

A REVIEW ARTICLE OF AYURVEDA AND MODERN APPROACH FOR NUTRITIONAL DEFICIENCY DISORDERS

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Abstract- In this growing world, providing health care services and proper nutrition to children is still part of big plans. Whereas, through the data collected in last few years, the issues majorly seen in rural areas than in urban. Increasing urbanisation also deteriorate the quality of life in some areas due to overcrowding. The biggest disadvantage of poor livelihood is no basic health standards and malnutrition on broad spectrum leading to PEM, deficiencies, diarrhoeal and respiratory illness. Even infant feeding practices are not good enough to meet the requirements of children. Poor environment, improper sanitation, inadequate food security among people living out in areas with no basic necessities including mothers who feed their infants are affected equally that give rise to further more adversely affecting disease and disorders among children. Lack of public health sector services in areas where malnutrition is affecting inefficiently is the biggest drawback for the country. According to WHO 45% of child deaths are associated with under nutrition and 45 million children under 5 years are too thin for their heights. There are 4 different forms by which under nutrition can be understood – wasting, stunting, and underweight and deficiencies of micronutrients. From this classification, underweight are more prone to diseases and death. Well, the *Ayurvedic* approach for the children is always to provide them optimal health and well-being. *Ayurveda* elaborates the fact that how food is important for longevity and how important is it to know that in the initial growing stage maintenance of healthy lifestyle, good immunity, mental growth plays a major role. On this basis ‘*Swarnprashna*^{1,2}’ is given great importance under *Ayurveda*. In *Ayurveda* the nutritional disorders are considered as *Phakka Roga*³⁻⁷, *Parigarbhika*⁸, *Bala shosha*⁹ and modern correlation is termed as Protein Energy Malnutrition (PEM).

keywords: - karshaya, Krishta¹⁰. *Phakka Roga*, *Parigarbhika*, *Balshosha*, *Shushka Revti*, Protein Energy Malnutrition (PEM).

INTRODUCTION

For establishing a foundation for development and healthy survival, proper nutrition should be encouraged in daily routine of children. A balanced diet is crucial for completing the growth and development of child. In most of the cases preschool children face nutritional deficiencies. For potential growth and keeping the immune strong every food constituent should be included in diet as children are more prone to diseases. Poor nutrition starts from birth, generally continues into adolescence and adult life and can span generations. It is often irreversible. The first two years of life is the most crucial period of life as foundation of mental, physical and emotional development of a person appears to be fulfilled in this period of life. Improper intake and absorption raises the issue of PEM. Protein energy malnutrition is due to lack of protein and energy from calorie or both.

In *Ayurveda*, all the nutritional disorders are considered under *Aptarpanjanya Vyadi* including *krishta*, *phakka Roga*, *Balshosha*, *Parigarbhika*. In all the under nutritional conditions the body is affected by *Dhatu Kshaya*. *Khaya* indulges both *Anuloma Kshaya* and *Pratiloma Kshaya*. *Ayurveda* Works On The *Prakriti* And *Aahara* For Better Lifestyle And To Manage *Doshas* And *Dhatu*.

Krishta:- According To *Acharya Charka*, (It is the condition of excessive emaciation)¹⁰

