

## A Clinical Study of Kutaja (*Holarrhena antidysenterica* Wall) on Shonitarsha

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**ABSTRACT :** Shonitarsha (Bleeding piles) is a common chronic painful disease afflicts the mankind, having only surgical treatment (Haemorrhoidectomy) in modern science but recurrence is more often. Bleeding per rectum during defaecation with fresh blood not mixed with motion is the commonest symptom of Shonitarsha. Kutaja (*Holarrhena antidysenterica* Wall) is an important plant mentioned in Ayurveda used successfully in atisara, pravahika and arsha especially in Shonitarsha. The fine powder of the *Holarrhena antidysenterica* Wall stem bark was prepared and given to the patients in a dose of 4 gms twice a day for two weeks. The results of this study are subjective of significant efficacy of the drug in the symptom "stoppage of bleeding" in Shonitarsha.

**Key words :** Kutaja (*Holarrhena antidysenterica*), Shonitarsha (Bleeding piles).

### INTRODUCTION

Since the beginning of human civilization on earth whole mankind has been struggling against the disease, decay and death. Amongst all the diseases that afflict the mankind, Arsha (Haemorrhoids) are definitely the commonest of them. The term Haemorrhoid originates from the Greek adjective "haimorrhoides" which consist of two words "Haima" (blood) and "rhoos" (flowing), thereby attributing the readily acceptable meaning to the common public. Shonitârsha (Bleeding piles) is such disease where only surgery is the choice of treatment (Haemorrhoidectomy) in modern science but the recurrence of the disease is more often.

Kutaja (*Holarrhena antidysenterica* Wall) is a glabrous or pubescent tree or large shrub found through out the deciduous forest areas of India at low elevations and up to 1100 meters in the tropical Himalayan tract<sup>1</sup>. It is sometimes cultivated in the garden as an ornamental plant. It is rich in several chemical constituents especially conessine, which was isolated by Haines in 1958 from the stem bark of *Holarrhena antidysenterica* Wall, having the properties like anti-bacterial and amoebicidal<sup>2</sup>. Its medicinal properties are well recognized in âyurveda and almost all classics mentioned this plant for the treatment of atisâra, prabâhika, arsha especially in Ūonitârsha, etc<sup>3&4</sup>.

The fine powder of the *Holarrhena antidysenterica* Wall stem bark was selected for the present study to evaluate the efficacy of the drug in the

symptom "stoppage of bleeding" in Ūonitârsha (Bleeding Piles).

### MATERIALS & METHODS

**Patients :** Patients attending O.P.D. of I.P.G.A.E. &R at S.V.S.P. Hospital, Kolkata having classical symptomatology of Shonitârsha (Bleeding Piles) were selected and registered irrespective of their age, sex, religion, etc.

**Inclusion criteria :** Patients having active bleeding with or without internal and external swelling (Piles mass) along with specific symptomatology of Shonitârsha (Bleeding piles) were selected for the present clinical trial. A special clinical proforma was prepared incorporating selected symptoms and signs like chronic constipation, indigestion, hyperacidity, general weakness, irregular motions, etc. A detailed history was taken and complete physical examination and laboratory investigations were also carried out.

**Exclusion criteria :** Patients having active bleeding from other ano-rectal diseases (fissures, malignancy of the rectum), pregnant and lactating women, patients of other systemic diseases (Hypertension, Diabetes mellitus, etc.) were excluded. The incurable patients as described in authentic text were also not included in the present clinical trial.

**Criteria for assessment :** The observed symptoms and signs were categorized in four groups on the basis of severity like severe (3), moderate (2), mild (1), no symptoms (0). The results of the therapy were assessed after completion of treatment schedule on the basis of improvement in the selected symptoms and signs based on both Ayurvedic and modern literature.

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**Posology :**

**Drug :** The fine powder of the *Holarrhena antidysenterica* Wall stem bark was internally administered to the patients.

**Dose and duration :** Kutaja tvak churna was prescribed in the dose of 4 gms twice a day. The treatment schedule was continued for two weeks. All the patients were reviewed after each seven days for a period of two weeks.

