



## AHIPUTANA : A SHASHIVYA VYADHI- A REVIEW

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### ABSTRACT

Ahiputana (napkin rash) is one of the diseases of balaawstha (mainly infantile age) which is discussed by various Ayurvedic Acharyas in their respective literature. Acharya Sushruta described Ahiputana in Ksudra roga. According to Acharya Vagbhata, either due to malaoplepa (coating of faeces) or sweda (by excess of sweat), rashes develops in perianal region due to rakta and kapha doshas, which is tamravrana (copper coloured), with itching and later on associated with many complication. Diaper rash is a disease which occurs in infantile group having similar causative factors, sign/symptoms, pathogenesis as described in Ahiputna. It is more common in artificially fed infants and those with poor perineal hygiene. It is usually caused by skin irritation from prolonged contact with urine and faeces. It is usually seen around the groin and inside the folds of the upper thighs and buttocks. Various Ayurvedic medicines have been described in treatment of Ahiputana.

**KEYWORDS :** Ayurveda, Ahiputana, Diaper Rash.

### INTRODUCTION

Ahiputana (napkin rash) is one of the diseases of balaawstha (mainly infantile age) which is discussed by various Ayurvedic Acharyas in their respective literature. Acharya Sushruta described Ahiputana in Ksudra roga (Su.Nidan 13/59-60)<sup>1</sup> and Su.Chikts. 20/57-59)<sup>2</sup>. Acharya Vagbhata discussed this in A.San.Uttar. 2/121-127)<sup>3</sup> and A.Hridya. uttar. 2/69-75)<sup>4</sup>. Acharya Madhav (Ma.Ni. 55/50-51)<sup>5</sup> and Yogratnakar (Kshudraroga Chi.p. 274)<sup>6</sup> described the disease similar to Acharya Sushruta.

### PATHOGENESIS

According to Acharya Sushruta<sup>1</sup> ( Ni.13/59-60), due to non cleaning of perianal region after passing stools and urine by the child as well as no bathing after sweating of the child, Rakta and Kapha doshas got deranged which results into kandu (itching) of anal region, which further progress to saphota (abscess/rashes) formation. The discharge also develop in these abscesses.

According to Acharya Vagbhata (Astang Sangraha Uttarsthana 2/121-122<sup>3</sup> and Astanga Hridaya Uttarsthana 2/69-70<sup>4</sup>), either due to malaoplepa (coating of faeces) or sweda (by excess of sweat, rashes develops in perianal region due to rakta and kapha doshas, which is tamravrana (copper coloured), with kandu (itching) in affected area and later on associated with many complication. Some call this disease as *matrikadoshha, pautana, prsitharu, gudakutta, anamikha*.

Diaper rash is a disease which occurs in infantile group having similar causative factors, sign/symptoms, pathogenesis as described in Ahiputna. It is more common in artificially fed infants and those with poor perineal hygiene. Diaper rash is a generalized term indicating any skin irritation (regardless of cause) that develops in the diaper-covered region. It is usually caused by skin irritation from prolonged contact with urine and faeces. It is usually seen around the groin and inside the folds of the upper thighs and buttocks. Despite the word 'diaper' in the name, the dermatitis is not due to the diaper itself, but to the materials trapped by the diaper (usually urine and faeces). Skin is exposed to prolonged wetness due to materials trapped by the diaper, increased skin pH caused by urine and faeces -- Irritant diaper dermatitis develops --resulting breakdown of the stratum corneum -- The skin is more vulnerable to secondary infections by bacteria and fungi e.g. Staphylococcus, Proteus mirabilis, Enterococci, Pseudomonas aeruginosa, Candida albicans. Retention of sweat makes the area moist and macerated. Constant rubbing of skin causes erosion and denudation of

the skin. Bacteria grow easily in this environment and causes secondary infection.<sup>7</sup>

