



Review Article

KARSHYA -A CRITICAL REVIEW ON NUTRITIONAL DEFICIENCY AS PER AYURVEDA

Lokhande Ketaki^{1*}, Sachchidanand², Khatun Hazera³

¹Associate Professor, Department of Swasthavritta, ²Assistant Professor, Department of Kaumarbhritya,

³Associate Professor, Department of Samhita siddhanta and Sanskrit, Vivek College of Ayurvedic Sciences and Hospital, Bijnor, UP, India.

Article info

Article History:

Received: 22-03-2022

Revised: 01-04-2022

Accepted: 08-04-2022

KEYWORDS:

Karshya, Under nutrition, Nutritional Deficiency, *Ahara*, Ayurveda.

ABSTRACT

Ayurveda emphasize prevention over cure. A balanced diet with proper dietetic rule can help avoid a lot of common health concerns. The source of life for all living beings is food, growth, strength, intelligence, satisfaction, all are established in food. Food is significant as a nutritional source, as well as having therapeutic value, and it plays an important part in regaining strength lost due to the disease's detrimental effects throughout the post-treatment phase and also excess exercise, or addiction too. Ayurveda classic haphazardly explain nutritional issues. Each and every disease is due to faulty *Ahara* and *Vihara*. *Ahara vidhi* is equally important to get optimum benefits from consumed food. Childhood malnutrition is thought to be the cause of 35% of all fatalities in children under the age of five, as well as 21% of total worldwide disability-adjusted life years lost in children. *Karshya* not only concerns with weight loss, but also compares with malnutrition-like disorders. In Ayurveda, *Karshya* is a disease as well as cause, prodromal symptoms, feature of different diseases and bad prognostic sign. *Karsha* is also a physiological in *Vataja prakriti* individual. This illness is linked to growth and development issues in children and adolescence group. In adults, malnutrition results in weakness, fatigue, low immune response, protein, vitamin, minerals, fats deficiencies, and more prone to degenerative diseases. The aim of this review article is highlighted the Ayurvedic perspective on *Karsha* in term of malnutrition. All material for this article is collected from classical Ayurvedic texts. Understanding the cause and pathophysiology and accurate treatment as per Ayurved classics all are discussed here elaborately.

INTRODUCTION

Malnutrition is a condition where relative or absolutely deficiency or excess of one or more essential nutrients. It includes- undernutrition, overnutrition, imbalance, specific deficiency. Malnutrition is classified into two major group- protein energy malnutrition and micro nutrients deficiency. Undernutrition is assessed by mid upper arm circumference, waist and hip ratio, and BMI -weight in kgs/height in meter.^[2]

Undernutrition (BMI- <18.5) is the state which occur due to insufficient food consume over an extended period of time. In extreme cases it is starvation (BMI- <16). It occurs when nutrients are consumed insufficiently, absorbed poorly, or lost excessively or extra demand to the body due to pregnancy, growth and malignant condition. Malnutrition is a phrase that encompasses both undernutrition and overnutrition. Malnutrition and Protein-Energy Malnutrition (PEM) are terms that are occasionally used interchangeably with undernutrition.^[1]

Children who are still growing are the ones who are most affected. Their nutritional condition is a sensitive indicator of the health and nutrition of their community. On the other hand, pregnancy, extra workload, long term diseases, post-surgery are the condition where individual suffer a lot from malnutrition.^[2]

Access this article online

Quick Response Code



<https://doi.org/10.47070/ijapr.v10i4.2339>

Published by Mahadev Publications (Regd.)
publication licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0)

The term *Karshya* means lean, feeble, emaciate, little. The word *Karshya* is derived from *Tanukarane dhatu* which means *Alpa, Suskshma*. As per *Dalhanacharya*, *Karshya* is deficient of *Upachaya, Bala*, and *Rupa*. *Ahara* placed in first position among *Tryopasthambha*.^[3] The '*Agni*' or digestive fire, which forms the architecture base, upon which the Ayurvedic treatment is based. It is the converting unit from 'food' into nutrition. *Mandagni* is a cause of malnutrition. Improper digestion, malabsorption is the result from *Mandagni*.^[4] According to *Acharya Charaka*, over lean (*Atikrushya*) people, as well as overfat (*Atisthaulya*) people, are classified as eight vile people (*Ashtaninditiya Purusha*).^[5] *Karshya* comes under cause, prodrome, sign and symptoms, complication, and bad prognostic sign. *Karshya* result from chronic disease as well.