**Direction and diet :** The patients were advised to take the prescribed medicine twice a day before an hour of lunch and dinner and also advised to avoid pulses, egg, meat, sour and fast food.

**Study protocol :**

Total 20 patients were registered for the clinical trial and were treated with Kutaja tvak churna in a dose of 4 gms twice a day. The treatment schedule was continued for two weeks.

Any unwanted effect of the drug during the total period of treatment schedule was noted. Laboratory investigation of routine blood, stool and urine were carried out before commencement and after completion of the treatment schedule.

**Statistical analysis :**

The obtained data were analyzed statistically and presented as mean  $\pm$  SEM (Standard Error of Mean). The observed difference was calculated by adopting student "t" test.

**RESULTS**

Total 20 patients were registered, among them 15 patients completed the treatment schedule. Out of 15 patients, 46.66% patients belonged to age group of 46-60 years, and 66.66% and 33.33% patients were found male and female respectively. Most of the sufferers of piles (40.00%) were servicemen and maximum numbers of patients (40.00%) were of middle and lower income group. Highest number of incidence of piles (66.66%) was found among Muslims and 86.66% patients were of non-vegetarian diet. Out of 15 patients, 33.33%, 06.66% and 20.00% patients were found Vata, Pitta and Kapha Dosha predominance respectively. The longest duration of illness (33.33%) was 1 to 12 months and maximum 40.00% patients are found of amla rasa satmya.

Most of the patients suffering from piles with having external mass (46.66%), 33.33% patients belong to extero-internal category and 20.00% of patients having internal Piles mass.

The Hb% in routine blood test were recorded above 10gm% in 46.66% patients and 33.33%, 13.33% and 06.66% patients respectively had Hb% as 8-10gm%, 6-8gm% and below 6gm% (Table-1).

The symptomatic relief was found in all patients with improvement of symptom "stoppage of bleeding" as "t" value was found 7.27 (Table-2).

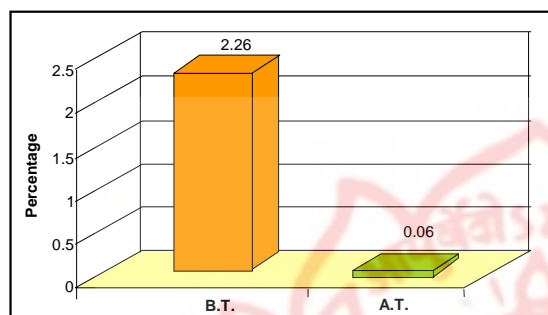
**TABLE NO. 1 : INCIDENCE IN RELATION TO DIFFERENT PARAMETERS OF 15 PATIENTS OF ARSHA :**

Description	Number of patients	Percentage
<b>Age</b>		
16- 30 years	01	06.66
31-45 years	06	40.00
46- 60 years	07	46.66
Above 60 years	01	06.66
<b>Sex</b>		
Male	10	66.66
Female	05	33.33
<b>Religion</b>		
Hindu	05	33.33
Muslim	10	66.66
<b>Occupation</b>		
Student	02	13.33
Housewife	04	26.66
Servicemen	06	40.00
Businessmen	01	06.66
Worker (Labour)	02	13.33
<b>Socio-economic status</b>		
Upper	03	20.00
Middle	06	40.00
Lower	06	40.00
<b>Dietetic nature</b>		
Vegetarian	02	13.33
Non-vegetarian	13	86.66
<b>Involvement of Dosās</b>		
Vata	05	33.33
Pitta	01	06.66
Kapha	03	20.00
Vata-Pitta	02	13.33
Pitta-Kapha	02	13.33
Kapha-Vata	02	13.33
Tridoshaja	00	00.00
<b>Duration of illness</b>		
1- 12 months	05	33.33
13- 24 months	02	13.33
25- 36 months	03	20.00
Up to 4 years	02	13.33
Up to 5 years	03	20.00
<b>Site of piles</b>		
External	07	46.66
Extero-internal	05	33.33
Internal	03	20.00
<b>Hb gm%</b>		
Above 10 gm%	07	46.66
8-10 gm%	05	33.33
6- 8 gm%	02	13.33
Below 6 gm%	01	06.66

