

REVIEW ARTICLE ON AHIPUTANA W.R.T NAPKIN RASH

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ABSTRACT

In *Ayurveda* a number of skin disorders has been described under the heading of *Kshudraroga*, *Ahiputana* is one of them. If mother fails to keep proper care of her child then they may suffer from many diseases and *Ahiputana* is one of them. Napkin rash is one of the most common skin disorder in infant and children. *Ayurveda* clearly states that main *Hetu* (cause) of *Ahiputana* is *Stanyadushthi*.^[1] Prevalence of Diaper rash has been variably reported from 7-35% in the first one year of life. Most cases occurs between 9-12 month of age.^[2] *Ayurveda* describe various disease of *Guda* region such as *Gudakutta*, *Anamika*, *Sannirudhguda*, *Gudabhransh* along with *Ahiputana*.^[3] According to *Ashtang Hridaya Mal uplepa* and *swed* both causes *Kandu*, *daha* and *tamra vrana* around the perianal region. In *Ahiputana* there is *pitta*, *kapha* and *rakta dosha prakop*.^[4]

KEYWORDS: *Ahiputana*, *Kshudraroga*, *Hetu*, *Stanyadushthi*, *Gudakutta*, *Anamika*, *Sannirudhguda*, *Gudabhransh*, *Mal uplepa*, *Swed*, *Kandu*, *Daha*, *vrana*, *Doshas*.

INTRODUCTION

Ayurveda is an ancient medical science which deals with the *swasthya* or normal health of human being as well as wide description regarding various diseases and their treatment.

Kaumarbhritya is the branch that deals with the mother and child relationship and their health, it also deals with *Kaumarbharana*, *dhatrī*, *Kshirdosha*, *dushta stanya*, *grahadosha* and their treatment. *Ahiputna* is well explained in most of *Ayurveda Samhitas*. According to *Ashtang Hridaya*, *Mal uplepa* and *Sweda* both causes *Kandu*, *daha* and *tamra vrana* around the *guda* area. In *Ahiputana* there is *pitta*, *Kapha* and *rakta dosh prakop*. Therefore, in treatment of *Ahiputana*, *Kaphapittashamak*, *vrananashak*, *twachya* and *kledhghana* drugs are used. In *Ayurveda* treatment which is described for the management of *Pittaj vrana* can be used for the management of *Ahiputana*.^[5]

If mother fails to keep proper care of her child than they may suffer from many diseases and *Ahiputana* is one of them. Diaper rash is one of the most common skin disorder in infant and children.^[6]

In modern medicine, it can be correlated with Diaper rash which is included in irritant contact dermatitis, diaper rash caused due to over hydration of skin, friction, prolonged contact with diaper, prolonged contact with urine and faces retained diaper. The skin of the diaper area may become erythematous and scaly,

papulovesicular or bullous lesions, fissure and erosions.^[7]

Derivation of *Ahiputana* and Its synonyms

An understanding of the synonyms will give a brief review about the nature of the disease and its finer details.

1. *Ahiputana*^[8] in Sanskrit means 'sores on the hold back part of the body'. *Acharya Indu* has related the disease *Ahiputana* to 'Putana-graha'.
2. *Matrukadosha*^[9] means a flaw which has maternal cause or that which comes from the mother; [*matruka* means maternal or belonging to the mother; dosha disorder or flaw]. This indicates that the illness is either due to improper care from the mother or due to vitiated breast milk which are said to cause the disease.
3. *Gudakuttaka*^[10] means that which cuts the anal region. [*kuttana* = cut]
4. *Prishtaru* means arus^[11] or sore in *prishtha*^[12] or back.
5. *Anamaka*^[13] means unspecified, unknown or iniquitous. The term is also used to denote piles or hemorrhoids which is also called by the name *Durnama*.

Nidana(etiology)

According to *sushruta*^[14]*Shakrunmutra samayukta*

Improper cleaning of *mala*, *mutra* of child gets attached to skin at perianal region. *Purisha* is the condensed part of *mala*, it gets attached to skin causes *shanic rakta*

kapha dushti. Along with this *mutra* has *kleda* property which causes wetness of skin and responsible for *kandu*. i.e itching at perianal region.

Sweenasya aswapyamanasya

Excessive sweating and its improper cleaning of perianal region causes inflammation of the skin.

According to astang hridaya^[15]

Mala upalepa

Purisha, *mutra* and *sweda* together having *drava guna* which causes *kandu* around perianal Region

Sweda: Excessive sweating causes *daha* at perianal region.

According to bhoja

Dushta stanya pana

Vatadi dosha are the causative factors for *stanya dushti*. The drugs used for *sthanashodhana* are *kaphapittaghna* hence we can conclude that *khaphaj pittaj stanya dushti* is the causative factor for *Ahiputana*.

