients were married, 6.66% of patients were unmarried.

### 6. OCCUPATION

occupation	No. of pts. in	Percentage	No. of pts. in	Percentage
	Group A	(%)	Group B	(%)
Standing/walking	10	33.33	8	26.66
Sitting	15	50	20	66.66
miscellaneous	5	16.66	2	6.66

Table (05) showing occupation of the 60 patients of Bahya Arsha each in Group A and Group B

Thus it is seen that in Group A 16.66% of patients were involved in miscellaneous occupation (fisher man, student, medical representative, LIC agent ), 33.33% of patients were involved in standing/waling occupation (conductor, hawker, salesman, labors, housemaid, waiter, guard) and 16.66% of patients were involved in sitting occupation (clerk, accountant, manager, house wife, computer operator web designer, driver).

Similarly in Group B, it is seen that 6.66% of patients were involved in miscellaneous occupation (fisher man, student, medical representative, LIC agent ), 26.66% of patients were involved in standing/walking occupation (conductor, hawker, salesman, labor, housemaid, waiter, guard) and 66.66% of patients were involved in sitting occupation (clerk, accountant, manager, house wife, computer operator web designer, driver).

## 7. DIET

Table (05) showing diet of the 60 patients of Bahya Arsha each in Group A and Group B

Diet	No. of pts. in	Percentage	No. of pts. in	Percentage
	Group A	(%)	Group B	(%)
Vegetarian	18	60	14	46.66
Mixed(Veg and non veg both)	12	40	16	53.33

Thus it is seen that in Group A 60% of patients were Vegetarians and 40% were. Vegetarians and Non Vegetarians.

Similarly in Group B, it is seen that 46.66% of patients were Vegetarians and 53.33% of patients were Vegetarians and non Vegetarians.

## 8. ADDICTION

Table (05) showing various type of addiction of the 60 patients of Bahya Arsha each in Group A and Group B

addiction	No. of pts. in	Percentage	No. of pts. in	Percentage
	Group A	(%)	Group B	(%)
Alcohol consumption	0	0	1	3.33
Smoking	0	0	6	20
Tea/coffee	4	13.33	0	0
Chewing tobacco	10	33.33	13	43.33
All above or	14	46.66	6	20
combination of above				

Thus it is seen that in Group A 13.33% of patients were addicted to tea/coffee., 33.33% of patients were addicted to tobacco chewing and 46.66% of patients were addicted to combination of addictions including alcohol.

Similarly, in Group B it is seen that that 3.33% of patients were addicted to alcohol consumption, 20% of patients were addicted to smoking, 43.33% of patients were addicted to tobacco chewing and 20% of patients had combination of addictions

## 9. SYMPTOMS

Table (09) showing percentage of symptoms in the 60 patients of Bahya Arsha each in Group A and Group B

Symptoms	No. of pts. in	Percentage	No. of pts. in	Percentage
	Group A	(%)	Group B	(%)
Shotha	27	90	26	86.66
Shoola	27	90	30	100
Kandu	18	60	19	63.33
malavashtamba	30	100	30	100

Thus it is seen that in Group A 60% of patients were suffering from kandu, 90% of patients were suffering from shotha and shoola

Similarly in Group B, it is seen that 63.33% of patients were suffering from kandu, 86.66% of patients were suffering from shoth and 100% of patients were suffering from shoola. While in both the groups all the patients were suffering from malavashtamba

### **10. TYPES OF PILES**

Table (10) showing distributution of patients on the basis of types of external piles.

types of external	No. of pts. in	Percentage	No. of pts. in	Percentage
piles.	Group A	(%)	Group B	(%)
External Piles.	16	53.33	16	53.33
Sentineal Piles.	11	36.66	11	36.66
Heamatoma in Ano	3	10	3	10

Thus it is seen that in both the groups 10% of patients had heamatoma in ano, 36.66% of patients had sentineal piles, while 53.33% of patients had external piles.

# CLINICAL EFFICACY OF THE DRUGS AFTER COMPLETION OF THERAPY ASSESSMENT OF OBSERVATION OF PARAMETERS

Symptoms	Gro	roup A Group B Difference(BT-		% of rel	% of relief			
					AT)			
	BT	AT	BT	AT	Grp A	Grp B	Grp A	Grp B
Shotha	79	52	69	51	27	18	34.17	26.08
Shoola	79	48	86	37	31	49	39.24	56.97
Kandu	29	21	31	24	8	7	27.58	22.58
Malavashtamba	84	75	80	71	9	9	10.7	11.25

In Group A the total score for the symptom shotha was 79 which then reduced to 52 after treatment, thus the % of relief was 34.17, while in Group B the total score for the symptom shotha was 69 which then reduced to 51 after treatment, thus the % of relief was 26.08.

In Group A the total score for the symptom shoola was 79 which then reduced to 48 after treatment, thus the % of relief was 39.24, while in Group B the total score for the symptom shoola was 86 which then reduced to 37 after treatment, thus the % of relief was 56.97

In Group A the total score for the symptom kandu was 29 which then reduced to 21 after treatment, thus the % of relief was 27.58, while in Group B the total score for the symptom kandu was 31 which then reduced to 24 after treatment, thus the % of relief was 22.58.

In Group A the total score for the symptom malavashtamba was 84which then reduced to 75 after treatment, thus the % of relief was 10.7, while in Group B the total score for the symptom malavashtamba was 80 which then reduced to 71 after treatment, thus the % of relief was 11.

# Statistical Analysis Of Symptoms Of Patients Of Bahya Arha In Group A And

# Group B

# **GROUP** A

Symptoms	Mean	SD	Mean	SD	Mean	SD	SE	t	р
	AT	AT	BT	BT	BT-	BT-			
					AT	AT			
Shotha	1.73	0.9803	2.63	0.9279	0.963	0.876	0.169	5.66	< 0.001
Shoola	1.6	0.8136	2.63	0.6429	1.148	0.456	0.087	13.199	< 0.001
Kandu	0.7	0.7497	0.966	0.8899	0.449	0.512	0.1207	3.67	< 0.001
malavashtamba	2.5	.5723	2.8	0.4608	0.3	0.406	0.085	3.52	< 0.001

## **GROUP B**

symptoms	Mean	SD	Mean	SD	Mean	SD	SE	t	р
	AT	AT	BT	BT	BT-	BT-AT			
					AT				
shotha	1.7	0.9523	2.3	1.1188	0.6923	0.5844	0.1146	6.04	< 0.001
Shoola	1.23	1.16	2.86	0.3459	0.97	0.7980	0.1457	6.65	< 0.001
Kandu	0.8	0.8051	1.033	0.8899	0.9684	0.4950	0.1137	3.24	< 0.001
malavashtamba	3.03	0.503	2.66	0.6065	0.3	0.46609	0.085	3.52	< 0.001

## COMPARISON OF GROUP A AND GROUP B

symptoms	Group	– A	Group - B					
	Mean	SD <sup>2</sup>	Mean	SD <sup>2</sup>	SD	SE	t	р
Shotha	1.6	20.97	1.7	8.54	0.761	0.0573	4.729	<0.001
Shoola	1.148	5.41	0.97	18.47	0.66	0.0463	3.84	<0.001
Kandu	0.4444	4.45	0.3684	4.422	0.2534	0.0269	2.82	< 0.001
malavashtamba	0.3	6.3	0.3	6.3	0.46609	0.0310	0	< 0.001

## COMPARISON OF GROUP A AND GROUP B

# CHI SQARE TEST ( $\chi 2$ )

## SHOTHA

GROUP	Relieved	Not relieved	Total
Group A	17	10	27
Group B	17	9	26
Total	34	19	53

 $\chi 2 = 0.13538$ 

p < 0.10

## SHOOLA

GROUP	Relieved	Not relieved	Total
Group A	25	2	27
Group B	23	7	30
Total	48	9	57

 $\chi 2=2.7136$ 

**p < 0.10** 

## KANDU

GROUP	Relieved	Not relieved	Total
Group A	8	10	18
Group B	7	12	19
Total	15	22	37

## $\chi 2 = 0.221$

**P** < 0.5

# MALAVASHTAMBA

GROUP	Relieved	Not relieved	Total
Group A	9	21	30
Group B	8	22	30
Total	17	43	60

χ2=0.220

p<0.5

# ASSESSMENT OF BLOOD INVESTIGATIONS

Sr.	Haematological	Group	Mean ± SD		Diff	SE.d	t	р
No.	Io. Parameters		BT	AT	-			
1	Hb in gm %	А	11.75 ±1.22	11.8± 1.14	-0.05	0.104	0.4807	>0.1
		В	11.76± 1.23	11.75± 1.19	0.025	0.94	0.3510	>0.1
2	Red Blood Cell Count	А	4.193 ±0.240	4.203±0.238	-0.01	0.0112	0.892	>0.1
		В	4.29±0.42	4.22±0.44	-0.07	0.05	1.4	>0.1
3	White blood cell count	А	5503.33±774.36	5530±767.95	- 26.67	11.87	2.246	>0.5
		В	5606.67±834.98	5610± 804.02	-3.33	23.123	0.1440	>0.1
4	Neutrophils	А	56.5± 5.177	56.5±4.98	-	-	-	-
		В	57.4± 5.593	57.5± 5.425	0.033	0.1334	0.2473	>0.1
5	Eosinophils	А	1.1± 1.124	1.1±1.124	-	-	-	-
		В	1.133± 1.041	1.133±1.041	-	-	-	-
6	Lymphocytes	А	32.367±2.157	32.167± 2.069	0.2	0.225	0.784	>0.1
		В	32.13±2.417	31.73±1.910	0.4	0.215	1.860	>0.1
7	Monocytes	А	0.166± 0.379	0.166 ±0.379	-	-	-	-
		В	0.066±0.253	0.066±0.253	-	-	-	-
8	Basophils	А	0.1±0.305	0.1±0.305	-	-	-	-
		В	0.1±0.305	0.1±0.305	-	-	-	-
9.	ESR	А	21.5±8.830	5.8± 5.019	15.7	1.389	11.30	< 0.001
		В	23.2±5.46	3.4 ± 2.513	19.8	0.984	20.12	< 0.001