शुष्कस्फिगुदरग्रीवो धमनीजालसन्ततः। त्वगस्थिशोषोतिकृशः स्थूलपर्वा नरो मतः॥

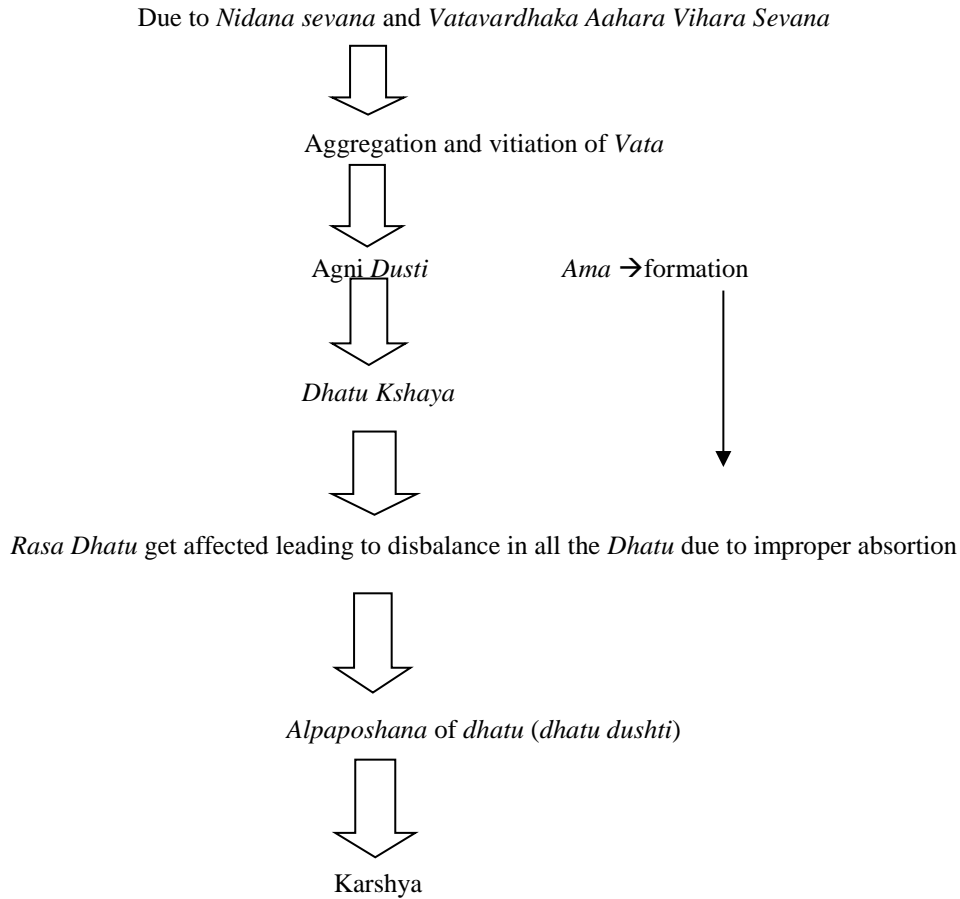
- Buttocks, abdomen and neck of a karshya patient are emaciated;
- a vascular network is visible on skin with prominent joints.
- Person appears to have skin and bones only.
- An excessively emaciated person cannot tolerate physical exercise.
- intake of food in large quantity, hunger, thirst, diseases 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

Etiology of *Krishta*:-

- *Rukshannpana sevan*(intake of dry and rough food and drinks)
- *Vegdharana* (suppressing natural urges)

- *Rukshudvartan*(non-unctuous anointing)
- *Krodha* (anger)
- *Ratrijagrana* (awakening at night)
- *Vyayam*(exercise)
- *AlapMatra Bhojan* (less intake of food)
- *Bhaya* (fear)
- *Sharama* (performing physical and mental activities more than capacity)
- *Adhyanna* (mentally stressing)
- *Upwasa* (fasting)
- *Beejadoshha* (heredity)
- *Vikara- Anushaya* (long term continued disorder) all these *nidana* (causes) may lead to *Krishta*.

Pathogenesis



Phakka Roga³⁻⁷

बालः संवत्सरापन्नः पादाभ्या यो न गच्छति सफक्क इति विज्ञेयः

The word *phakka* is understood as running down condition of the body. Normally a child who attains one year of age should be able to walk with support. And if he fails to do so he is said to have slow movements or creeping like a snail or failure of the skill of locomotion. So when the child becomes crippled with wasting of the body, apathy and slow movements, he is referred as suffering from *Phakka Roga*. *Phakka Roga* is described in two conditions: (1) *Samvatsarapanaha* – one year is ideal age of child to start walking. (2) *Samvatsaradudharva pratishtathi*. When child's ability to walk is impaired the condition is termed as *Phakka Roga*.