Malasya adhabanam

Improper cleaning of perianal region of the children causes *Ahiputana*

Modern science^[16]

The aetiology of Napkin Rash is primarily non-infectious and multi-factorial. The main factors related to the cause of Napkin Rash are: friction, hydration, urine and faeces, pH, micro-organisms, skin maturation, type of nappy and diet.

Friction

This is one of the biggest pre-disposing factors for Diaper dermatitis due to the damage of the epidermal barrier caused by the constant friction of skin-to-skin or skin-to-diaper. This breach of the epidermis increases the chance of penetration of micro-organisms into the deeper layers of the skin. The convex areas (buttocks, genitals, lower abdomen and upper thighs) of skin covered by the diaper are most at risk for friction.

Hydration

Moistness of the skin is caused by prolonged exposure to urine and faeces. This results in a compromised barrier, leading to increased susceptibility to invasion of organisms and irritants.

Urine and faeces

Contained within urine and faeces are enzymes such as proteases and lipases, as well as bile salts which can cause an irritation to the skin and lead to a compromised stratum corneum, and thus an increase in skin permeability.

pH

Babies' skin has a higher absorbing capacity in comparison to adults, leading to higher hydration. This

results in a neutral pH (7), leaving the skin vulnerable for penetration and injury.

Roop (Sign & Symptoms)

According to Sushruta^[17]

Kandu (itching sensation): Due to *aprakshalana* of *mala*, *mutra* and *sweda*, it aggravates the *kapha dosha* and causes *kandu* at perianal region.

Daha (Burning sensation): It occurs due to vitiation of *pitta dosha*.

Sphota (blister): The vitiation of *pitta dosha* and *rakta dhatu* causes *sphota* around the perianal region.

Srava (discharge): It occurs due to vitiation of *kapha dosha*.

Ekibhuta vrana (Fused ulcer): The vitiation of *pitta dosha* and *rakta dhatu* responsible for *ekibhuta vrana*.

According to bhoj samhita: *Kandu*, *daha*, *ruja* and *pidaka* are the symptoms of *Ahiputana*.

The commentary of Indu depicts that child suffering from *Ahiputana* has loose motion which is *amayukta* foul smell with different colour and having foam over it.

According to *Yogaratanakar* and *Madhav nidan* itching around *guda* with or without discharge are the symptoms of *Ahiputana*.^[18]

Modern science^[19]

The rash may be mild erythematous reaction covering the perianal region, buttocks and genitalia. In others it may be severe with papulovesicular lesions and ulcers. Superadded infections with fungus or bacteria may further complicated the picture.

Samprapti (Pathogenesis)

Ahiputana occurs due to *dusta stanya pana* and *aprakshalana* of *guda Pradesh*. These causes vitiate the *kapha dosha* and *rakta dhatu*. Vitiating *kapha dosha* causes *kandu* and *srava* at *guda pradesh*. Whereas vitiated *rakta dhatu* responsible for *daha*, *ruja* and *tamra vrana utpatti*.

The irritants and micro-organisms found in urine, faeces and soap results in a disruption of the skin barrier when in contact with each other for extended periods of time. This in turn results in a disruption of the lipid bilayer of the epidermis, as well as cytokine release. The overall effect is inflammation, loss of cohesion, desquamation and an increase in trans epidermal water loss, due to the activation of mast cells, phagocytes and T cells. Due to the compromised barrier, irritants can then enter the epidermis more freely, which stimulates a further release of cytokines and a structural change in keratinocytes, which gives the clinical presentation of Irritant diaper dermatitis. If these irritants or micro-organisms are not

removed or treated, the process will continue and amplify making the dermatitis progressively worse, and secondly leading to further complications such as sepsis and severe trans-epidermal water loss.

Treatment

Ayurvedic approach

In Ayurveda, for the treatment of *Ahiputana* treatment is given in both mother and child. Medication are given orally to *Dhatri* for *stanya Shodhan chikitsa* and also for child for *Shodhan* caused by *Stanya Dushti*. Along this there are various local treatment available for treatment of *Ahiputana*. Ayurveda state that *Stanya Dushti* is a one of the cause of *Ahiputana* so we should treat mother as well as baby.

Stanya shodhan treatment for mother^[20]

According to *Vagbhata samhita*, some *Ayurvedic* herbs are given to mother by orally.

Kwatha of Pitta and Kapha Shamak drugs for mother, which are given in *Astang Hridaya*. Same *Kwatha* should applied over rashes of *Ahiputana* with honey and *Rasanjana*.