# TABLE SHOWING EFFECT OF THERAPY

## **ON BLOOD SUGAR LEVEL**

Sr. No.	Parameter	Group	Mean ± SD		Diff.	S.E.D.	t	Р
			BT	AT	•			
		А	83.53 ±	83.33 ±	0.2	0.431	0.464	>0.1
1	1 BSL – Fasting		6.831	5.897				
1		В	83.33±	83.1±	0.23	0.311	0.739	>0.1
			6.081	5.689				
		А	119.2 ±	118.9 ±	0.36	0.651	0.55	>0.1
2	2 BSL – PP		10.867	8.786				
		В	116.9±	117.3±	0.4	0.48	0.83	>0.1
			8.264	7.168				

# TABLE SHOWING EFFECT OF THERAPY ON DIFFERENT BIOCHEMICAL PARAMETERS (LFT)

Sr. No.	Parameter	Group	Mean ± SD		Diff.	S.E.D.	t	р
			BT	AT	-			
1	SGOT	А	27.2 ± 6.1330	26.93 ± 6.400	0.27	0.211	1.275	>0.1
		В	26.8± 6.55	26.6± 5.28	0.06	1.27	0.047	>0.1
2	SGPT	А	22.6± 6.72	24.13±6.74	1.53	0.96	01.59	>0.1
2	5011	В	22.6± 6.72	21.13±6.74	1.2	0.89	1.348	>0.1
3	Sr. Protein	A	7.213± 0.187	7.22±0.144	-0.006	0.019	0.315	>0.1
		В	7.76± 6.44	$7.77 \pm 0.40$	-0.01	-0.01	0.892	>0.1
4	Sr.Bilirubin (Total)	A	0.743± 0.138	0.736± 0.129	0.006	0.006	1	>0.1
		В	$0.74 \pm 0.127$	$0.71 \pm 0.106$				

# SHOWING EFFECT OF THERAPY ON DIFFERENT BIOCHEMICAL

PARAMETERS.	(RFT)
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Sr. No.	Parameter	Group	Mean ± SD		Diff.	S.E.D.	t	р
			BT	AT				
	BUN	А	10.166	10.026	0.14	0.079	1.772	>0.1
1			± 1.415	± 1.332				
		В	11.15±	11.01±	0.14	0.1	1.4	>0.1
			1.40	1.20				
	Blood Urea	А	27.7±	29.5±	1.86	1.05	1.77	>0.1
2			6.59	5.25				
2		В	29.5±	27.7±	1.86	1.05	1.77	>0.1
			5.25	6.59				
3	Sr. Creatine	А	0.943±	0.92±	0.023	0.011	2	>0.1
			0.216	0.197			2	
		В	0.906±	0.886±	0.026	0.016	2	>0.1
			0.183	0.152				

## TOTAL EFFECT OF THERAPY Showing total effect of therapy in 60 patients each in Group A and Group B

Sr. no	BT Score	AT Score	Difference	Percentage	Result
1	8	5	3	37.5	Ι
2	8	5	3	37.5	Ι
3	7	5	2	28.5714	Ι
4	7	3	4	57.1429	MI
5	7	4	3	42.8571	Ι
6	3	2	1	33.3333	Ι
7	6	4	2	33.3333	Ι
8	6	5	1	16.6667	U
9	7	5	2	28.5714	Ι
10	4	3	1	25	Ι
11	4	2	2	50	Ι
12	7	5	2	28.5714	Ι
13	4	3	1	25	Ι
14	6	5	1	16.6667	U
15	7	4	3	42.8571	U
16	3	3	0	100	С
17	5	4	1	20	U
18	7	5	2	28.5714	Ι
19	8	5	3	37.5	Ι
20	6	6	0	100	С
21	5	4	1	20	U
22	5	2	3	60	MI
23	5	2	3	60	MI
24	8	5	3	37.5	Ι
25	8	3	5	62.5	MI
26	8	3	5	62.5	MI
27	6	4	2	33.3333	Ι
28	6	3	3	50	Ι
29	6	3	3	50	Ι
30	8	4	4	50	Ι

## PATIENT WISE % OF RELIEF IN GROUP A

sr. no.	BT	AT	Difference	percentage	results
1	8	5	3	37.5	Ι
2	8	5	3	37.5	Ι
3	8	6	2	25	Ι
4	7	4	3	42.85714	Ι
5	7	5	2	28.57143	Ι
6	7	5	2	28.57143	Ι
7	6	3	3	50	Ι
8	3	2	1	33.33333	Ι
9	4	2	2	50	Ι
10	6	4	2	33.33333	Ι
11	5	3	2	40	Ι
12	7	5	2	28.57143	Ι
13	6	4	2	33.33333	Ι
14	6	5	1	16.66667	U
15	7	5	2	28.57143	Ι
16	5	3	2	40	Ι
17	6	3	3	50	Ι
18	7	5	2	28.57143	Ι
19	4	2	2	50	Ι
20	3	2	1	33.33333	Ι
21	6	4	2	33.33333	Ι
22	8	7	1	12.5	U
23	8	6	2	25	Ι
24	5	3	2	40	Ι
25	6	4	2	33.33333	Ι
26	8	7	1	12.5	U
27	6	5	1	16.66667	U
28	8	7	1	12.5	U
29	6	5	1	16.66667	U
30	5	5	0	100	С

# PATIENT WISE % OF RELIEF IN GROUP B

Results	No of patients	percentage
Cured	2	6.66
Markedly improved	5	16.66
Improved	18	60
unchanged	5	16.66

Thus in Group A

Thus it is seen that in Group A 6.66% of patients were cured completely, 60% of patients

Showed improvement 16.66% of patients showed marked improvement and results of another 16.66% of patients were unchanged

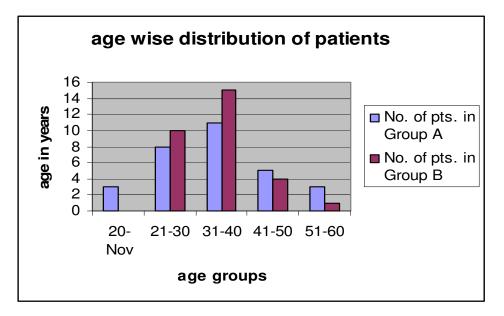
Results	No of patients	percentage
Cured	1	3.33
Markedly improved	0	0
Improved	23	76.66
unchanged	6	20

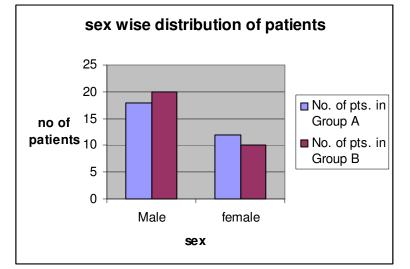
Thus in Group B

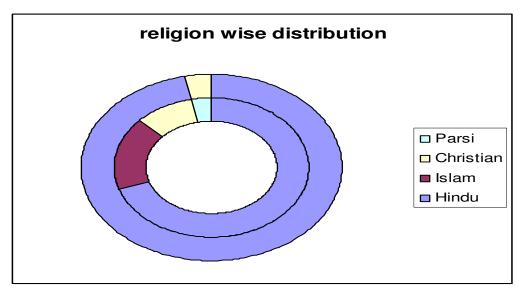
Thus it is seen that in Group B 3.33% of patients were cured completely, 76.66% of patients showed improvement and results of 20% of patients were unchanged

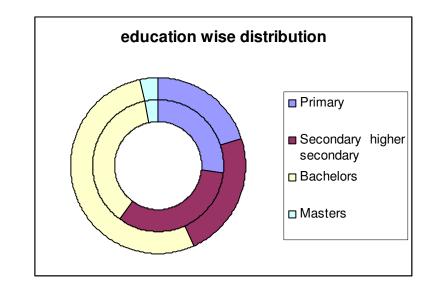
Hereby the observations and results obtained during the study have been mentioned here completely in this chapter.