Classification on the basis of causes

Phakka Roga is represented as :-

धात्री श्लैष्मिकदुग्धा तु फक्कदुग्धेति संज्ञिता I तत्क्षीरपो बहुव्याधिः कार्शात् फक्कत्वमाप्नुयात् II

Phakka is classified into 3 types

- *Ksheeraja*
- *Garbhaja*
- *Vyadhija*

धात्री श्लैष्मिकदुग्धा तु फक्कदुग्धेति संज्ञिता I तत्क्षीरपो बहुव्याधिः कार्शात् फक्कत्वमाप्नुयात् II

1. *Ksheeraja Phakka* – Milk Vitiated By *Shleshma* Is Called *Phakka Dughdha*. The *Shleshma* of Milk Blocks The *Strotasas* Of The Body Which Results In Improper Nutrition Of Body Leading To *Shosha* In Child. This Is Understood As First Stage, If Child Continued To Feed With The *Phakka Dughdha* He Becomes Apathetic And Adopts Slow Movements Because Of Weak And Withered Body. It Becomes Disaster When Child Also Suffers With Dehydration From Loose Stools In Apathetic Child. Thus the *Sleshmika Dughdha* Causes *Ksheeraja Phakka Roga*. *Kashyapa* With Emphasis Reveals The Role Of *Kapha Dughdha* By Saying That Why Even The *Tridosha Ksheera* Should Produce Idiocy, Lameness And Dumbness.

गर्भिणीमातृकः क्षिप्र स्तन्यस्य विनिवर्तनात् I क्षीयते म्रियते वा अपि स फक्क गर्भपीडितः II

2. *Garbhaja Phakka* – The Parigarbhika Is An Early Stage Of *Garbhaja Phakka Roga*. The Early Weaning Of Child Due To Breast Milk. When The Mother Again Becomes Pregnant Requires More Attention Towards The Child In Proper Way And With Proper Feeding. If The Child Is Not Taken Care Properly N Respect To Feeding, The Sign Of Retarded Growth Is Seen As The Earliest Sign.

निजैरागन्तुभिश्चैव....रोज्वरादिभिः।अनाथःक्लिश्यतेबालः

क्षीनमांसबलददुति।।सशुष्कस्फिकचबाहुरुर्महोदरशिरोमुखः।पीताक्षोहृषिताङ्गश्च

द्रश्यमानास्थिपञ्जरः।।प्रम्लानाधरकायश्चनित्यमुत्रपुरिषकृत्।निश्चेष्टाधरकायोवापाणिजानुगमोऽपि वा।। दौर्बल्यान्मन्दचेष्टश्च मन्दत्वात् परिभूतकः। माक्षिकाकृमिकीटनां गम्यश्चासन्नमृत्युरुक्।विशीर्णहृष्टरोमा च स्तब्धरोमा महानखः। दुर्गन्धी मलिनः क्रोधी फक्कः श्वसिति ताम्यति।। अतिविण्मूत्रदूषिकाशिङ्घाणकमलोद्भवः।इत्येतैः कारणैर्विद्वान् व्याधिजां फक्कतां शिशोः।।

3. *Vyadhija Phakka* – As The Name Suggests The Resultant Of Prolonged Disease Is Seen As *Vyadhija Phakka*. Disorders Like Celiac Disease Like Enteropathy, *Grahani*, Lactose Intolerance And Many More Of Them Can Cause Malabsorption. This Will Result In Growth Failure, Emaciation And Finally Crippling.

Pathogenesis of *Vyadhija Phakka*

- When child is not taken care properly (anath shishu), may suffer from various diseases like fever, etc. Prolong suffering from exogenous and endogenous diseases may result in malnutrition.
- Anath shishu may be victim of different problems
- Probably due to poor socio-economic status and negligence they may not be able to prevent the diseases, hence more susceptible for diseases and later on gets severely malnourished.
- **Anatha Shishu**
Anath shishu may be victim of
 - child abuse
 - neglect
 - child labor
 - poor nutrition
 - psychological problems etc.

Features of *Vyadhija Phakka*

- Loss of strength, lustre and muscle wasting
- Buttocks, arms and thighs become lean
- The abdomen and head looks relatively bigger, due to the emaciation of the other body parts
- Eyes becomes yellowish and external body parts looks like skeleton
- Lower extremities becomes weak, resulting in slow and feeble movement. Therefore uses hand and knees to move.
- The severity of loss of movement incapacitates the child even to drive away the insects like house fly etc. Hence exists more contamination inviting secondary infections more easily.
- Due to metabolic disturbance of the body, the hairs are subjected for either falling or erection, nails becomes big, Polyuria and Diarrhoea may be resulted.
- Foul smelling odour from child due to dirtiness
- Child looks very irritable.
- Pattern of respiration is changed i.e. laboured breathing may occur at last.
- There is excess production of dhatu mala i.e. nasal secretions are increased.
- At last child becomes totally apathic, dull of unconscious and seem to be died.