**TABLE NO. 2 : EFFECT OF THERAPY ON SYMPTOM "STOPPAGE OF BLEEDING" IN THE DISEASE SHONITARSHA :**

n = 15	B. T.	A. T.
Mean	2.26	0.06
SD±	0.77	0.24
SE±	0.19	0.06
"t"	7.27	

**FIG 1 : EFFECT OF THERAPY ON SYMPTOM "STOPPAGE OF BLEEDING" IN THE DISEASE SHONITARSHA :**



## DISCUSSION

The patients of the piles are usually suffer from the complaints like chronic constipation, indigestion, hyperacidity, general weakness, irregular motions along with internal or external piles mass and with or without active bleeding<sup>5</sup>.

Most of the ancient scholars of Ayurveda like Acharya Charaka, Sushruta, Vâgbhata, Bhela, Sharangadhara, etc. have mentioned arsa as a chronic Tridoshaja disease of malashaya (Pakvashaya) with involvement of tvak, mamsa and meda and active bleeding is suggestive of vitiation of pitta along with Tridosha.

Most of the scholars of Ayurveda like Bhava mishra, Madanapala, Narahari, P.V. Sharma, etc. mentioned that Kutaja as having tikta and kashaya rasa, shita Virya and tridosha hara specially Kapha Pitta shamana properties<sup>1</sup>.

The aspect of chikitsa of arsha roga corresponds two components, preventive that includes regimen of Swasthavritta and curative like Antahparimarjana or internal purification i.e. shodhana, shamana, ahara, etc., Bahiparimârjana or external purification i.e. swedana, abhyanga, application of kshara, etc., and Shastrapranidhana includes several surgical methods. Internal administration of Churna of Kutaja tvak causes antahrparimârjana and shamana of vitiated internal doshas<sup>6</sup>.

From the observed result on general signs and symptoms, it may be revealed that due to tikta, kashaya rasa and shita virya of Kutaja bark, it will directly palliate pitta and sthambhana property of kashaya rasa will help to stop bleeding.

The highest duration of illness in this work was of 1-12 months duration. As the disease becomes chronic, the patients become frustrated and their number of attending O.P.D. also goes down.

Most of the patients suffering from piles were of non-vegetarian diet since the study was conducted in a city like Kolkata, where most of the people are non-vegetarian.

As in bleeding piles active bleeding occurs and anaemia is a common feature of Piles with reduced Hb%. The Hb% is comparatively less in chronic stage, but massive active bleeding may also lead to severe anaemia. Most of the patients had bleeding within 3 months and the patient comes to O.P.D. in acute stage of the disease.

Excellent response was found with improvement as symptom "stoppage of bleeding" as "t" value was found 7.27 (Fig. 1). But in some of the patients powder of *Holarrhena antidysenterica* Wall caused nausea and vomiting, probably due to its excessive bitter taste, apart from this no other unwanted effect was observed during the study. In modern therapeutic approach the effect of the drug on this disease is abrupt and when the drug is withdrawn the improvement goes away. But in this study, Kutaja tvak cûrna shows abrupt stoppage of bleeding and it is also observed that there had been no recurrence of bleeding.

The relief of symptoms "stoppage of bleeding" in Shonitarsha was achieved in due course but more prolonged treatment is required for complete cure and prevention of recurrence.

In the aspect of Ayurveda, Kutaja (*Holarrhena antidysenterica* Wall) has the definite principle of management that abruptly stops the bleeding as well as cures the disease Shonitarsha.

## CONCLUSION

Analysis of the data of the present study revealed Kutaja (*Holarrhena antidysenterica* Wall) tvak churna has highly significant role in stopping the bleeding in the disease Shonitarsha (Bleeding piles).

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It is a great pleasure for me to express my sincere and hearty gratitude to my beloved and highly