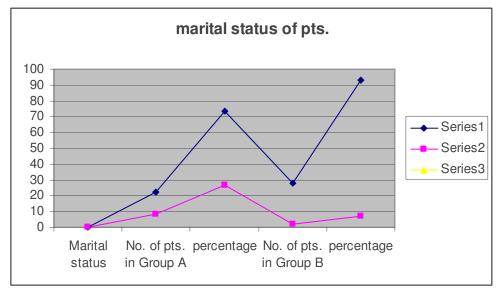
# GRAPHS

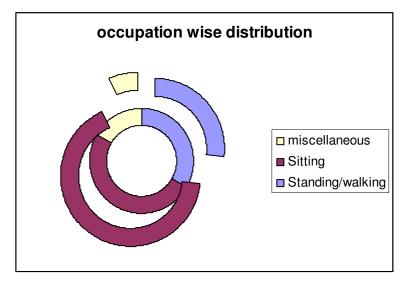


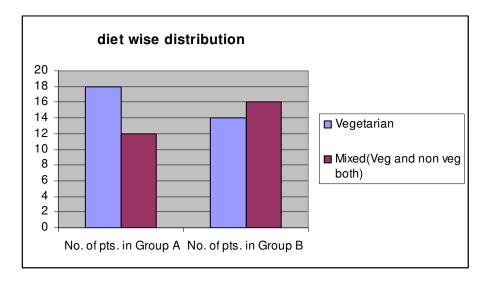


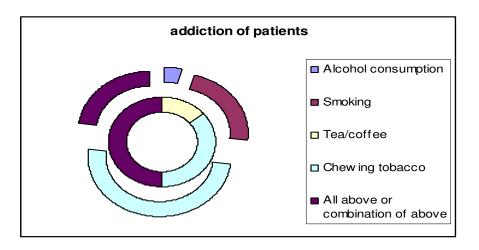


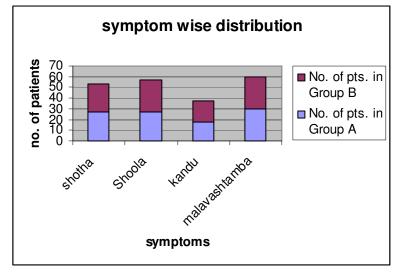


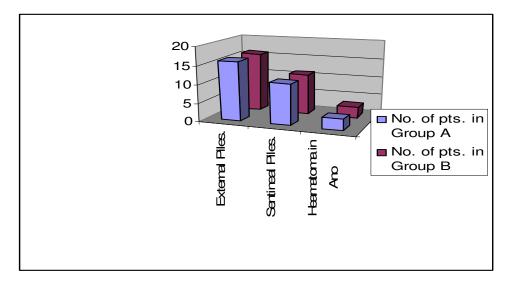


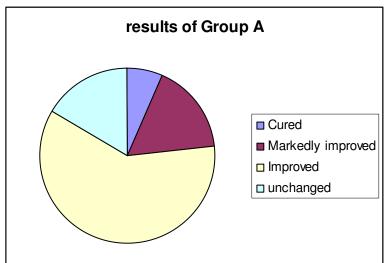


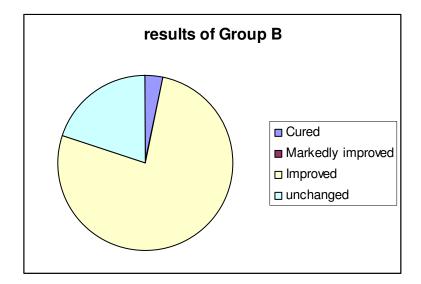


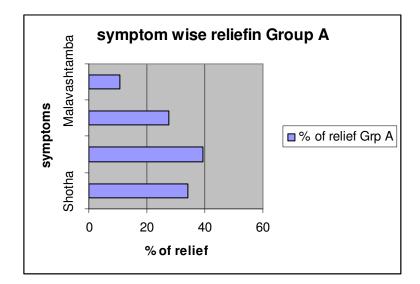


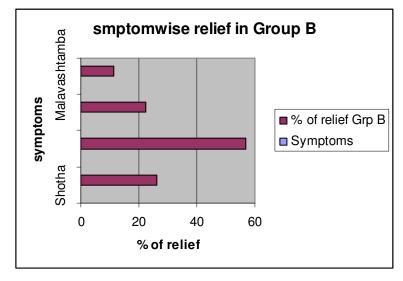










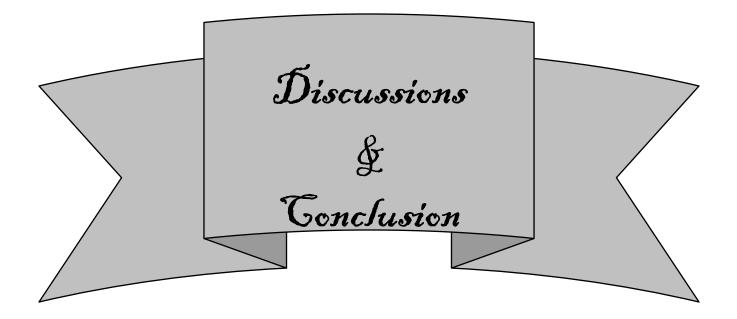




# **Before Treatment**



# After Treatment



# VI. DISCUSSION AND CONCLUSION

Ayurvedic shatra was created for all to maintain their body and soul healthy and any breach in following the ways to achieve the swasthya will surely lead to ill body and soul. All disease whether physical and mental follow their pattern without any exception and so it is in case of arsha also.

Haemorrhoids are the most burning problem among various ano-rectal disease, because of changing life style, lack of exercise, sedentary work, changing behavioral patterns of food (spicy food, junk food, flavoured food etc.) leading to systemic pathology.

The medicinal treatment and preventive modern science are still not aspects are still not elaborated which are common in day-to-day surgical practice. These aspects are described in details in ayurvedic samhitas.

So to propose an easy conservative medicinal treatment in all types of external piles including sentineal piles, this study title "ROLE OF KUKKUTA PURISHADI MALAHARA AND SIDDHA TAILA IN BAHYA ARSHA (EXTRNAL HEAMMORHODS)" is taken for research work by the scholar under the excellent guidance of his guide.

For treating arsha with topical application the drug should have *shothaghna, shoolaghna,* kandughna properties besides a good penetrating power.

On analyzing the observation and result, generated into both groups following facts can be laid down:-

- It can be said that incidence of bahya arsh is common in age group 31-40 yrs followed by s21-30 yrs.
- It is seen that incidence of Bahya Arsha is more common in Hindus than in any other community probably due to majority of Hindu population.
- It is seen that incidence of arsha is more common in the population who have completed or were doing bachelors as has been now a days minimum qualification required.
- It can be said that incidence of bahya arsh is common in married people than in unmarried as maximum of patients involved in study were married

- It can be said that the incidence bahya arsh is common in the people involved in sitting and standing/walking occupation, as has been mentioned in the textbooks also. Thus sitting or standing for a long time can lead to Bahya Arsha.
- It can be said that the incidence bahya arsh is common in the people who follow mixed diet pattern and so it can be concluded that non vegetarian diet plays an important role in causing Bahya Arsha.
- It is concluded that kandu is not a common symptom as compared to shotha and shoola in patients of Bahya Arsha.while malavashtamba is a common symptom.
- It can be concluded that external piles are more common than sentineal piles

# EFFECTS OF THERAPY ON PARAMETERS ASSESSED DURING THE TRIAL

## **ON OBSERVING THE PATIENTS UNDER STUDY**

In Group A the total score for the symptom shotha was 79 which then reduced to 52 after treatment, thus the % of relief was 34.17, while in Group B the total score for the symptom shotha was 69 which then reduced to 51 after treatment, thus the % of relief was 26.08.

In Group A the total score for the symptom shoola was 79 which then reduced to 48 after treatment, thus the % of relief was 39.24, while in Group B the total score for the symptom shoola was 86 which then reduced to 37 after treatment, thus the % of relief was 56.97

In Group A the total score for the symptom kandu was 29 which then reduced to 21 after treatment, thus the % of relief was 27.58, while in Group B the total score for the symptom kandu was 31 which then reduced to 24 after treatment, thus the % of relief was 22.58.

In Group A the total score for the symptom malavashtamba was 84which then reduced to 75 after treatment, thus the % of relief was 10.7, while in Group B the total score for the symptom malavashtamba was 80 which then reduced to 71 after treatment, thus the % of relief was 11.2

# EFFECTS OF THERAPY ON DIFFERENT HAEMATOLOGICAL PARAMETERS BY PAIRED't' TEST

Effects on Hb% was evaluated with the help of paried t -test. Before starting the treatment Hb% in Group A was 11.75 ± 1.22 gm% which after the treatment was 11.8 ± 1.14 gm% where t = 0.4807, P>0.1 which was statistically insignificant.
 In case of Group B mean ± SD before and after therapy is 11.76 ± 1.23 & 11.73 ± 1.19 gm%

respectively t = 0.3510, P = > 0.1 which was statistically insignificant.