### TREATMENT

**Acharya Sushruta Chi.20/57-59)<sup>2</sup> gave following treatment:**

- Treatment includes Dhatri stanyasodhan.
- Apply a lepa over affected area made up of Kashish, Rochana, Tutha, Hartala, Rasanjana or Badar Twak and Saindhava.
- Also use kapala and tutha powder.
- **Acharya Vagbhata, (A.Sa.Uttarsthana 2/123-128)<sup>3</sup>** advised following treatment
- Stanyasodhan chikitsa – mother's milk should be got purified by administering medicine (Pittaslesmhar drvyas) to the mother by normalise pitta and shleshma doshas.
- The rashes or ulcers should be covered with paste made of mixture of tarkasyasaila with honey.
- The area must be washed with the decoction of barks of triphala, badar, palaksha twak.
- a paste made of kashisha, rochana, tutha, maohvia, ala, and rasanjana made with any amla liquid should be applied on the area or a fine powder of these drugs may be dusted on it.
- a fine powder of yasthimadhu, sankha, sovirkaanjana or of shariva and sankhanabhi or of bark of asana only.
- In case of excessive redness and itching, blood letting with jaloka (leeches).
- Ingestion of tarkshya in between meals.
- In **Astanga Sangreha** Hridya Uttarsthana 2/72-75)<sup>4</sup>, Acharya Vagbhata advised
- Purify dhatristanya with use of pittasleshmahar aushadhya.
- Parishechan on affected area by decoction of Triphala, Baer, palaksha twak and then apply lepa made of kshish, rochana, tutha, manashila, hartala, rasanjan and kanji, or sprinkle powder of said drugs over area.
- Sprinkle powder of yasthimadhu, shankha, soviraka on vrana
- Sprinkle powder of Shariva and Shanknabhi
- Apply lepa of Asan twak
- In case of raga and kandu, apply Jaloka for raktastrava
- All treatment of pittavrananashaka is beneficial in this disease.

In modern literature, the treatment include keeping the area dry or allow air-drying, changing your baby's diaper often, and as soon as possible after the baby urinates or passes stool. Avoid rubbing the area, so use water and a soft cloth to gently clean the diaper area with every diaper change. Put

diapers on loosely. Topical antifungal skin creams and ointments will clear up infections caused by yeast, fungi. Sometimes a mild topical corticosteroid may be used in acute cases.

Various ayurvedic drugs are described in treatment of Ahiputna which showed following properties as per ayurvedic and scientific experimental evaluations:

1. Rasanjan: It is the product of rasakriya of Daruharidra, *Berberis aristata*. Kaphanasak, vranadosahar, rasayana, chedaka are the property described by Bhav Prakash (Bhav Prakash Nighantu Haritkyadivarga p.122).<sup>8</sup> This plant reported antimicrobial activity,<sup>9</sup> anti-inflammatory effects.<sup>10</sup>
2. Yastimadhu (*Glycyrrhiza glabra*): According to Bhavprakash, yastimadhu has sheethvirya, balakarka, pitta-vata-rakta-shamman, cures vrana, shotha, visha etc (Bhav Prakash Nighantu Haritkyadivarga p.65).<sup>8</sup> It also reported antimicrobial activity,<sup>11</sup> antibacterial activities,<sup>12</sup> antifungal activity,<sup>13</sup> effective in dermatitis,<sup>14</sup> antiallergic effects.<sup>15</sup>
3. Triphala: Triphala (contains dried and powdered fruits of amla (*Embllica officinalis*), haritaki (*Terminalia chebula*), and bibhitaka (*Terminalia bellerica*) is a popular remedy in ayurveda and has kaphapittnashaka, and cures kustha, vishamjavara (Bhav Prakash Nighantu Haritkyadivarga p.12).<sup>8</sup> Triphala promotes healing,<sup>16</sup> anti-inflammatory effect.<sup>17</sup> Haritaki showed antinociceptive activity,<sup>18</sup> wound healing property,<sup>19</sup> antibacterial property.<sup>20,21</sup> Amalaki showed antimicrobial property,<sup>22</sup> and anti-inflammatory and analgesic activities.<sup>23</sup>
4. Khadira (*Acacia catechu*): Khadira tikta and kashaya in rasa, sheet, cures kandu (itching), krimi, shotha (inflammation), pitta-rakta-kapha-vikara (Bhav Prakash Nighantu Vatadivarga p.525).<sup>8</sup> *Acacia catechu* showed anti-inflammatory activity,<sup>24</sup> antimicrobial activity.<sup>25,26</sup>
5. Shariva (*Hemidesmus indicus*): Shariva cures javara, atisara, visha and tridosahara (Bhav Prakash Nighantu Guduchiyadivarga p.426).<sup>8</sup> *Hemidesmus indicus* reported anti-inflammatory and antipyretic activities,<sup>27</sup> antimicrobial activity.<sup>28,29</sup>
6. Kashisha: Shuda Kasisha has tikta, kasya, ushna and cures kandu, vata-kaphajanya roga, krimi etc (Rasa Bhaishajyakalpna p.195).<sup>30</sup>
7. Tutha: Tutha has following properties katu, kshara, kashya, lekhan, netrya and cures kandu, krimi, visha (Baishaja Ratnavali 2/58 p.19).<sup>31</sup>

