

Effect of Rasaanjan Aalep in Ahiputan: An Open Clinical Study

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Abstract

Neonates, infants & early childhood are prone to get skin diseases due to delicate skin and less immunity. *Ahiputan* is one of the many diseases explained in *Ayurvedic* classics among children which is considered as *Ghora* and *Dhaarun*[1,2] which is caused by frequent stagnated urine, faeces and sweat around the anal region for longer duration, resulting into *Sphota* with *Kandu* around the anal region. The similar condition can be seen in diarrhea with anal excoriation and in diaper dermatitis. If it is ignored, lead to wide spread infection by bacteria or fungi necessitating vigorous and prolonged treatment. Study conducted with the age from birth to 03 years infants and toddlers with signs and symptoms of *Ahiputan* were randomly recruited from IPD and OPD of *Kaumarabhritya*, KLE's BMK *Ayurveda* hospital. Group was intervened with *Rasaanjan Aalep* and the patients were applied *Rasaanjan Aalep* on every stool passage for three days and observed on the basis of two grading criteria viz: 1. On the basis of area affected and 2. Skin color during and after the treatment on 3rd and 5th day respectively. An observation reveals that 68% improvement in skin dimension and 63.33% improvement in skin color between the follow up and after treatment. 87.8% improvement in skin dimension and 97.3% improvement in skin color from the 1st visit to after treatment. Hence the present study concludes that *Rasaanjan Aalep* is effective in treating the *Ahiputan*.

Keywords: *Kandu*; *Sphota*; *Dhaarun*; *Ghora*; Diaper dermatitis; Anal excoriation.

Introduction

Ayurveda is the eternal science of life. The knowledge of *Ayurveda* was passed orally through a lineage of sages in India until it was collated into text more than five thousand years ago which supports health without disturbing the natural intelligence of the body. Childhood is the important initial part of life. To become a healthy individual, childhood must be provided careful attention. Neonates, infants & early childhood are prone to get skin diseases due to delicate skin and less immunity. *Ahiputan* is one of the many diseases explained

in *Ayurvedic* classics among children. *Ahiputan* is caused by frequent stagnated urine, faeces and sweat around the anal region for longer duration, resulting into *Sphota* with *Kandu* around the anal region. Similar condition can be seen in diarrhoea with anal excoriation and in diaper dermatitis. If it is ignored, lead to wide spread infection by bacteria or fungi necessitating vigorous and prolonged treatment.[1,2,3]

Ahiputan is *Daarun* and *Ghora*. [1,2] The diarrhoea will increase the incidence rate in babies. [2] The prevalence of diaper dermatitis has been reported from 4-35% in the 1st two years of life and in India it is 13%. [4]

The skin is a largest and important organ which covers entire body and protects from invasion of micro-organisms but the infants skin cannot withstand the toxicity of most substances like urine and faeces as they make skin delicate [5] and skin is a potential portal of entry for invasive infective organisms in neonates and infants. Skin break down is very common during infancy period which will

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enhance the condition like anal excoriation and diaper dermatitis.[6,7]

In *Ayurvedic* classics some of the compounds are mentioned in concerned with the management of *Ahiputan*; *Rasaanjan Aalep* for *Ahiputan* is one among them,[8] *Rasaanjan Aalep* is easy to prepare and cost effective. It needed exploration and validation for today's medical science. Thus with the aim of assessing the effect of *Rasaanjan Aalep* in *Ahiputan* this study entitled "*Evaluation Of The Efficacy Of Rasaanjanaalep In Ahiputan: An Open Clinical Study*" was conducted.

In the present trial total 30 subjects who suffered from signs and symptoms of *Ahiputan* were recruited. Encouraging statistical results were found contributing a great deal in treating *Ahiputan*.

Materials and Methods

Ethical Clearance

Ethical Clearance been obtained from Institutional ethical Committee (IEC).

IEC No: BMK/PG/11/14

Source of Data

Diagnosed cases of *Ahiputan* were selected from IPD and OPD of *Kaumarbhritya*, KLE's BMK *Ayurveda* hospital and KLE's Kamal hospital Ankola and were recruited in the study.

Collection and Authentication of Plant material

The *Daruharidra* (*Berberis aristata*) was collected from GMP certified K.L.E Ayurvedic pharmacy Kasabhag Belgaum and was authenticated in AYUSH approved drug testing laboratory, Shree B.M.K. Ayurved Mahavidyalaya, Belgaum,Karnataka.

Method of preparation

The *daruharidra kwath* was prepared and equal quantity of *aja khseera* added and heated on *mandaagni* till it get solidify.

Dosage form & Dose

Method of Collection of data

The patients attending *Kaumarbhritya* O.P.D with rashes and discoloration over the perianal region as predominant symptom were screened. A diagnosis was done based on the *Lakshanas* of *Ahiputan* described in classics like *Spota*, *Sraava*, *Khandu*, *Daaha*, etc. The cases were recruited. Informed written consent was taken from parents. Evaluation of *Ahiputan lakshanas* was done before and after the treatment with the help of preformed parameters.

Diagnostic criteria

The diagnosis was made as per clinical signs and symptoms mentioned in *Ayurvedic* classics like *Spota*, *Sraava*, *Khandu*, *Daaha*etc.

Inclusion criteria

- Infants and Toddlers from birth to 3 years suffering from signs and symptoms of *Ahiputan*.

Exclusion criteria

- Infants under the medication for systemic and topical diseases and
- The children of above 3 years age group were excluded.