- Effects on Red Blood Cell count in Group A before starting treatment RBC count was 4.193 ± 0.240 & 4.203 ± 0.238 at the end. 'T' was 0.892 & P > 0.1 which was statistically insignificant. Group B RBC count was 4.29 ± 0.42 initially and 4.22 ± 0.44 at the end. T was 1.4 and P > 0.1 no significant change noted.
- In Group A mean WBC count was 5503.33 ± 774.36 initially and 5530 ± 767.95 at the end and study significant change was noted where t = 2.246 and P <0.05. in Group B mean WBC count was 5606.67 ± 834.98 initially and 5610 ± 804.02 at the end of study. Where t = 0.1440 and P > 0.1 no significant change was noted.
- Effects on Neutrophills, Eosionophils, Monocytes & Basophils was not different in both groups before and after therapy.
- Effects on lymphocytes in treating Group A mean ± SD is 32.367 ± 2.064 at the end of therapy where t = 0.784, P > 0.1. No significant change was observed, where as in Group B also mean ± SD is 32.13 ± 2 417 initially and 31.73 ± 1.910 at the end of study where t = 0.215, p>0.1, No significant changes was noted.
- Mean ESR in Group A was initially 21.5 ± 8.830 and 5.8 ± 5.019 at the end of the study where t = 11.50, p= <0.001 significant change was noted. ESR reduced after the end of the theraphy. Mean ESR in Group B was initially 23.2 ± 5.46 and 3.4 ± 2.313 at the end of the study where t = 20.12, p < 0.001, significant after the theraphy.</li>

# EFFECTS OF THERAPY ON DIFFERENT BIOCHEMICAL PARAMETERS IN LIVER FUNCTION TEST

Meant SGOT of Group A before treatment was  $27.2 \pm 6.1330$  and  $26.93 \pm 6.400$  at end and study where t = 1.275 P>0.1 no significant change was noted.

Mean SG0T of Group B before treatment was  $26.8 \pm 6.55 \& 26.7 \pm 5.28$  at the end and study where t = 0.047, P>0.1 no significant change was noted.

Mean SGPT of treated Group Before treatment was  $22.0 \pm 6.72 \& 21.13 \pm 6.74$  at the end and study where t = 1.348, P>0.1 no significant change was noted.

Mean SGPT of control Group Before treatment was  $22.6\pm6.72$  &  $21.13\pm6.74$  at the end of the study where t = 1.348, P>0.1 no significant change was noted.

Mean serum protein level of Group A was  $7.213 \pm 0.187$  initially before treatment and at the end of study it was  $7.22 \pm 0.144$  where t = 0.315, P>0.1 no significant change was noted.

Mean serum protein level of Group B before treatment was  $7.76 \pm 6.44 \& 7.77 \pm 0.40$  at the end of study where t = 0.892, P>0.1, no significant change was noted.

Mean total serum Bilirubin level of treated Group B before treatment was  $0.743 \pm 0.138 \& 0.736 \pm 0.129$  at the end of study where t = 0.006, P>0.1, no significant change was noted.

Mean total serum Bilirubin level of treated Group B before treatment was  $0.74 \pm 0.127 \& 0.74 \pm 0.106$  at the end of study where t = 0.006, P>0.1, no significant change was noted.

# EFFECT OF THERAPY ON DIFFERENT BIOCHEMICAL PARAMETERS IN RENAL FUNCTION TEST

Mean Bun level of Group A before treatment was  $10.166 \pm 1.415 \& 10.026 \pm 1.332$  at the end of study where t = 1.772, P>0.1, no significant change was noted.

Mean Bun level of Group B before treatment was  $11.15 \pm 1.40 \& 11.01 \pm 1.20$  at the end of study where t = 1.4, P>0.1, no significant change was noted.

Mean Serum Urea level of Group A before treatment was  $27.7 \pm 6.59 \& 29.5 \pm 5.25$  at the end of study where t = 11.77, P>0.1, no significant change was noted.

Mean Serum Urea level of Group B before treatment was  $29.5 \pm 5.25 \& 27.7 \pm 6.59$  at the end of study where t = 1.77, P>0.1, no significant change was noted.

Mean Serum creatanine level of Group A before treatment was  $0.943 \pm 0.216 \& 0.92 \pm 0.197$  at the end of study where t = 2, P>0.1, no significant change was noted.

Mean Serum creatanine level of Group B before treatment was  $0.906I0.183 \pm 0.886I0.152 \& 0.92 \pm 0.197$  at the end of study where t = , P>0.1, no significant change was noted.

# **CONCLUSION**

After conducting the clinical trial" ROLE OF KUKKUTA PURISHADI MALAHARA AND SIDDHA TAILA IN BAHYA ARSHA (EXTRNAL HEAMMORHODS)" a confident conclusion can be made as follows:-

During the trial the review of literature and the practical view of study suggest a relevant relationship between arsha and haemarrhoids. The anatomy and physiology of guda pradesh described in ayurvedic texts appears crude but it seems to have given the modern anatomist and physiologist an initiative to ponder upon it, which probably has given rise to today's microcellular leveled description of the ano rectal region. The aetio pathogenesis of the arsha and haemorrhoids appears to be very similar on giving a calm thought.

The obvious difference felt during the study of both pathies is due to the fact that these are based on the fundamentals which are specific to that pathy only. PROBABLE MECHANISM OF ACTION OF KUKKUTA PURISHADI MALAHARA AND SIDDHA TAILA ON SYMPTOMS OF BAHYA ARSHA of drug as a whole Kukkuta purishadi malahara has an oily as it contains paraffin wax as its base. Thus it being a lipid soluble drug, when applied on the skin it can be absorbed through skin easily as outer layer of the skin is made up of lipid. Ointment promotes slow and long term absorption of drug through skin.

(Ref:- Textbook of pharmacology by Tripathi) As per ayurvedic concepts

> यतु त्वचि पितं तस्मिन् भ्राजकोऽग्निरिति संज्ञा, सोऽभ्यंगपरिषेकावगाहनं व लेपनादीनां क्रियाद्रव्याणां पक्ता......।i

> > सु.सू.२१/१०

त्वकप्रसादनमेवाग्रयं मांसरक्त प्रसादनम्। दाहप्रशमनं श्रेष्ठं रुजा कण्डुविनाशनम्।। मर्मदेशेषु ये रोगा गुहयेष्वपि तथा नृणाम्। संशोधनाय तेषां हि कुर्यादालेपन भिषक्।।

सु.सू.१८/९–१०

रोमकूपान् स्वेदवाहिभिश्च सिरामुखैः वीर्यं प्राप्नोति।

सु.सू.१८/४

रोमाभिमुखमादेयौ प्रलेपाख्यप्रदेहैकौ। वीर्यं सम्यंग्विशत्याशु रोमकूपै: सिरामुखै:।।

शा.उ.अ.११/७३

Probable mechanism on individual ingredients of the compound used for the trial

#### **GUNJA**

It acts as kandughna and vednasthapak

#### HARIDRA

It is katu tikta, ruksha, ushna veeryatmak, acts as vata and kaphhaghna. Besides it is ktumighna, kledashoshak. Thus helps in reducing pruritus. The drug is said to possess anti-inflammatory properties and so it does acts on inflammation thus helps in reducing the pain and swelling of external piles

#### PIPPALI

Pippali is katu tikta with ushna veerya and laghu snigdha and is vata kaphghna. Besides it is rabificient on external application. Thus when applied locally it will act as an analgesic and may reduce inflammation to certain extent.

#### GOMUTRA

It is katu tikta ushna and vata kaphghna and possess anti inflammatory properties.

### GOPITTA

It is tikta rasatmak laghu ruksha ushna veeryaatamak and is shothghna.

#### KUKKUTA PURISHA

It is katu rasatamak, ushna veeryatamak, thus exerts shothghna effect.

From the above it can be said that drug might be katu tikta rasatmak ushna veeryatamak and laghu ruksha exerting doshghna effect on vata and kapha which are responsible for shoola and kandu.. thus it might be possessing anti inflammatory analgesic and antiprurite properties.

## **EFFICACY OF THE THERAPY**

#### **EFFECT ON SHOTH**

Shotha in external piles is generally due to inflammation and the drugs used in the two preparations are shothghna by their pharmacological actions as mentioned in the ayurvedic texts the application of malahar showed better effect on the shotha than the application of the taila.

### **EFFECT ON SHOOLA**

Shoola is the symptom caused by th frequent straining, due to constipation, during defecation resulting into tear at mucocutaneous junction of anal region, which further results into constipation, thus continuing the vicious cycle. This results into vata prakopa as mentioned in the ayurvedic texts, resulting into pain. The drug compound used in the study contains vatashamak dravya, besides taila in general is best known for its vatashamak effects. Thus the drug exerts an analgesic effect reducing the pain in the various types of external piles. This effect was more seen with siddha taila than malahar. As per the statistical analysis the effect of taila was better than malahar.

### **EFFECT ON KANDU**

The results of the application of both the drugs were neither satisfying nor encouraging in relieving the above symptom of external piles the reason perhaps may be that the preparation consists of haridra which is the only kandughna drug and was used in low quantities. Even the statistical analysis supports that the kandughna effects of the preparation was only 27.58% in Group A and 22.58% in Group B.

