

Ashwagandha Ghrita in Bal Karshya (Childhood Undernutrition)

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ABSTRACT

Aim of study: Karsya is very common disease in children of age group 6months to 5 years. In ayurveda Karshya is described as *Apatarpanajanya vyadhi* & Due to *Rasavaha Shrotodusti* where vata dosha plays a very important role in the pathogenesis, along with that vitiated Pitta. Aim of article is to review antimicrobial activity against various organisms and nutritional value of drug.

Material and methods: Literary review was conducted with help of several important Ayurvedic and Modern text books, Research papers, Journals to collect information on *Ashwagandha Ghrita*. The description of Karsya clearly correlates with under nutrition. Karshya is described in almost all samhita from both point of view i.e. preventive as well as curative. *Ashwagandha Ghrita* is described in Chakra Dutta (63/70), Yog. Ratnakar (Bal rog Chi. 44), Bha. Rat. (71/132). This yoga contains Goghrita, Ashwagandha Kalka, Godugdha and Water. Karshya is directly related to recurrent infections. This literary review article shows antimicrobial activity against various organisms.

Conclusion: Ashwagandha contains alkaloid and steroids and ghrita has yogvahi and Sanskaranuvarti properties and these are responsible for Increase in body mass.

Keywords: Karshya, Undernutrition, Malnutrition, *Apatarpanajanya vyadhi*, *rasavaha Shrotodusti*, Antimicrobial activity, *Ashwagandha Ghrita*.

INTRODUCTION

According to recently released National family Health survey NFHS-4 carried out in 2015-2016, 36% of India's children under the age of three years are underweight, 38% are stunted, 21% are wasted. Almost 11 million children are estimated to die before they reach the age of five. [1] Both girls and boys have a similar prevalence of under nutrition. It is more prevalent in rural areas (46%) than in urban population (33%) during the first 6 months of life, 20-30% children are already malnourished, often because they were born with low birth weight. The proportion of under nutrition starts rising after six months of age because of introduction on

unhygienic food intake which leads increase in predisposition to under nutrition. [2] Food (*Aahara*) is considered as one of the three sub-pillars of life as per Ayurvedic classics and *Ahara Dosha* (faulty dietary habits) is the main predisposing factor for *Karsya* among which *Alpashana* (reduced intake of food) and *Vishamashana* (false habit of intake) are especially responsible in the development of *Karshya*. Under nutrition is a major contributing factor for inadequate physical, psychological and intellectual development. Recent several researches suggest that major disorder of later life including Heart disease, Hypertension, & type-2 D.M. originate in children suffering from under nutrition.

MATERIAL AND METHODS

The literary review was conducted with help of several important Ayurvedic and Modern text books, Research papers, Journals to collect information on ASHWAGANDHA GHRITA which is used for the management of Bal Karsya (Childhood Undernutrition).

Undernutrition: Under nutrition is a condition in which there is inadequate consumption, poor absorption or excessive loss of nutrients. [2] Term Mal nutrition refers to both under nutrition and overnutrition. However, sometimes the terms Mal nutrition and PEM are used interchangeably with undernutrition.

Causes of Mal-nutrition:

- Low dietary intake
- Low Birth weight
- Recurrent Infections - Diarrhea, Pneumonia, Other Infection

Acharya Dalhan has explained the *Ati-Karshya* as its literally meaning is reduction in *Upachaya, Rupa* and *Bala*. [3]

Causes of Karshya: [4]

Dietary cause: *Kashaya rasa atisevan, Langhana, Pramitsan, Rukshaannapan Vatalaahara* etc.