There are numerous diseases in the realm of pediatrics for which modern medical science has no or limited answers. Growth and development are physiological processes that occur when all of the components that influence it are in good condition. When these components are missing, failure to flourish or being undersized for age occurs. Childhood malnutrition is thought to be the cause of fatalities in children under the age of five, as well as total worldwide disability-adjusted life years lost in children under the age of five. According to the National Family Health Survey (NFHS), 50% of India's children under the age of three are underweight, 45 per cent are stunted, and 27% are wasted.^[6] Children will die before reaching the age of five, with four million of them dying in their first month.^[7]

Undernutrition affects both girls and boys in the same way. Rural regions have a greater prevalence of undernutrition than urban areas. Children are malnourished during their first six months of life, frequently as a result of low birth weight. Because of the introduction of improper food is leading to an increase in the risk of malnutrition. Undernutrition is the outcome of insufficient food intake and repeated infection. It also adds on under height and weight. Worldwide focus is given to malnourished person as PEM- kwashiorkor, marasmus, xerophthalmia, iron deficiency anemia, iodine deficiency goiter, growth retardation etc.^[8]

MATERIAL AND METHODS

The material related to the *Karshya* manuscript was collected from Ayurvedic classics such as *Charaka Samhita, Sushruta Samhita, Kashyap Samhita, Ashtanga Hridaya. Astanga Sangraha*, Ghai Essential Pediatrics, text books of *Kaurmarabhritya* etc.

Etiological Factors (*Nidana*) of *Karshya*- Not only diet, lifestyle and psychological issue also play same important as an etiology of *Karshya*. Excessive intake of dry (non-unctuous) diets and drinks (*Ruksha Anna*

pana), weight reducing therapy (*Langhana*), intake of food in inadequate quantity (*Pramitashana*), overuse of therapeutic purificatory measures (*Kriya* i.e., over use of *Panchakarma* therapy), grief, (*Shoka*) suppression of natural urges (*Vega nigraha*) inadequate sleep or sleep deprivation (*Nidra vega vinigraha*), dry powder massage (*Ruksh udvartanam*), indulgence in baths (*Sanna abhyasa*), hereditary (*Prakriti*) old age (*Jara*) prolonged illness (*Vikara anushaya*) and anger (*Shoka*) make a person *Karshya* (lean).^[9]

Intolerable Factors of *Karshya*- The *Karshya* individual does not tolerate excess of physical exercise, (*Vyayama*), intake of food in large quantities (*Atisauhitya*), hunger (*Kshuda*) thirst (*Trishna*), diseases (*Amaya*) and drugs (*Aushadha*). They are also unable to withstand too much cold, heat and sexual intercourse (*Ativshita, Atiushna, Atimaitunam*).^[10]

Disease susceptibility of *Karshya* (*Upadrava*) *Karshya* individual are prone to following diseases like splenic diseases (*Pleeha*), cough, (*Kasa*) ematiation (*Kshaya*), dyspnoea (*Shwas*), *Gulma* (abdominal tumor with pain), piles (*Arsha*) abdominal disorders (*Udara roga*,) and disorders of *Grahani*.^[11]

Features (*Lakshana*) of *Karshya*- The excessively lean person has dried up that is fat loss especially from buttocks, abdomen and neck (*Shushka-sphic, Udarara, Greeva*), prominent vascular network (*Dhamanijala santataha*), remnants of skin and bones (*Twagasthi shesho*) with prominent joints (*Sthoola Parva*).^[12]