#### **EFFECT ON MALAVASHTAMBA**

As per the literature review malavashtamba was one of the parameters that should have been relieved on application either of either of the drugs. Hence keeping respect to the retrospective study the symptom was introduced. But result were not satisfactory as only 10.7% relieving effect on Group A and 11.25% relieving effect on Group B was documented.

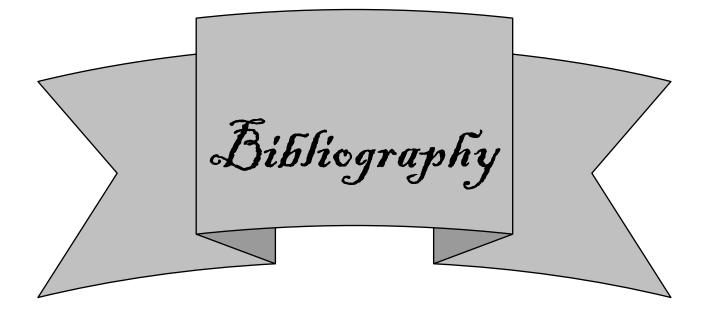
Hence it can be concluded that the above drug composition in the management of bahya arsh has following achievement

- 1. The application of the above drugs causes no side effects.
- 2. The application of the above drugs serves as a cost effective easily available alternative management in relieving the symptoms of Bahya Arsha thus over coming the emergency of surgeries
- 3. The therapy can be carried on OPD basis.
- 4. In an developing country like India, where not many people can afford surgery it can prove to be a comparative effective treatment in relieving the symptoms of Bahya Arsha
- 5. The application of the above drugs has not much effect on symptoms kandu and malavashtamba
- 6. The therapy helps in relieving the symptoms and not the disease as a whole.
- 7. May be addition of more dravyas into the preparation or complementary oral medicine could have better results for the symptoms kandu and malavashtamba

Malavashtamba, is caused by malfunctioning of doshas and agni so the proper treatment of the later will probably help in relieving the symptom.

Sushruta has mentioned the use of freshly prepared lepa, but in the study trial, this was converted into a malahar by using an oily base for easy and all time availability of the drugs, so whether the the former will have more effect as compared to later will require further evaluation

But as kandu is not always present in all the patients of bahya arsh, this study could be said to be satisfactory



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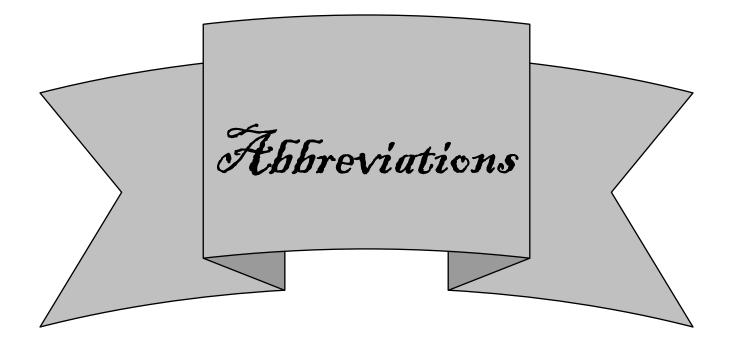
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### **ABBREVIATION**

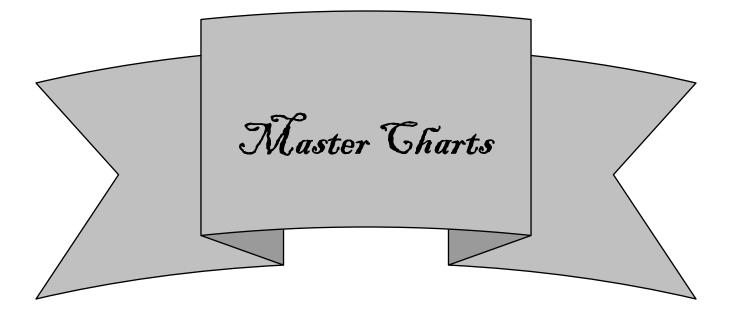
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- ११. B.T before treatment
- $\xi$  AT After Treatment
- $\xi z$ . C Cured
- १४. I Improved
- १५. MI Markedly Improved
- $\xi \xi$ . U Unchanged

### **ABBREVIATIONS USED IN MASTER CHARTS**

1.	Μ	-	Male
2.	F	-	Female
3.	Tob	-	Tobacco
4.	А	-	Alcohol
5.	T/C	-	Tea/Coffee
6.	S	-	Smoking
7.	V	-	Vegetarian
8.	Mix	-	Mixed Diet
9.	Mr.	-	Married
10.	Um	-	Unmarried
11.	Н	-	Hindu
12.	Mu	-	Muslim
13.	С	-	Christian
14.	Р	-	Parsi



# MASTER CHART I :\_ DEMOGRAPHIC CHART OF GROUP A

Sr. No.	Name	Age (in Yrs)	Sex	Reg. No.	Occupation	Religion	Mr/Um	Diet	Education	Addiction	Diagnosis
1	AK	26	Μ	2226	Busdriver	Н	Mr	Mix	SSC	Tob/TC	Ext. Piles
2	SS	34	Μ	2234	MR	Н	Mr	Mix	B.pharm	Tob/A/TC	Ext. Piles
3	Sh.S	38	F	2241	Housewife	М	Mr	Veg	B.Com	TC	Ext. Piles
4	RS	32	М	246	Worker	Н	Mr	Veg	SSC	Tob/TC	Ext. Piles
5	RV	42	М	252	Businessman	Н	Mr	Mix	B.Com.	Tob/TC	Ext. Piles
6	GD	42	Μ	2254	LIC Agent	С	Mr	Mix	B.com	Tob	Ext. Piles
7	SS	27	Μ	225	Businessman	Н	U	Veg	B.A.	Tob	Sent. Piles
8	RM	32	Μ	761	Driver	Н	Mr	Mix	HSC	Tob	Sent. Piles
9	SS	51	F	63	Housemaid	Н	Mr	Mix	Vth	Tob/A/TC	Ext. Piles
10	VD	23	F	2201	Student	Н	U	Mix	B.Com	Tob/TC	Haematoma
11	VK	29	F	2212	Housewife	Н	Mr	Veg	VIIth	Tob/TC	Ext. Piles
12	AS	25	F	2208	Student	Н	U	Mix	MBA	Tob/TC	Sent. Piles
13	JS	33	F	2228	Housemaid	Р	Mr	Veg	IIIrd	TC	Sent. Piles
14	RS	28	F	206	Housemaid	М	Mr	Mix	VIIth	-	Ext. Piles
15	SM	55	F	1212	Housewife	Н	Mr	Veg	SSC	Tob	Ext. Piles
16	MR	20	Μ	1219	Student	Н	U	Mix	B.Sc.	Tob	Haematoma
17	JR	53	Μ	222	Retired	Н	Mr	Veg	VIIIth	Tob	Ext. Piles
18	RS	35	Μ	223	Clerk	М	Mr	Mix	B.Com	TC	Haematoma
19	RK	20	Μ	43	Labourer	Н	Mr	Mix	IXth	Tob/TC	Sent. Piles
20	ND	35	М	745	Com. Opt.	Н	Mr	Mix	BCA	Tob/TC	Ext. Piles
21	RS	28	М	2270	Driver	Н	Mr	Mix	SSC	Tob	Ext. Piles
22	AH	30	М	273	Salesman	Н	Mr	Veg	HSC	TC	Sent. Piles
23	SK	34	F	176	Housewife	Н	Mr	Veg	SSC	Tob	Haematoma
24	SS	20	Μ	2279	Driver	С	U	Veg	SSC	Tob/TC	Sent. Piles
25	AS	40	Μ	282	Shopowner	М	Mr	Veg	BA	Tob/TC	Ext. Piles
26	DM	34	F	81	Housemaid	Н	Mr	Mix	IVth	-	Ext. Piles
27	РТ	44	F	2287	Housemaid	М	Mr	Mix	IVth	Tob	Sent. Piles
28	KK	48	Μ	1290	Com. Opt.	Н	Mr	Mix	BCS	Tob/S	Sent. Piles
29	SM	36	F	1293	Housemaid	С	U	Veg	IIIrd	Tob/TC	Sent. Piles
30	SV	28	Μ	2296	Guard	Н	U	Mix	SSC	Tob/S	Ext. Piles