## REFERENCES

1. Kaviraj Ambikadutta Shastri. Susruta Samhita edited with 'Ayurveda Tattva Sandipika' Hindi commentary, Part-I (reprint year: 2005), Chaukhambha Sanskrit Sansthan, Varanasi (India).
2. Sushruta Samhita by Kaviraja Ambikadutta Shastri, part-1, Chaukhamba Sanskrit Sanasthana, varansi, reprint edition 2005.
3. Astang Sangreha of Vagbhata, translated by Pooof.K.R.Srikantha Murthy, Chaukhamba Orientalia, Varanasi, reprint edition 2012.
4. Astanga Hridayam of Vagbhata, by Kaviraja Atrideva Gupta, Chaukhamba Prakashan, Varanasi, reprint edition 2011.
5. Madav Nidana, edited by Dr. Brahmananda Tripathi, Chaukhamba Surbharti Prakashan, Varanasi, Vol-2, reprint edition:2002.
6. Yogratnakar, commentary by Shrilaxmipatisastri, edited by Shribrahmasankar Shastri, Chaukhambha Sanskrit Sansthan, Varanasi (India), edition: 8th.
7. Ghai Essential Pediatrics, editor- O.P.Ghai, Piyush Gupta, V.K.Paul, Published by Dr.O.P.Ghai, Delhi, Edition:2004.
8. Bhav Prakash Nighantu commentary by Dr. K.C.Chunekar, edited by Dr. G.S.Pandey, Chaukhamba Bharti Academy, Varanasi (India), Reprint: 2004.
9. Pasrija Anubhuti, Singh Rahul, Katiyar Chandra Kant Dabur. Comparative study on the antimicrobial activity of *Berberis aristata* from different regions and berberine in vitro. JILPR 2011;1(1):2011.
10. Suresh Kumar Gupta, Renu Agarwal, Sushma Srivastva, Puneet Agarwal, Shyam Sunder Agarwal, Rohit Saxena, Niranjan Galpalli. The anti-inflammatory effects of *Curcuma longa* and *Berberis aristata* in endotoxin-induced uveitis in rabbits. Invest. Ophthalmol. Vis. Sci. September 2008; 49(9):4036-4040.
11. Mahboubeh Irani, Marziyeh Sarmadi, Françoise Bernard, Gholam Hossein Ebrahimi Pour, Hossein Shaker Bazarnov. Leaves Antimicrobial Activity of *Glycyrrhiza glabra* L. Iranian Journal of Pharmaceutical Research 2010;9(4): 425-428.
12. Manoj M. Nitalikar, Kailas C. Munde, Balaji V. Dhore, Sajid N. Shikalgar. Studies of antibacterial activities of *Glycyrrhiza glabra* root extract. International Journal of PharmTech Research 2010;2(1):899-901.
13. Tharkar PR., Tatiya A.U., Shinde PR., Surana S.J., Patil U.K. Antifungal Activity of *Glycyrrhiza glabra* Linn. and *Embllica officinalis* Gaertn. by direct