Viharaja cause: *Atisnanabhayas, AtiVyayama, AtiVyavaya, Dhyana, Nidra Nigraha, Kshudha Nigraha, Pipasa Nigraha, RukshaUdvartan.*

Manasik Nidan: *Bhaya, Chinta. Krodh, Shok*

Samprapti/Pathogenesis: *Karshya* is the disease correlated with under nutrition which may be *Swatantra Vyadhi* (independent disease) or it may appear along with other diseases as a prestige symptom of complication. It is an *Apatarpana Janya Vyadhi* (disease caused due to under nourishment) where *Vata dosha* (bio-humor) plays an important role in the pathogenesis, [5] along with that vitiated *Pitta* (bio-humor). *Pachaka Pitta* (sub type of *Pitta*- digestive enzymes) leads to *Agni Dushti* (improper digestion) as a result of which the *Dhatus* (tissues) are not

nourished properly leading to *Anuloma Kshaya* (depletion of whole body tissues). This altered function of *Vata dosha* and *Agni* leads to insufficient production of *Rasa Dhatu*. Insufficient production of *Rasa Dhatu* takes place leading to *Dhatu-kshaya* chronologically.

Samprapti Ghatak:

- *Dosa - Vata*
- *Dusya - Rasa dhatu*
- *Agni- Jatha-ragni (Mandagni)*
- *Ama- formation of Ama due to Agnimandya*
- *Vyadhi-Sthan -Amasaya*
- *Srotas affected -Rasa vaha, Raktavaha, Medavaha and Mamsavaha,*
- *Type of Srotodusti -Sanga*
- *Rogamarga – Abhyantar-rogamarga*
- *Vyaktasthan -Sphiga, Udar, Uriba, Twak, Asthi*
- *Vyadhiprakar - Chirakari.*
- *Sadhyasadhyata – Kricchasadhya*

Rupa (Clinical features of Karshya): [6]

Aacharya Charaka, Sushruta and Vagbhatta have described almost identical symptoms of *Karshya* as *Shushk Sphiga Udar Griva* (Emaciated buttock, abdomen, neck region), *DhamanijalaSantatah* (Prominent venous network), *Twak-Asthi Shesh* (Skin bone appearance) *SthulaParva* (Prominent joint), Patient can't tolerate-*AtiVyayama* (excessive exercise), *KshutPipashaOushadha* (Hunger, Thirst, Medicines), *AtiShita Ushnamaithuna* (excessive cold- hot, sexual intercourse).

Upadrava of Karshya: [7]

The patients of *Karshya* are prone for developing following diseases like *Pleeha, Kas, Kshaya, Swas, Gulma, Arsha, Udar, Grahani*.

CHIKITSA SUTRA (PRINCIPLE OF MANAGEMENT):

1. *Laghu-Dravya-SantarpanChikitsa* should be advised in *Karshya-Rogi*. [8]

2. In chronic *Karshya* patients the refreshing therapy should be administered slowly depending upon the physical constitution, digestive power, *Doshas* vitiated, nature of therapy, dose, season and time of administration. For such patients, *Mansa Rasa*, *Ksheer* and Ghee of different animals, different types of *Brinhana Basti*, *abhyanga* and nourishing drinks are useful.

Yuktivyapashraya Chikitsa:

Vidarikandadi Churna [with milk & honey.] [9]

Talamkhana with goat milk.

Laja-Adi Yog (combination) is useful in malnutrition. [10]

According to *Charak Bringan Chikitsa* is helpful in *Karshya* [11]

Vidarikandadi Yog is a useful drug due to its *Bringhaneeya* effect [12]

Indigenous diet, drug *Shoshjit Yog* along with standard diet is a good alternative for the treatment of malnutrition as it enhances absorption of nutrients & increase the total serum protein. [13]

The roots of *Withania Somnifera* are used extensively in Ayurveda, categorized as a *Rasayana* which is used to promote physical and mental health and to provide defence against diseases [14]