### **MASTER CHART II :- DEMOGRAPHIC CHART OF GROUP B**

Sr. No.	Name	Age (in Yrs)	Sex	Reg. No.	Occupation	Relig ion	Mr/Um	Diet	Educatio n	Additio n	Diagnosis
31	LG	44	F	2299	Housemaid	Н	Mr	Veg.	IInd	_	Sent.Piles
32	RK	25	Μ	302	Labour	С	Un	Veg.	IIIrd	Tob	Ext. Piles
33	HP	35	F	230	Housemaid	Н	Mr	Mix	VIIth	Tob	Ext. Piles
34	NC	27	F	309	Housemaid	Н	Mr	Mix	VIth	Tob	Ext. Piles
35	VK	40	М	2314	Driver	Н	Mr	Veg.	SSC	Tob	Ext. Piles
36	RM	49	М	2318	Clerk	Н	Mr	Mix	B.Com	Tob	Ext. Piles
37	MK	38	М	238	Shopowner	Н	Mr	Mix	B.Com	Tob	Ext. Piles
38	HK	46	Μ	3230	Clerk	Н	Mr	Veg.	BA	Tob/S	Ext. Piles
39	GM	54	Μ	2338	Driver	Н	Mr	Mix	HSC	S	Sent.Piles
40	NS	27	М	3011	Student	Н	Un	Mix	M.Sc.	TC	Ext. Piles
41	KA	35	F	3016	Housewife	Н	Mr	Veg.	SSC	Tob	Sent. Piles
42	AT	32	F	2014	Housewife	Н	Mr	Veg.	HSC	-	Ext. Piles
43	MT	35	Μ	301	Clerk	Н	Mr	Veg.	BA	Tob/S	Ext. Piles
44	NG	34	F	17	Clerk	Н	Mr	Mix	BA	-	Sent.Piles
45	MC	34	Μ	40	Com. Opt.	Н	Mr	Mix	BCS	Tob/TC	Sent.Piles
46	SP	36	F	3037	Accountant	Н	Mr	Veg.	BCOM	TC	Sent.Piles
47	MT	35	Μ	226	Clerk	Н	Mr	Mix	BCOM.	-	Sent.Piles
48	NS	33	F	19	Housewife	Н	Mr	Veg.	B.COM	Tob/S	Ext. Piles
49	DW	29	М	331	Com. Opt.	Н	Mr	Veg.	BCA	-	Ext. Piles
50	RN	27	Μ	302	Com. Opt.	Н	Mr	Mix	B.Com	TC	Haematoma
51	VS	42	Μ	3024	Accountant	Н	Mr	Mix	B.Com	Tob	Ext. Piles
52	RN	40	Μ	3033	Clerk	Н	Mr	Mix	BA	Tob	Ext. Piles
53	RG	23	Μ	3023	Waiter	Н	Mr	Mix	SSC	TC	Haematoma
54	KD	29	Μ	22	Fisherman	Н	Mr	Mix	HSC	Tob	Sent.Piles
55	BS	30	Μ	31	Webdesigner	Н	Mr	Veg.	BCA	S/TC	Haematoma
56	SS	25	F	3030	Housemaid	Н	Mr	Veg.	IIIrd	-	Sent.Piles
57	AK	39	F	3019	Housemaid	Н	Mr	Mix	IVth	TC	Sent.Piles
58	RR	29	Μ	3017	Com. Opt.	Н	Mr	Veg.	B.Com	Tob	Ext. Piles
59	AK	35	Μ	3018	Salesman	Н	Mr	Mix	HSC	TC	Sent.Piles
60	SM	40	Μ	304	Clerk	Н	Mr	Veg.	B.Com	Tob	Sent.Piles

### MASTER CHART III :- CLINICAL PARAMETERS OF GROUP A

Sr. No	Pt. Name	Age	Sex	Reg. No.		uda 10th			G	uda	-Sho	ola	G	uda	-kan	du	Ma	alav	ashta	mba
					0	5	10	15	0	5	10	15	0	5	10	15	0	5	10	15
1	AK	26	М	2226	3	2	2	2	3	2	2	2	2	1	1	1	3	3	3	3
2	SS	34	Μ	2234	3	2	2	2	3	2	2	2	1	1	1	1	3	3	3	3
3	Sh.S	38	F	2241	3	2	2	2	3	2	2	2	1	1	1	1	3	3	3	3
4	RS	32	Μ	246	3	2	1	1	3	2	2	2	1	0	0	0	3	2	2	2
5	RV	42	М	252	3	2	2	2	3	2	2	2	0	0	0	0	3	3	3	3
6	GD	42	М	2254	0	0	0	0	3	2	2	2	0	0	0	0	2	2	2	2
7	SS	27	Μ	225	3	3	3	3	3	2	1	1	0	0	0	0	3	3	3	3
8	RM	32	Μ	761	3	3	3	3	3	2	2	2	0	0	0	0	2	2	2	2
9	SS	51	F	63	3	3	3	3	2	2	2	2	1	1	1	1	2	2	2	2
10	VD	23	F	2201	0	0	0	0	3	2	2	2	1	1	1	1	3	3	3	3
11	VK	29	F	2212	0	0	0	0	2	2	1	1	2	2	2	2	3	3	3	3
12	AS	25	F	2208	3	3	2	2	2	2	1	1	2	2	2	2	2	2	1	1
13	JS	33	F	2228	3	3	3	3	1	0	0	0	0	0	0	0	3	3	3	3
14	RS	28	F	206	3	3	3	3	3	2	2	2	0	0	0	0	3	3	3	3
15	SM	55	F	1212	3	3	3	3	3	2	1	1	1	1	1	1	3	3	3	3
16	MR	20	Μ	1219	3	3	2	2	0	0	0	0	0	0	0	0	3	2	2	2
17	JR	53	Μ	222	2	2	2	2	3	2	2	2	0	0	0	0	3	2	2	2
18	RS	35	Μ	223	3	2	2	2	3	3	3	3	1	1	1	1	3	3	2	2
19	RK	20	Μ	43	3	2	2	2	3	2	2	2	2	2	1	1	3	3	2	2
20	ND	35	Μ	745	3	3	3	3	3	2	2	2	0	0	0	0	2	2	2	2
21	RS	28	Μ	2270	2	2	2	2	3	2	2	2	0	0	0	0	3	3	3	3
22	AH	30	Μ	273	3	2	2	2	0	0	0	0	2	2	1	1	3	2	2	2
23	SK	34	F	176	3	2	1	1	0	0	0	0	2	2	2	2	3	2	2	2
24	SS	20	Μ	2279	3	1	1	1	3	2	2	2	2	2	2	2	2	2	2	2
25	AS	40	Μ	282	3	2	1	0	3	1	1	1	2	2	2	2	3	3	3	3
26	DM	34	F	81	3	2	2	2	3	1	1	1	2	1	1	1	3	3	3	3
27	PT	44	F	2287	3	2	1	1	3	2	2	2	0	0	0	0	3	3	3	3
28	KK	48	Μ	1290	3	1	1	1	3	2	2	2	0	0	0	0	3	2	2	2
29	SM	36	F	1293	3	1	1	1	3	2	2	2	0	0	0	0	3	3	3	3
30	SV	28	Μ	2296	3	2	1	1	3	3	3	3	2	1	1	1	3	3	3	3

### **MASTER CHART I :- CLINICAL PARAMETERS OF GROUP B**

Sr.	Pt.	Age	Sex	Reg.		uda			G	uda	-Sho	ola	G	uda	-kan	du	Ma	alava	ashta	mba
No	Name			No.	5r 0	noth 5	10	15	0	5	10	15	0	5	10	15	0	5	10	15
31	LG	44	F	2299	3	3	2	2	3	2	2	2	2	2	10	13	3	3	3	3
32	RK	25	M	302	3	3	2	2	3	$\frac{2}{2}$	2	2	2	2	1	1	3	3	3	3
33	HP	35	F	230	3	3	2	2	3	2	2	2	2	2	2	2	3	3	3	3
34	NC	27	F	309	3	3	2	2	3	2	1	1	1	1	1	1	$\frac{3}{2}$	$\frac{3}{2}$	2	$\frac{3}{2}$
35	VK	40	M	2314	3	3	3	3	3	$\frac{2}{2}$	2	2	1	1	0	0	$\frac{2}{2}$	$\frac{2}{2}$	2	2
36	RM	49	M	2314	3	3	3	3	3	$\frac{2}{2}$	1	1	1	1	0	0	$\frac{2}{2}$	1	1	1
37	MK	38	M	238	3	$\frac{3}{2}$	2	1	3	$\frac{2}{2}$	2	2	0	0	0	0	1	1	0	0
38	HK	46	M	3230	0	0	0	0	3	2	2	2	0	0	0	0	3	3	3	3
39	GM	54	M	2338	0	0	0	0	3	2	1	1	1	1	1	1	3	3	3	3
40	NS	27	M	3011	2	2	1	1	3	3	3	3	1	1	1	1	3	3	2	2
41	KA	35	F	3016	1	1	1	1	2	2	1	0	2	2	2	2	2	2	2	2
42	AT	32	F	2014	3	3	2	2	2	2	2	2	2	2	1	1	3	3	3	3
43	MT	35	М	301	3	3	2	2	3	2	2	2	0	0	0	0	3	2	2	2
44	NG	34	F	17	3	3	3	3	3	2	2	2	0	0	0	0	3	2	2	2
45	MC	34	Μ	40	3	3	2	2	3	2	2	2	1	1	1	1	2	2	2	2
46	SP	36	F	3037	2	2	2	2	2	2	1	1	0	0	0	0	2	2	2	2
47	MT	35	Μ	226	3	3	2	2	2	1	0	0	1	1	1	1	3	3	3	3
48	NS	33	F	19	3	3	2	2	3	3	2	2	2	2	1	1	3	2	2	2
49	DW	29	Μ	331	1	0	0	0	3	3	2	2	0	0	0	0	1	0	0	0
50	RN	27	Μ	302	0	0	0	0	3	3	2	2	0	0	0	0	3	3	3	3
51	VS	42	Μ	3024	3	3	2	2	3	2	2	2	0	0	0	0	3	3	3	3
52	RN	40	Μ	3033	3	3	2	2	3	3	3	3	2	2	2	2	3	3	2	2
53	RG	23	Μ	3023	3	3	2	2	3	3	2	2	2	2	2	2	3	3	2	2
54	KD	29	Μ	22	2	2	2	2	3	2	1	1	0	0	0	0	3	3	3	3
55	BS	30	Μ	31	3	3	2	2	3	2	2	2	0	0	0	0	3	3	3	3
56	SS	25	F	3030	3	3	3	3	3	2	2	2	2	2	2	2	3	3	3	3
57	AK	39	F	3019	3	3	2	2	3	3	3	3	0	0	0	0	3	3	3	3
58	RR	29	Μ	3017	3	3	3	3	3	2	2	2	2	2	2	2	3	3	3	3
59	AK	35	Μ	3018	1	1	1	1	3	3	3	3	2	2	1	1	3	3	3	3
60	SM	40	Μ	304	0	0	0	0	3	3	3	3	2	2	2	2	3	3	3	3