- bioautography method. International Journal of Pharm Tech Research 2010; 2(2):1547-1549.
14. M Saeedi, K Morteza Semnani, MR Ghoreishi. The treatment of atopic dermatitis with licorice gel. Journal of Dermatological Treatment 2003;14(3): 153-157.
15. Shin YW, Bae EA, Lee B, Lee SH, Kim JA, Kim YS, Kim DH. In vitro and in vivo antiallergic effects of *Glycyrrhiza glabra* and its components. Planta Med. 2007;73(3):257-61. Epub 2007 Feb 28.
16. Muthusamy Senthil Kumar, Shanmugam Kirubanandan, Ramasamy Sripriya, Praveen Kumar Sehgal. Triphala promotes healing of infected full-thickness dermal wound. Journal of Surgical Research 2008;144(1):94-101.
17. M. Rasool, E. P. Sabina. Antiinflammatory effect of the Indian Ayurvedic herbal formulation Triphala on adjuvant-induced arthritis in mice. Phytotherapy Research 2007;21(9):889-894.
18. Kaur Sarabjit, Jaggi R K. Antinociceptive activity of chronic administration of different extracts of *Terminalia bellerica* Roxb. and *Terminalia chebula* Retz. fruits. IJEB 2010;48(9):925-30.
19. Lonchin Suguna, Surjeet Singh, Pitchumani Sivakumar, Padmavathi Sampath, Gowri Chandrakasan. Influence of *Terminalia chebula* on dermal wound healing in rats. Phytotherapy Research 2002;16(3):227-231.
20. Anwesa Bag, Subir Kumar Bhattacharyya, Premananda Bharati, Nishith Kumar Pal and Rabi Ranjan Chattopadhyay. Evaluation of antibacterial properties of Chebulic myrobalan (fruit of *Terminalia chebula* Retz.) extracts against methicillin resistant *Staphylococcus aureus* and trimethoprim-sulphamethoxazole resistant uropathogenic *Escherichia coli*. African Journal of Plant Science 2009;3(2):25-29.
21. Kannan P, Ramadevi S.R., Waheeta Hopper. Antibacterial activity of *Terminalia chebula* fruit extract. African Journal of Microbiology Research 2009;3(4):180-184.
22. Sabahat Saeed, Perween Tariq. Antimicrobial activities of *Embllica officinalis* and *Coriandrum sativum* against gram positive bacteria and *Candida albicans*. Pak. J. Bot. 2007;39(3): 913-917.
23. Jaijoy K, Soonthornchareonnon N, Panthong A, Sireeratawong S. Anti-inflammatory and analgesic activities of the water extract from the fruit of *Phyllanthus emblica* Linn. International Journal of Applied Research in Natural Products 2010;3(2):28-35.
24. Gulzar Alam, Manjul Pratap Singh, Anita Singh, Roshan Patel. Investigation of anthelmintic, anti-inflammatory activity of leaves extract of *Acacia catechu* Willd. Journal of Pharmacy Research 2012,5(5),2587-2589.
25. Lakshmi T, Geetha R.V., Anitha Roy. In vitro evaluation of antibacterial activity of heartwood extract of *Acacia catechu* Willd. International Journal of Pharma and Bio Sciences 2011;2(2).
26. Bhawana Sunil Negi, Bharti P Dave. In vitro antimicrobial activity of *Acacia catechu* and its phytochemical analysis. Indian J Microbiol. 2010;50(4): 369-374.
27. Lakshman K, Shivaprasad HN, Jaiprakash B, Mohan S. **Anti-inflammatory and antipyretic activities of *Hemidesmus indicus* root extract.** African Journal. Traditional, Complementary and Alternative Medicines 2006;3:90-94.
28. Gayathri M, Kannabiran K. Antimicrobial activity of *Hemidesmus indicus*, *Ficus bengalensis* and *Pterocarpus marsupium* Roxb. Indian J Pharm Sci 2009;71:578-81.
29. Ratha, M, Subha. K, Senthilkumar. G, Panneerselvam. A. Screening of phytochemical and antibacterial activity of *Hemidesmus indicus* (L.) and *Vetiveria zizanoides* (L.). European Journal of Experimental Biology, 2012, 2(2):363-368.
30. Rasa Bhaishajyakalpna Vigyana by Santosh Kumar Sharma "Khandal", Publication Scheme Jaipur, India, Edition: 4<sup>th</sup>.
31. Kaviraj Ambika Dutt Shastri, Rajeshwar Dutt Shastri, editors, Bhaishyaratnavali, Hindi commentary, Chaukhambha Prakashan, Varanasi (India), edition: reprint, 2012.