Pathophysiology (*Samprapti*) of *Karshya*- Those who engage in *Vata*-promoting diet, physical exercise, excessive sexual intercourse, strenuous study, anxiety, wakefulness at night, thirst, hunger, taking of astringents, partial starvation, etc., circulating *Rasa* being reduced in quantity fails to nourish the tissue due to insufficiency; thus, extreme *Karshya* (leanness/emaciation) occurs.^[13]

Vatadosha vitiates *Dugdha*, especially *Vairasa* (tasteless) *Dugdha* which is the cause of *Krishsta* in children. Apart from *Vata prakriti*, *Vataja gada* are the cause of *Krishya* in children.^[14]

Karshya Samprapti

Etiological factors diet, regime and physical work and psychological factors like *Vata vardhaka Ahara- Vihar* (*Ruksha annapana, Pramitashana, Langhana, Ativyayama, Ativyavaya, Chinta, Shoka, Kradha* etc.)

↓
Aggregation of *Vata dosha* specially *Rukshaguna briddhi*

↓
Upashoshana of *Rasa dhatu* result in *Apreenana* or *Alpapreenana*

↓
Insufficient *Rasa Dhatu* fail to circulate whole body

↓

Fail to nourish subsequent *Dhatu*s due to inadequacy
 ↓
 Manifestation of symptoms like *Sushka sphiga, Udara, Griva*
 ↓
Karshya

Factors involve in *Karshya* (*Samprapti Ghatak*)

Dosha- *Vata*

Dushya- *Rasa*

Agni- *Mandagni*

Srotas- *Rasavaha*

Srotodushti- *Sanga*

Adhishtana- *Sarva sharira*, especially *Sphiga, Udara, Griva, Twaka, Asthi*.

Avastha- *Chirakari* and *Asukari*

As per contemporary view, children up to the age of five who have significantly less physical development than their peers of the same age and gender. Weight below the 3rd or 5th centile and inability to gain weight over time or a shift in growth rate that has crossed two major centiles, e.g., 75th to 50th, during a period, are all examples of failure to thrive. In adult BMI less than 18.5 is term as malnutrition. [15]

Review of *Karshya* according to *Samhitas*

Karsha as a *Lakshana* (features) of diseases

1. *Sama sannipatika Jwara*.
2. *Vataja Unmada*
3. *Samanya lakshana of Udara*
4. *Vata-udara*
5. *Pleeha udara*
6. *Vataja Grahani*
7. *Kshyaja Kasa*
8. *Sleshmaja krimi*
9. *Purishja krimi*
10. *Arajaska yoni vyapad*
11. *Parigarbhika*
12. *Ksheraja Phakka*
13. *Vataja stanya dusti*
14. *Sahaja Arsha*

Karsha as a causative factor (*Nidana*) and predisposing Factors of other diseases

1. *Udara*
2. *Vata udara*
3. *Gambhira Hikkka*
4. *Sannipatika Atisara*
5. *Gulma*
6. *Shosha*
7. *Kshyaja Klabhya*

Karsha as a premonitory symptom (*Purvarupa*) of other diseases

1. *Arsha*
2. *Udara*

Karsha as a bad prognostic sign

1. *Shvayathu*
2. *Hikkka*

***Karsha* as a complication (*Upadrava*) of other diseases-** Individuals get emaciated due to long term diseased condition (*Vyadhi karshita*).

DISCUSSION

Karshya comes under *Rasaprodoshaja vikara* listed in the *Ayurveda Samhita*, which may be compared with malnutrition in contemporary science. It may be a primary factor for many diseases. As per *Ayurveda*, *Karshya* is a separate disease entity as well as causative factor, premonitory symptoms, feature and complication and also as a bad prognostic sign (*Arishta*). According to *Acharya Sushruta, Sthaulya and karshya* both depend upon *Rasa dhatu* whereas *Acharya Charaka* said it depends on *Ahara* and *Nidra* amongst the *Trayoupsthambha*.