Herbs

1. *Amalaki*^[21]

Latin name-*Emblica officinalis*

Family-Euphorbiaceae

Amalaki has rich in vitamin-c and vit-c is involved in all phase of wound healing. During the proliferative phase vitamin-c (Ascorbic acid) contributes towards synthesis, maturation, secretion and degradation of collagen.

Acharya Priyavat sharma state that *Amalaki* has *kushthaghna* property and it has *madhura vipaka* and *shita virya* which has *pittaghna (pittashamak)* action.

2. *Haritaki*^[22]

Latin name-*Terminalia Chebula*

Family-Combrataceae

According to *Acharya Priyavat sharma*, *Haritaki* has *Madhur*, *tikta*, *kashaya* ras which act on *prakupit pitta*. *Haritaki* has *vranashodhana* and *shothahar* property.

3. *Bibhitaki*^[23]

Latin name-*Terminalia Belerica*

Family- Combrataceae

- *Bibhitaki* has *madhur vipaka* so it act as *dhatuwardhak* and also use in *sadyovrana* for bleeding and *vedanasthapana*.
- *Acharya Sushruta* also state *Stanya Shodhan* treatment as medicated *Ghritha (Patol, Triphala, and Rasanjana siddha ghritha)* for mother.
- *Patol, Triphala, and Rasanjana siddha ghritha* given to *Dhatri* for pana, it makes *kruchyasadhya Ahiputana Sadhya*.
- According to *Bhaishajya Ratnavali Acharaya* told that that *Stanyashodhan* of mother should be done by *pittashamak* and *stanya shodhan kwatha* and

developed perianal region should be cleaned by *triphala* or *khadira kwatha*. *Ghritha* medicated by *Karanja, triphala, and tikta dravya* can be applied on rash and also use as oral medication. *Rasanjan* can use local as well as orally.

Topical treatment for *Ahiputana*

1. *Lepa (Paste)*

According to *Sushruta*^[24]

Kasisadi lepa, Badara twak, saindhava and kanji lepa. Kapala churna, Tutha churna lepa.

According to *Astanga Hridaya*^[25]

Lepa of Tarksyasaila(rasanjana) mixed with honey, *Kasisadi lepa.*

According to *Astanga Samgraha*^[26]

Lepa of rasanjana with honey. *Lepa of gunja* seed powder.

According to *Bhavaprakash*^[27]

The paste prepared with *sankha, sauviranjana* and *yastimadhu* should be applied for *Ahiputana*.

2. *Awachurnan (Dusting)*^[28]

Yastimadhu, shankha, sauvirakanjana, sariva, sankhanabhi, kasisa, rochana, tuttha, manasila and haritala churna avachurnana. Asana twak churna avachurnana.

3. *Parisheka (Irrigation)*

According to *Sushruta*^[29]

Parisechana by *triphala, kola* and *khadira Kashaya* for *vrana ropana*

According to *Astanga Hridaya*^[30]

Decoction of *triphala*, barks of *badara* and *plaksha* used for *vrana parisechana*.

4. *Raktamokshana (Blood letting)*^[31]

Acharya Vagbhata has advised blood letting therapy by the application of leech if there is excessive inflammation and itching.

Do's (Pathya)

- Reduce use of diapers
- Use of cotton nappies
- Change the diaper once it is contaminated with feces or urine
- Keep diaper area always clean and dry
- Regular bath
- Wipe out excess sweat

Don't (Apathya)

- Continuous and prolonged use of diaper
- Rubbing over diaper area
- Use of strong scented, flavored wipes and lotions.
- Repeated use of allergic baby products

Comparison of *ahiputana* with napkin rashes

Factors	Ahiputna	Diaper rash
Age-Childhood	+	+
Factor – Improper hygiene of napkin are	+	+
Affects – Napkin area	+	+
Features – Itching	+	+
Inflammation	+	+
Ulcer	+	+

Differential diagnosis

- Seborrhoeic dermatitis
- Atrophic dermatitis
- Psoriasis
- Perianal streptococcal cellulitis
- Langerhans cell histiocytosis

DISCUSSION

Ahiputna is a skin disease involving *Kapha Rakta* predominance. It is commonly observed in infants especially of developing countries. During infancy the skin is continuous contact with urine, faeces and other wastes. The improper hygienic condition and increased perspiration with retention of sweat may leads formation of ammonia resulting skin burning and rashes in anal region. The anal region may observe with inflammatory condition, erythema, papules and scaling in *Ahiputna*.

CONCLUSION

Kapha and *Rakta shamak* treatment should be advised for the treatment of *Ahiputna*. *Pittaja* and *Vrana shodhaka* treatment also be helpful for treating *Ahiputna*. One of the main cause is *Stanyadushthi*, therefore oral treatment of mother is also important.

Prevention is better than cure, so the napkin should be changed when it became wet without any delay and maintain the hygiene of perianal region of children.

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