### **MASTER CHART V :- INVESTIGATION OF GROUP A**

	H	0%	R	BC	W	BC	]	N		E	]	L	I	M	]	B
S.N.	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT
1	11.5	11	4.0	4.0	6200	6200	64	64	0	0	33	33	1	0	1	1
2	12.5	12.5	4.3	4.3	6000	6200	66	66	0	0	32	32	0	0	0	0
3	13	13	4.4	4.4	6200	6200	64	64	2	2	34	34	0	0	1	
4	14	14	4.2	4.2	5200	5200	50	50	2	2	32	32	0	0	1	0
5	11.5	11	4.1	4.1	5000	5000	64	64	0	0	30	30	0	0	0	1
6	11	11.5	4.5	4.5	6800	6800	61	61	0	0	35	30	0	0	0	0
7	12	12.5	4.3	4.3	5000	5000	64	64	2	2	32	32	0	0	0	0
8	10	10	4.0	4.0	5000	5000	58	58	4	4	30	30	0	1	0	0
9	14	14	4.5	4.5	6400	6400	58	58	2	2	30	30	0	0	0	0
10	10	10	4.0	4.5	6200	6200	58	58	1	1	30	30	0	0	0	0
11	10	10	4.1	4.0	6500	6200	60	60	0	0	30	30	0	0	0	0
12	11	12	4.5	4.0	4800	4800	51	51	1	1	38	38	0	0	0	0
13	12	12	4.3	4.3	6500	6400	60	60	2	2	30	30	0	0	0	0
14	14	14	4.0	4.0	4000	4000	62	62	1	1	35	30	0	0	0	0
15	12	12	3.8	4.0	5400	6500	60	60	2	2	32	32	0	0	0	0
16	12	12	4.0	4.5	5000	5000	60	60	4	4	30	30	0	0	0	0
17	12	12	4.4	4.4	5200	5200	50	50	0	0	32	32	0	0	0	0
18	12	12	4.5	4.5	5400	5400	50	50	0	0	32	32	0	0	0	0
19	11	11	3.8	4.0	5200	5200	54	54	0	0	35	35	0	0	0	0
20	13	13	4.1	4.1	4800	5000	54	54	1	1	34	34	0	0	0	0
21	11	11	4.0	4.0	5000	5000	54	54	2	2	34	34	0	0	0	0
22	11.5	12	4.4	4.4	5000	5000	50	50	1	1	34	34	0	0	0	0
23	14	14	4.0	4.0	6400	6500	54	54	1	1	30	30	1	0	0	0
24	11	11	4.3	4.5	6200	6200	60	60	1	1	31	31	0	1	0	0
25	12	12	4.0	4.0	6000	6000	58	58	0	0	34	34	0	0	0	0
26	11	11	4.5	4.5	6000	6000	60	60	0	0	29	30	0	0	0	0
27	12	12	4.0	4.0	5000	5000	68	65	0	0	30	30	0	0	0	0
28	11	11	3.8	3.8	5400	5500	50	50	1	1	32	32	0	0	0	0
29	11	11.5	4.4	4.4	4000	4000	50	50	2	2	32	32	0	0	0	0
30	9.5	9.5	4.6	4.5	4300	4500	50	50	1	1	34	34	0	0	0	0

### **MASTER CHART VI :- INVESTIGATION OF GROUP B**

	H	0%	R	BC	W	BC		N		E	]	L	I	М		B
S.N.	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT
1	11.5	11	4.0	4.0	6200	6200	64	64	0	0	33	33	1	0	1	1
2	12.5	12.5	4.3	4.3	6000	6200	66	66	0	0	32	32	0	0	0	0
3	13	13	4.4	4.4	6200	6200	64	64	2	2	34	34	0	0	1	
4	14	14	4.2	4.2	5200	5200	50	50	2	2	32	32	0	0	1	0
5	11.5	11	4.1	4.1	5000	5000	64	64	0	0	30	30	0	0	0	1
6	11	11.5	4.5	4.5	6800	6800	61	61	0	0	35	30	0	0	0	0
7	12	12.5	4.3	4.3	5000	5000	64	64	2	2	32	32	0	0	0	0
8	10	10	4.0	4.0	5000	5000	58	58	4	4	30	30	0	1	0	0
9	14	14	4.5	4.5	6400	6400	58	58	2	2	30	30	0	0	0	0
10	10	10	4.0	4.5	6200	6200	58	58	1	1	30	30	0	0	0	0
11	10	10	4.1	4.0	6500	6200	60	60	0	0	30	30	0	0	0	0
12	11	12	4.5	4.0	4800	4800	51	51	1	1	38	38	0	0	0	0
13	12	12	4.3	4.3	6500	6400	60	60	2	2	30	30	0	0	0	0
14	14	14	4.0	4.0	4000	4000	62	62	1	1	35	30	0	0	0	0
15	12	12	3.8	4.0	5400	6500	60	60	2	2	32	32	0	0	0	0
16	12	12	4.0	4.5	5000	5000	60	60	4	4	30	30	0	0	0	0
17	12	12	4.4	4.4	5200	5200	50	50	0	0	32	32	0	0	0	0
18	12	12	4.5	4.5	5400	5400	50	50	0	0	32	32	0	0	0	0
19	11	11	3.8	4.0	5200	5200	54	54	0	0	35	35	0	0	0	0
20	13	13	4.1	4.1	4800	5000	54	54	1	1	34	34	0	0	0	0
21	11	11	4.0	4.0	5000	5000	54	54	2	2	34	34	0	0	0	0
22	11.5	12	4.4	4.4	5000	5000	50	50	1	1	34	34	0	0	0	0
23	14	14	4.0	4.0	6400	6500	54	54	1	1	30	30	1	0	0	0
24	11	11	4.3	4.5	6200	6200	60	60	1	1	31	31	0	1	0	0
25	12	12	4.0	4.0	6000	6000	58	58	0	0	34	34	0	0	0	0
26	11	11	4.5	4.5	6000	6000	60	60	0	0	29	30	0	0	0	0
27	12	12	4.0	4.0	5000	5000	68	65	0	0	30	30	0	0	0	0
28	11	11	3.8	3.8	5400	5500	50	50	1	1	32	32	0	0	0	0
29	11	11.5	4.4	4.4	4000	4000	50	50	2	2	32	32	0	0	0	0
30	9.5	9.5	4.6	4.5	4300	4500	50	50	1	1	34	34	0	0	0	0