It is very confusing and hard to differentiate from *Karshya to Shosha* and *Kshaya*. *Karshya* is due to *Rasadhatu vikriti* and *Vata* vitiation whereas *Kshaya* and *Shosha* are *Tridoshaja*. Except *Karshya prakriti* that is *Vata prakriti* (normal healthy lean individual), all other *Karshya* individual have special treatment protocol.

Though *Acharya Charaka* advice *Laghu santarpana* as a line of treatment for *Karshya*, but we must pay attention for *Langhana* also as it is a *Rasa Pradoshaja vikara*. *Sadya krisha* (acute) person such as *Vyayama, Bhara, Adhva, Vyadhi karshita* should be treated with *Sadhya santarpana*. On the other hand, *Abhyasa santarpana* is recommended for *Chira-krisha* (chronic). *Charakacharya* emphasized sound sleep, comfort living, relaxed mind, cheerfulness, devoid of over exercise, sexual act, bathing, unctuous massage, wearing white dress, use of fragrance and garlands etc., as a regimen for *Karshya*. In diet, person should advice to take *Navaanna, Shali* rice, wheat and its products, milk, *Dadhi, Ghrita, Mamsa-rasa, Ikshu-rasa, Guda-vikriti, Madya, Anuvasana basti*, timely *Shodhana, Rasayana, Vrishya yoga* etc. for *Karshya*. *Acharya Sushruta* advice all *Madhura dravyas* like *Payasya, Ashwagandha, Vidarigandha, Shatavari, Nagbala* and other *Madhur dravya, Diwaswapna* (day sleep), celibacy etc.

As per *Acharya Dalhana nirantana* (continuous) *Brimhana* is advised. *Acharya Vagbhatta* also recommended *Brimhana*. *Acharya Kashyapa* included *Karshya* in *Vatavyadhi*, so *Brimhana* is the choice of treatment. *Acharya Sharangadhara* followed the *Kashyapa's* view. Only *Acharya Bhavaprakash* described *Karshya* in detail as a separate chapter with *Nidana, Samprapti, Chikitsa*. *Acharya Yogaratnakara* explained *Karshya* in *Medo-roga-nidanam* and his view is almost similar to *Charakacharya*.

After thorough evaluation of all *Acharyas* concept, it is clear that they opined for the same treatment protocol i.e., *Brimhana* as a key for *Karshya chikitsa*. Whatever increases the bulk of the body mass

and makes it strong is known as *Brimhana* (nourishing therapy). Proper *Brimhana* gives *Bala*, *Pusti*, *Karshya-dosha-vivarjana* (free from disease of leanness). It reduced *Vata* specially *Ruksha guna* which is the main culprit for *Rasadhatu upashoshana*. Though *Brimhana* is treatment of choice but we should keep in mind *Karshya* is *Rasa-pradosha vikara* where *Langhana* therapy is main treatment. Out of ten *Langhana*, we have to choose particular type of *Langhana* like *Deepana*, *Pachana*, *Shodhana* etc., for individual. Hence *Laghu santarpana* is prescribed. To resolve psychological issues *Charakacharya* advised the use of fragrances and garlands having *Soumanasya* (to calm mind) property. *Snana*, *abhyanga*, *priyadarshanam* (good company) these all induces sound sleep. Ageing (*Jara karshya*), *Vatika* body constituent are well managed by *Brimhana* alone. To get optimum result *sura* should be used as *Anupana* in *Karshya* to get nutrition as well as to gain weight as, *Madya* has *Srotoshodhaka* property.

Karshya is not described as separate chapter in *Balaroga*. *Acharyas* cite nutritional deficiency disorders like *Kshiraja Phakka* and *Parigarbhika* which is caused by deficient nutrient (*Alpa Poshakansha*) breast milk of pregnant mother. Apart from above diseases there are so many diseases including, *Phakka*, *Stanya dusti janita vyadhi* etc. concerned with *Karshya*. Before going for treatment in children group (*Ksheerad*) we should consider the type of *Stanyadushti* in mother and treat accordingly. Commonly *Vatik Stanyadushti- Vairasya* variety results in *Karshya*. For the children group (*Ksheeranad*), treatment should be as per the type of *Stanya dushti* along with *Balya* and *Brihan* treatment in both mother and baby. As per *Acharya Kashyapa* children with *Alpa-mutra-purish* and *Deeptagni* who is *Krishna* and does not defecate for three days is advised for *Lehan*.