Duration of Study

The treatment period and total study period was done for 5 days. Progress during treatment was recorded periodically on 3rd and 5th day after the first application of *Rasaanjan*. The children were assessed before, during and after (on 5th day) study as per the graded clinical parameters. The variations in severity of *Ahiputan* were recorded.

Statistics

Non-parametric paired student't' test was applied to know the effect of drugs.

Table 1: Shows the gradation of skin color

Color	Grading	Before treatment	After treatment	
			72 hrs	120 hrs
No erythema	0			
Erythema without exudation	1			
Erythema with exudation	2			
Erythema with exudation and excoriation	3			

Table 2: Shows the gradation of area affected by the rashes

Area affected by the Rashes	Grading	Before treatment	After treatment	
			72 hrs	120 hrs
Nil	0			
1 to 2 cm	1			
2 to 3 cm	2			
3 to 5 cm	3			
More than 5 cm	4			

Assessment criteria

Assessment will be done on basis of gradation of objective clinical feature before and after treatment.

Discussion was done on following heading:

1. Discussion on observation
2. Discussion on action of drug.
3. Discussion on the Skin Dimension and color.
4. Discussion on Nidaanas.

Results**Discussion**

Parameters	Before treatment		After treatment		Changes from before and after treatment	
	Day 0	Day 3	Day 5	BT to Day3	BT to Day 5	
	Mean+SD	Mean+SD	Mean+SD	Mean+SD	Mean+SD	Mean+SD
Dimensions in sqcms	1.366±0.752	0.433±0.615	0.166±0.372	0.933±0.137	1.2±0.38	
% of change in Dimensions in sqcms				68% P=<0.0001	87.8% P=<0.0001	

5. Outcome of the study**1. Discussion on Observations**

Age: The present study does not conclude incidence of *Ahiputan* in particular age group, because of small sample size.

Sex: According to gender it was observed male babies had the more incidence than that of female babies. In present study 63.33% were males and 36.33% were females.

Habitat: The study revealed that, there is maximum involvement of patients from rural area 73.3%.

Diet: The study revealed that, maximum patients were belonging to mixed diet (66.7%). Study was conducted in coastal area (Anupadesha) where fish was the main food. And usage of more oily, fried and cold foodstuffs will leads to pitta-kaphja diseases.

2. Discussion on Rasaanjan

Action on skin lesion: The Rasaanjan is having Kashaya, Tikta rasa and Laghu, Ruksha guna all of these having Vranshodhan and Vranropan properties mainly Kashaya rasa have vranropan property hence the Rasaanjan facilitate to reduce the skin lesion.

Action on Color: Tikta rasa having rakt

dustinashak property so local application of tikta, kashay, rasatmak Rasaanjan normalize the stanik rakta prakop these way reduces the redness of skin and achieve normal skin texture.

Action on Irritability: Irritability of patients can be because of two causes either daha or due to itching. Daha is always aggravated by pitta and Kandu is due to Kapha and vata, Rasaanjan having ushna virya cause vatakapha Shaman and reduces irritability. Tikta kashaya rasa having pitta shaman property causes reduce in symptom of daha.

Exudation (Sraav): Exudation (srava) is mainly due to kaph dosh vikruti, Rasaanjan having ushna virya, Ruksha guna and Tikta, Kashay rasa which are kaphashamak property. All these together cause vikrutkaphnashan and kaphshaman and reduces discharge.

Kandu: Kandu is mainly due to kapha dushti. Rasaanjan having laghu, ruksh guna and ushna virya which helps in normalizing local kapha dushti thus helpful.

Spota (Rashes): Spota caused by the local Rakta/Kaphadushti, Tikta, Kashya rasa having Raktadushtinaashak property, so locally applied Rasaanjan helps to normalize the stanikraktaprakop these way reduces the Spota and achieve normal skin.

3. Discussion on the Skin Dimension and Color

1. *Dimension:* In trial group mean score of dimensions on day 1 was 1.366, by day 3 it was 0.433 which was significant and by 5th day of treatment it was 0.166 which was highly significant.
- 2) *Skin color:* In trial group mean score of skin color on day 1 was 1.366, by day 3 it was 0.5 by which was significant and by 5th day of treatment mean score was 0.233 which was highly significant.

4. Discussion on Nidaanas

- i. *Frequency of Stool:* In 30 patients it was found that 10 children had frequency of

motion more than 6 times a day. Along with this there was improper cleaning associated with it and most of the patients were affected with Ahiputan due to loose stools.

- ii. *Mutravega:* In all the 30 patients Mutravega was more than 2-3 times a day.
- iii. *Asuchita:* In all the 30 patients it was found that the daily regimen was not maintained. Cloths, nappies were not frequently changed proper hygienic condition such as malaprakshalan and it was found that all the children were cleaned roughly which might had increased the incidence of peri-anal skin break down.
- iv. *Kandu:* In the patients of Ahiputan no one parents presented the history of khandu directly but the parents gave history like irritability and sleep disturbance by this Khandu might be the cause for sleep disturbance and irritability which were subsided by third day
- v. *Pidika:* In all the patients pidikas were seen, out of 30, in 20 patients pidikas were subsided by 3rd day.
- vi. *Strava (Erythema with exudation):* In 30 patients, erythema with exudation was seen in 5 patients which subsided by 3rd day.
- vii. *Area affected from 1-2 cms:* Out of thirty patients, in 26 patients 1 to 2 cms area was affected and got subsided on 3rd day in 19 patients.
- viii. *Area affected from 2-3 cms:* Out of thirty patients, in 6 patients 2 to 3 cms area was affected and got subsided on 3rd day in 4 patients.

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