



Review Article

MALNUTRITION & RELATED DISORDERS IN CHILDREN (KUPOSHAN JANYA VYADHI): AN AYURVEDIC OVERVIEW

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ABSTRACT:

The basic necessity of mankind is nutrition and diseases resulting from its inadequacy or overuse are most common in the Pediatric age group. Malnutrition is a condition which results when a child is deprived from essential nutrients, minerals, and calories. World Health Organization estimates that malnutrition accounts for 54% of child mortality worldwide, i.e about 1 million children. Another estimate also by WHO states that childhood underweight is the cause for about 35 % of all deaths of children under the age of five years worldwide. The etiology and features described under Karshya, BalShosha, Phakka, and Parigarbhikaresemble nutritional disorders. This article reviews and highlights etiology and management of malnutrition in children as per modern and ancient science.

KEY WORDS: Malnutrition, Kuposhan, Aptarpan, Santarpan, Ayurved

INTRODUCTION:

Malnutrition in children is common globally. The 2018 Global Hunger Index (GHI) report ranked India 103rd out of 119 countries with a serious issue of child wasting. At least one in five children under the age of five years in India are wasted. Malnutrition includes both under & over nutrition. The former is referred as 'Aptarpanjanya Vyadhi' and the latter as 'Santarpanjanya Vyadhi' in Ayurveda. Under-nutrition or malnutrition can be caused by an insufficient Intake of food or of particular nutrients or by an inability of body to absorb or assimilate these nutrients. On the other hand overnutrition is caused by overconsumption of food. Nutritional disorders interfere with growth and development and can be particularly serious in children, and may result in both short and long term irreversible negative health outcomes.

Aptarpanjanya vyadhi (Malnutrition in children) as per standard Ayurvedic Texts.

Etiology :-

As per Acharya Charak following can be the major etiological factors for undernutrition-

*“Vyayam anashanam chinta-rukshapramitashana |
Vaat aatapo bhaya shoko rukshapanam prajagar ||
Kapha shonita shukranam malanam chativartanam|
kalo bhutopghatasha gnatavya khsaya hetav|| ”* ¹

Major classification of malnutrition disorders in children :-

Karshya:

It is the condition of excessive emaciation. Excessive emaciation is caused by the intake of diet devoid of any fat, excess fasting, intake of

food in inadequate quantity, over administration of sanshodhan treatment or Panchkarma procedures, grief, suppression of natural urges including urge for sleep, repeated baths, hereditary factors, old age, chronic illness and stress.

Clinical features:

“Shushka sfika udar griva, dhamani jaalsantata |
tvagasthi shesho, atikrusha sthulaparva nara mata ||”^[2]

Buttocks, abdomen and neck of a child are wasted; a vascular network is visible on skin with prominent joints. Person appears to have skin and bones only. An excessively emaciated person cannot tolerate physical exercise, intake of food in large quantity, hunger, thirst, diseases and drugs. They also cannot stand excessive cold and heat. Such emaciated persons often suffer from splenic diseases, cough, wasting, dyspnea, gulma (abdominal tumor), piles, abdominal diseases and malabsorption diseases.^[3]

Principle of treatment:

Light and nourishing diet is prescribed for the nourishment of the Karshya patients.

Such diets being light, serve as stimulants of digestive power and bring about nourishment due to their nutritive property. Sleep, joy, comfortable bed, contentment, tranquility of mind, abstinence from anxiety and physical exercise, pleasant sights, intake of freshly harvested rice, fresh wine, meat soup of domestic, marshy and aquatic animals, well prepared meat, curd, ghee, milk sugarcane, shali rice, Phaseolus radiates, wheat, sweet preparations, enema consisting of unctuous and sweet herbs, regular oil massage, use of scents and garlands, use of white apparel, elimination of doshas in time and administration of rejuvenating and Brinhana (nutritive) drugs remove emaciation and bring out nourishment in the body.^[4]

BALSHOSHA

This disease of children is described by

Acharya Vagbhata. Indulgence in excessive sleep, intake of cold water and breast milk vitiated by kapha cause an imbalance in doshas and increase in Kapha in baby. This Kapha causes obstruction in Rasavahasrotas of child, which are the channels for nutrition, thus causing undernutrition.

“Atyaha svapna shitambu shleshmastanya sevitā |
shisho kaphen strotasu rasavahishu ||
arochaka pratishyayo jwara kasasha jayate |

kumaro shushyati tata, snigdha mukhaslakshna-akshan ||”^[5]

The undernourished child suffers from lack of appetite, recurrent respiratory infections, cough, fever, emaciation of muscles and paleness of face and eyes.

Principle of treatment:

To combat Balshosha, snehapana, use of anabolic herbs and preparations along with appetizers is recommended. Concurrently efforts are made to clear the obstructed channels and to purify the vitiated milk in the mother.

Phakka:

The word ‘Phak’ indicates the slow movements or creeping like a snail or failure of the skill of locomotion even after attaining age of one year. So when the child becomes crippled with wasting of body, apathy and slow movements, he is said to be suffering from Phakkaroga. Acharya Kashyap^[6] has described three types of phakka namely, Ksheeraj, Garbhaj and Vyadhij Phakka. Ksheeraj Phakka is similar to Balshosha and is caused by milk vitiated by Kaphadosha. Garbhaj phakka is caused when a mother whose baby is still exclusive breast feeding conceives again which results in decreased quantity and quality of mother’s milk. Vyadhij Phakka is caused by chronic illnesses and unhygienic conditions. It manifests as severe form of malnutrition with clinical features such as wasting of buttocks, thighs and upper limbs, pot belly, big head appearance, inability to walk etc.