Apathya - Katu, tikta, Kashaya dravyas, Khali, Pinyaka (oil cake of mustard and sesame), *Takra, Madhu* etc. all kind of *Ruksha dravyas*, over exercise, over indulgence in sexual activity, excessive anger, grief and stress are prohibited.

CONCLUSION

Malnutrition is a term used in contemporary science to represent a condition that can be compared to *Karshya*. Nutritional disorders are still a crucial issue in third world countries like India. A holistic

examination of these illnesses provides insight into the dangers of nutritional insufficiency and reflects many elements of nutritional deficiency, as well as a good knowledge of the pathophysiology of the condition, which is prime factor for efficient care. Not only diet, life style and psychological issue also play an important role as an etiology of *Karshya*. Hence, we must pay equal attention in all factors for proper treatment.

REFERENCES

1. VG. Rao, Yadav R, Dolla CK, Kumar S, Bhondeley, Ukey M. Undernutrition and childhood morbidities among tribal preschool children. Indian J Med Res. 2005; 122
2. Paul Vinod K, Arvind Bagga. Ghai Essential Pediatrics. 8th edition, CBS Publishers & Distributors Pvt. Ltd., New Delhi. 2013, Page no. -95.
3. Khushwaha HC, Charaka Samhita (Hindi). volume-1, Varanasi, Chaukhamba Orientalia, sutrasthana-11\35, p-170.
4. Ibid; Chikitsathana- 15\5, p-377
5. Ibid; sutrasthana-21\3, p-309.
6. Paul Vinod K, Arvind Bagga (2013) Ghai Essential Pediatrics. (8th edition), CBS Publishers & Distributors Pvt. Ltd., New Delhi. Nutrition, Page no. 95-96
7. Mathad Vijayashree, Shivprasad S Malnutrition: A daunting problem for India's spectacular growth. Asian journal of paediatrics practice volume 16, No.1, 2012
8. Paul Vinod K, Arvind Bagga (2013) Ghai Essential Pediatrics. (8th edition), CBS Publishers & Distributors Pvt. Ltd., New Delhi. Nutrition, Page no. 95-96
9. Khushwaha HC, Charaka Samhita (Hindi). volume-1, Varanasi, Chaukhamba Orientalia, sutrasthana-21\3, p-309.
10. Ibid; Sutrasthana-21\11-12, p-311.
11. Ibid; Sutrasthana-21\14, p-311.
12. Ibid; Sutrasthana-21/15, p-311.
13. Murty.Srikantha KR, Sushruta Samhita (English). volume-1, Varanasi, Chaukhamba Orientalia, sutrasthana-15\33, p-108.
14. Mishra Devendranath, Abhinava Balaswatha Chikitsa Vijyana. Delhi. Chaukhamba Sanskrit pratisthana. p-389.
15. Parthasarathy A, IAP Textbook of paediatrics 2013 IAP, National Publication House Gwalior, Jaypee Brothers Medical Publishers (P) LTD, page no-130

*Address for correspondence

Dr. Lokhande Ketaki

Associate Professor,
Department of Swasthavritta,
Vivek College of Ayurvedic
Sciences and Hospital, Bijnor, UP.

Email:

drketakilokhande@outlook.com

Mob: 9766814248

Cite this article as:

Lokhande Ketaki, Sachchidanand, Khatun Hazera. Karshya -A Critical Review on Nutritional Deficiency as per Ayurveda. International Journal of Ayurveda and Pharma Research. 2022;10(4):146-149.

<https://doi.org/10.47070/ijapr.v10i4.2339>

Source of support: Nil, Conflict of interest: None Declared