# MASTER CHART VII:- INVESTIGATIONS OF GROUPA

S.N.	ESR		BF		BSP		OT		РТ		SP		SB		BUN		SU	
	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT
1	30	10	84	84	110	110	36	36	19	16	7.7	7.4	1.0	0.8	9.3	9.5	32	33
2	08	00	86	86	110	110	37	37	24	24	7.0	7.2	0.8	0.8	10.7	10.5	22	32
3	12	12	89	88	115	115	30	30	30	29	7.3	7.4	0.7	0.7	12	12	34	33
4	10	04	88	84	98	98	27	27	13	24	7.3	7.3	0.6	0.6	10.5	10.5	28	30
5	20	05	82	80	110	110	39	40	18	30	7.3	7.3	0.7	0.7	10.7	9.8	28	32
6	30	10	403	100	120	120	24	24	20	33	7.5	7.4	0.8	0.8	12.6	10.5	23	38
7	30	20	98	98	118	118	23	20	19	20	7.2	7.1	0.6	0.6	8.4	8.5	26	30
8	25	05	101	100	108	108	22	20	13	17	7.2	7.2	0.6	0.6	9.0	9.0	29	39
9	15	10	71	80	102	110	28	27	18	18	7.4	7.4	0.4	0.4	6.0	6.0	26	32
10	20	05	84	80	110	110	38	38	20	16	7.5	7.5	1.0	1.0	10.0	10.0	19	20
11	35	05	80	80	120	120	30	30	22	26	7.5	7.4	0.7	1.7	10.5	10.5	18	23
12	40	10	78	80	124	120	30	30	18	18	7.3	7.3	0.6	0.6	12.0	12.0	28	32
13	25	05	78	78	130	130	28	28	16	14	7.0	7.2	0.8	0.8	10.6	10.5	98	30
14	20	02	78	78	125	120	22	22	24	30	7.1	7.1	0.7	0.7	10	10	16	18
15	25	04	80	80	140	140	15	15	33	32	7.2	7.2	0.7	0.7	12.0	12.0	20	22
16	20	04	81	81	113	113	27	30	42	40	7.4	7.4	0.6	0.6	10.5	10.5	23	28
17	18	05	82	82	125	120	20	20	30	28	7.1	7.1	0.7	0.7	8.0	8.0	28	26
18	15	05	84	84	124	128	15	15	19	19	7.0	7.0	0.8	0.8	9.0	8.5	35	19
19	10	00	80	80	120	120	18	18	24	30	7.2	7.2	0.8	0.8	8	8	32	36
20	08	00	78	8	125	120	28	28	17	20	7.4	7.4	0.8	0.8	11	10.5	24	30
21	25	20	78	8	112	110	27	27	34	30	7.0	7.2	1.0	1.0	12	12	32	34
22	28	08	79	80	124	120	27	27	32	30	7.0	7.1	1.0	1.0	10	10	36	32
23	21	02	85	82	115	120	30	30	19	20	7.0	7.0	0.8	0.8	10	10	40	36
24	20	02	82	80	130	128	30	30	20	32	7.1	7.2	0.7	0.7	12	12	24	28
25	30	10	84	82	135	135	24	24	20	18	7.1	7.1	0.8	0.8	10.2	10	26	24
26	32	02	85	85	140	130	28	28	16	14	7.1	7.2	0.7	0.7	10	10	36	38
27	30	10	82	82	124	120	24	24	24	2	7.1	7.1	0.7	0.7	10	10	32	28
28	20	02	80	80	120	120	28	28	26	2	7.0	7.0	0.8	0.8	10	10	22	32
29	18	02	82	82	124	124	25	25	28	30	7.2	7.0	0.8	0.8	10	10	30	28
30	15	05	84	84	120	120	36	36	20	26	7.2	7.2	0.6	0.6	10	10	30	32

# **MASTER CHART VIII:- INVESTIGATIONS OF GROUP B**

S.N.	BF		BSP		OT		PT		SP		SB		BUN		SU	
	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT
1	82	82	112	112	26	33	20	16	8.6	7.7	0.8	0.8	11	11	33	30
2	84	84	110	110	23	24	28	24	8.3	8.7	0.8	0.8	12	12	32	30
3	88	88	110	110	36	21	26	29	7.6	7.8	0.8	0.6	10	10.5	33	22
4	82	82	100	110	22	32	24	24	8	8.2	1.0	0.8	10	10	30	32
5	80	82	110	110	26	22	16	20	7.4	7.6	0.8	0.8	9	9	32	36
6	101	101	110	110	40	41	20	33	7.7	7.9	0.7	0.7	10	10	38	26
7	92	90	120	120	31	26	20	20	7.5	7.6	0.7	0.7	13	13	30	24
8	101	101	124	120	21	21	19	17	7.8	8	0.6	0.6	14	12.5	29	40
9	72	98	110	110	36	34	32	18	7.4	7.6	0.4	0.2	10	10	32	36
10	80	80	102	110	37	14	34	16	7.8	8	0.6	0.6	9	9	20	32
11	84	84	110	110	26	29	17	26	6.9	7.2	0.8	0.8	11	10	23	24
12	80	80	120	120	25	26	24	18	7.7	7.6	0.7	0.7	12	12	32	32
13	78	80	120	120	24	26	19	14	7.9	7.8	0.7	0.7	13	12	30	35
14	78	78	124	120	28	20	30	30	7.5	7.6	1.0	1.0	10.5	10	18	28
15	80	80	180	130	30	26	42	32	7.8	7.8	1.0	1.0	9.5	10	22	23
16	81	80	125	125	36	32	33	40	7.6	7.4	0.8	0.8	10	10	28	20
17	84	82	140	140	22	26	24	28	7.6	7.3	0.8	0.8	12.6	12.5	26	16
18	82	82	120	120	24	20	16	19	7.8	7.9	0.6	0.6	12.5	12.5	19	38
19	80	80	120	120	28	26	18	30	7.7	7.9	0.7	0.7	10	10	36	28
20	78	78	120	120	24	28	22	20	7.9	7.8	0.7	0.8	11.5	11	30	28
21	79	79	120	120	30	28	20	30	7.8	7.4	0.6	0.6	13	13	34	19
22	85	85	84	120	120	38	34	18	30	7.6	7.9	0.7	0.8	12.5	12.5	32
23	82	80	118	120	17	28	13	20	7.2	7.8	0.8	0.8	12	11	36	29
24	84	80	110	110	22	30	19	32	7.9	7.4	0.8	0.8	11	11	28	26
25	88	88	120	120	18	20	20	18	9.4	9.2	0.7	0.7	9	10	24	23
26	80	80	110	110	18	26	18	14	7.4	7.8	0.7	0.7	12	12	38	28
27	82	80	118	118	18	26	13	20	8	7.8	0.6	0.6	12	12	28	28
28	85	85	120	120	32	28	30	20	7.6	7.4	0.7	0.7	12.5	12	32	34
29	86	84	110	110	20	28	24	30	7.6	7.4	0.8	0.8	9	10	28	22
30	82	82	124	124	26	24	19	26	7.9	7.8	0.8	0.8	10	10	32	32

# CASE RECORD FORM SHALYATANTRA DEPARTMENT WORLI, MUMBAI – 400 018

### "ROLE OF KUKKUTA PURISH MALAHARA AND SIDDHA TAIL IN BAHYAARSH (EXTERNAL HAEMMORHOIDS)"

SCHOLAR

Vd. S.D.Waghmare

Dr. G.S.Lavhekar

**GUIDE** 

Sr. No.		DOA	
Reg. No.		DOD	
Patients Nam	ie		
Age	Years Sex	MF	
Marital Statu	ıs: Married/Unmaı	ried	
Occupation	:		
Address	:		
Ph. No.	:		

**Chief Complaints with duration:** 

**Associated Complaints with Duration:** 

**History of Previous Illness:** 

#### **Family History:**

#### **Personal History:**

- Diet : Veg/Mixed
- Habit :
- Addiction : Tabacco/Alcohol/Smoking/Tea-Coffee/Other.
- Drug Allery :

General Examination										
Pulse	/Min									
BP	_mm hg									
Respiratory Rate		_/mm								
Temperature		degree f								
Cyanosis										
Pallor										
Clubbing										
Oedema										
Lymphadenopathy										

**Systemic Examination** 

- Respiratory System :
- Cardiovascular System :
- Central Nervous System :
- Per Abdomen :

Local Examination			$\sim$						
External Examination	<u>on</u>								
Peianal Regio	on								
Anal Verge									
Inspection									
External Hae	emmorhoids N	0.	1 2 3 / more than 3						
		Position	<b>Clockwise Position</b>						
		Colour							
		Shape							
Anal Openin	g :	Constricted/Dilated/Normal							
Palpation		Tenderness							
		Local Tempe	erature						
		Other							
Proctoscopy Examin	nation								
Investigations:									
Haemogram :									
nachiogram .	Hb		om %						
			million/mm3						
	-		/mm3						
		NEBLN	_						
			mm at the end of one hr.						
BSL F									
PP									
BT min		sec							
min									
Urine R & M									
Stool R & M									
Hbs Ag	Positive/Nega	ative							
VDRL	Reactive/Non-reactive								
HIV I and II	Reactive/Nor	n-reactive							
X ray chest PA view	•								
USG Abdomen	:								

~

#### Diagnosis

#### Treatment : Application of Kukkuta Purishadi malhar Siddha Taila

Chinical Assessment of 1 arameters																
Parameters	Days															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1) Shotha																
2) Shoola																
3) Kandu																
4) Malavashtamba																

**Clinical Assessment of Parameters** 

:

#### Remarks

- Cured
- Relieved
- Not Cured

#### Signature of Guide

#### Signature of Scholar

#### अनुमती पत्र

#### रुग्ण अनुमती

मी स्वेच्छेने या औषधोपचाराबाबत संमती देत आहे. हे औषधोपचार करणाऱ्या संबधित डॉक्टरांनी मला समजेल असा भाषेत औषधोमुळे होणारे उपद्रव व लाभ या विषयी पूर्ण माहिती दिली आहे.

दिनांक :

रुग्ण नांव.....

सही.....

#### रुग्ण अनुमती

मैं स्वेच्छा से इस औषध उपचार के लिए संमती देता हुँ। इस औषधी से होनेवाले सभी उपद्रव एवम लाभ की जानकारी मेरे समझ में आए इस भाषा में संबंधीत डॉक्टरोने दी है।

तारीख

रुग्ण नाम.....

सही.....

#### CONSENT

I willingly desire to participate in the treatment as a patient. It is fully explained by the concerned doctor to me about the side effects and complications of therapy in the language I understand

Date

Patient's Name.....

Signature .....