Table 1: Antimicrobial property of Ashwagandha Ghrita

Sr. No.	Reference	Name of Micro Organism	Results
1	African Journal of microbiology Research vol 6 [22] pp. 4810-4815, 14 June 2012.	<i>E.coli</i> <i>K. pneumoniae</i> <i>S. pyogenes</i> <i>B. subtilis</i> Methicillin Resistant <i>Staphylococcus aureus</i> <i>P. aeruginosa</i>	This drug is effective against these bacteria
2	International Journal of Current Pharmaceutical Research ISSN- 0975-7066. Vol. 7 Issue 4, 2015 page 76-78.	<i>B. anth racis</i> <i>S. typhi</i> <i>C. pneumoniae</i> <i>C. albicans</i> <i>C. vaginitis</i> <i>B. dermafoidis</i> (Fungus) <i>E. coli</i> <i>B. thruengensis</i> <i>P. aeruiginosa</i>	This drug has inhibitory effects against these bacteria and fungus
3	Antibacterial effect of <i>Withania Somnifera</i> root extract on <i>E.Coli</i> , Veterinary World , EISSN; 2231-0916 VOL.8(1): 57-60 JAN 2015	<i>E. coli</i>	Aquous root extract of <i>W. Somnifera</i> has excellent potential as an antibacterial Agent against <i>E. Coli</i> .
4	Journal of Chemical and Pharmaceutical research 2011, 3 (3) : 260.263 ISSN No: 0975-7384	<i>E. coli</i> <i>P. aeruginosa</i> <i>Staphylococcus aureus</i> <i>S. mutans</i> <i>Candida albicans</i>	Methanolic Aq. root Extract of <i>W. sominifera</i> might be exploited as natural drug for treatment of several important diseases cause by these organism

Panchakarma Therapy (Purification)

In *Karshaya* (under nutrition) prominent *Dosha* is *Vata*. So *Basti* is the best therapy to win over the *Vata dosha*. [15]
Combination of *Kshira Paka* and *Kshira Basti* therapy in *Karshya* is better than individual therapy. Best result obtained in patients of *Karshya* due to the synergistic effect of *Kshira Paka* and *Kshira Basti* [16]

Different forms of drugs and combinations used in malnutrition:

Ghrit – *Ashwagandhaadi*, [17] *Shishu Shosh Nashak*, [18] *Kalyank*, *Shatpal*, *Trivrith*, *Brahmi ghrit*. [19]

Tail - *Lakshaadi Taila*, *Shosh-Nashak Taila*, [18] *Raj Taila* [19]

Kwatha - *Kakoli*, *Shirkakoli* with goat milk. [16]

Churna - *Swarn Bhasm* with *Ghee* & honey, [15] *Kusta Churna* [17]

Pathya- Apathya: (Congenial and Non congenial diet)

Pathya: ^[20] (Congenial diet)

Aahar: Freshly harvested rice, *Mansa rasa* of domestic marshy aquatic animals, *Dadhi*, Ghee, milk, Sugarcane, Shali rice, Masa, Wheat, Sugar and candy preparations etc.

Vihar: Sleep, joy, comfortable bed, abstinence from anxiety, sexual act and physical exercise, pleasant sight, regular oil massage, unctuous unction bath, use of perfume and garlands etc.

Ousadh: Enema consisting of unctuous and sweet drugs, elimination of *Dosas* in time and administration of rejuvenating and aphrodisiac drugs. *Payashya*, *Aswagandha*, *Salparni*, *Shatavari*, *Bala*, *Atibala*, *Nagbala*, etc. *Madhura* drugs should be administered.

Apathya: (**Noncongenial diet**): Intake of pungent, bitter and astringent substances, oilcake of mustard and til, honey, sexual indulgence, night awakening, excessive physical and mental exercise etc should be avoided in *Karshya*.

CONCLUSION

Karshya is a disease caused by nutritional deficiencies in which the body gets slowly emaciated. Mainly the gluteal region, abdomen and neck show gross bulk muscle loss and subcutaneous fat depletion. This condition is very much similar with under nutrition. Efficacy of Ashwagandha Ghrita on Shishu *Karshya* (Underweight Children) is described in many Ayurvedic Samhitas (Chakradutta 63/70 Page 273, Yog Ratna Balroga Chi. (443), Bha. Rat. 71/132). This drug contains natural steroids that enhances the protein synthesis and lipophilic activity that allows it to penetrate the cell membranes. An Increase in the capacity of internal organs, with increasing power of lungs probably due to increased amounts of alveolar line proteins of lungs. Ashwagandha contains alkaloid and steroids and ghrita has yogvahi and sanskaranuvarti properties and these are all responsible for Increase in body mass.

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