*“Kalyanakam pibet fakka, shatapalam va yatha amrutam |
sapta ratrat param cha en trivrutta khiren shodhayet /”[6]*

The treatment depends on the cause. In case of milk impurity, the mother should be treated. In case of chronic diseases, attention should be given to treatment of such diseases. The treatment of Phakka includes snehana with Kalyanakaghrita followed by shodhana. Administration of drugs having property of activating the neuromuscular response like raasna, punarnava etc. along with Samvardhanaghrita is done. Nutritious diet must be prescribed like ghee, soups and mamsa rasa. Abhyanga with Raj Taila is advised to improve muscle tone. Rehabilitative measures like Tripad chakra ratha (Tricycle) are also advised to help child regain his locomotive ability.

Parigarbhika:

*“ Garbhinya pibet stanyam, parigarbhikam vrudhi tata |
matu-kumaro garbhinya stanyam prayah pibana-api ||
kaya-agni saad vamathu tandra karshya aruchi bhrama |
yujyate kostha cha tamahu parigarbhikam ||”[7]*

It is described by Astanga Sangraha which states that when a baby feeds on milk of a pregnant mother or there is an abrupt stoppage of breast milk to baby due to pregnancy of mother, the baby suffers from Parigarbhika. It manifests as respiratory illnesses, loss of appetite, vomiting, lethargy, abdominal distension. The treatment of Parigarbhika should be aimed at bringing the Agni to normalcy (correction of digestion and appetite). This is achieved by small doses of ghrita made of carminatives and digestive agents. Various Lehya preparations, Jeevaniya herbs and milk are also prescribed.

Sushka Revati:

Bal Grahaare a group of diseases of children which are caused by unidentified factors and carry a high mortality and morbidity rate. Sushka Revati is one of them and manifests as

progressive emaciation of all body parts, diarrhea, anorexia, skin changes, abdominal nodular swellings and geographic tongue.[8] General line of management includes personal hygiene measures anointment, bath and fumigation, isolation and disinfection of surroundings. Various drugs like swarnabasant malti, shilajatvadilauha, shringabhasma, vardhaman pippali and medicated ghrita are advocated.

DISCUSSION:

The various diseases described above represent a wide spectrum of protein energy malnutrition. BalShosha correlates well with caloric malnutrition and gives the child a marasmic appearance with white puffy and slimy face. On the other hand, Parigarbhika represents protein malnutrition (Kwashiorkor). It refers to the disregarded child consequent to the pregnancy. Karshya is a state of wasting (low weight for height) and stunting (low height for age) due to chronic malnutrition. Among three types of Phakka, Ksheeraj Phakka and Garbhaj Phakka have etiology and manifestations similar to BalShosha and Parigarbhika respectively. Vyadhija Phakka may be understood as protein energy malnutrition due to low intake of nutrients, chronic illness and malabsorption. This adversely affects the child development resulting in delayed milestones.

CONCLUSION:

Deficiency in nutrition inflicts long term damage to both individual and society. Malnourished children are more prone to infectious diseases such as pneumonia and tuberculosis, which leads to higher mortality rate. Ayurveda has precisely described the etiology, clinical features and treatment of malnutrition. A thorough study of the same equips us with a better understanding and enables us for an early diagnosis, apt management as well as prevention of nutritional deficiencies.

REFERENCES:

- [1] Tripathi R. Charak Samhita of Charaka, Sutrasthan, Kiyant Shiraseeya Adhyaya, Shlok 76-77. Varanasi: Chaukhamba Sanskrit Series; 2009.
- [2] Tripathi R. Charak Samhita of Charaka, Sutrasthan, Ashta Ninditeeya Adhyaya, Shlok 15. Varanasi: Chaukhamba Sanskrit Series; 2009.
- [3] Tripathi R. Charak Samhita of Charaka, Sutrasthan, Ashta Ninditeeya Adhyaya, Shlok 20. Varanasi: Chaukhamba Sanskrit Series; 2009.
- [4] Tripathi R. Charak Samhita of Charaka, Sutrasthan, Ashta Ninditeeya Adhyaya, Shlok 29-34. Varanasi: Chaukhamba Sanskrit Series; 2009.
- [5] Murthy K. R. Srikantha edited Vagbhatta's Astanga Hridayam. Vol III, Ch. 2/44-56

- Chowkhamba Krishnadas Academy, Varanasi, Reprint edition 2012; Ch. 2/44-56
- [6] Tewari P. V. Kasyapasamhita. Edition 1996. Varanasi. Chaukhamba Bharati Academy. ChikitsaSthana. Phakkarog chikitsa.
- [7] Sharma Shiv Prasad, Vridhha Vagbhat, Astangasangraha with shashilekha commentary, 1st edition. Varanasi, Chaukhamba Sanskrit series, 2006; Uttar Tantra. 3/21.

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