Comparison between *Vyadhija Phakka*, *PEM* and *Rickets*^{3-7,11}

features	<i>Vyadhija Phakka</i>	<i>Marasmus</i>	<i>Kwashiorkor</i>	<i>Rickets</i>

1.Irritability	+	+	-	-
2. muscle wasting	+	+	-	-
3.Distended abdomen	+	+	-	-
4.Hair & nail Changes	+	+	+	-
5.Loss of sub-cutaneous fat	+	+	-	-
6.associated Features like Anemia, infections etc.	+	+	+	-

physiotherapy in phakka roga

- *Abyanga* –patient should be massaged with *RajTaila* . It can cure *Bandhyalva* and *Pangutva*
- Practice of walking should be started with the help of specially prepared tricycle (*Tricakra Phakka Ratha*)
- **Pathyapathya in phakka(Diet regimen)**
- Supplementation of diet is important factor in the management of *Phakka*.
- The child should be offered especially meat soup, cereals and medicated milk for prompt relief

Balshosha⁹:-

अत्यहः स्वप्न शीताम्बुश्लैष्मिक स्तन्य सेविनः / शिशो कफेन् रूद्धेषु स्रोतःसु रसवाहिषु॥ अरोचकःप्रतिश्यायो ज्वरः कासश्च जायते। कुमारः शुष्यति ततः स्निग्ध शुक्ल मुखेक्षणः॥

Balshosha is a *kaphja vyadhi*. If child repeatedly sleeps for a long time, drinks cold water and sucks kapha vitiated milk this will block the *rasavaha srotas* and child will suffer with

Aruchi (disinterest towards food),

Pratishaya (running nose)

Kasa (cough)

Shosha (emaciation)

Jwara (fever) and child may have paleness of face and eyes.

Samanya Nidan of Balshosha

Dhatu kshaya causing factors

They are well summarized in *Charaka Samhita*. These are -

- *Pertaining to food habits*

Anashana (avoidance of food), *ruksha* (dry), *alpa & pramita* (low in quantity as well as in quality) diet intake, intake of ununctuous fluids

- *Environmental factors and habits-*

Facing strong air current or sunlight, excessive exercise, awakening in nights, excessive loss of feces, Rakta, Shukra & Kapha, Bhooto-upghata and Adana kala

- *Psychological factors-Fear, tension, grief etc*

Nidana of Shosha-

- *Visham Bhojana* (Improper and unbalanced diet)
- *Dhatu Kshaya* (wasting of dhatus)
- *Sandharanama* (suppression of natural urges)
- *Sahasa* (work beyond one's power)

Nidan(pathogenesis) of Balshosha

Ashtanga Samgrahakara describes *Balshosha* for first time with its specific etiology and pathology, clinical features and treatment. Thus the *Nidana* mentioned by *Vagbhata* are *vishishta* to *Balshosha*. These are

- *Excessive sleep in day hours*
- *Excessive intake of cold water*
- *Excessive intake of Kapha vitiated breast milk*
- *Due to obstruction to rasavaha srotas and ill formation of Rasa dhatu leads to anuloma Kshaya of the subsequent dhatus (tissues). The poor nutrition of tissues results in emaciation of the child leading to the Balshosha.*
- *Due to the vishama / hina ahara (low calorie/quantity/quality diet), the Jatharagni will get hina indhana for the pachanakriya . Ultimately the dhatvagnis will get low quality/quantity of indhana. After digesting the indhana(low quantity) the dhatvagnis will start the dhatupachana itself. Ultimately there will be Sarvadhatukshaya leading to Balshosha (Marasmus).*
- *Due to causative factors there will be Kaphaprokop wich is further endagered by Balyavastha there will be mandagni and production of Amarasa wich may cause vaman, aruchi, atisar etc. leading to Rasakshay and Anulom kshay of Sarvadhatu and ultimately Balshosh will occur.*

- *Showing symptoms of Balshosha according to various Ayurvedic texts*⁹

symptoms	K.S	C.S.	S.S	A.S	A.H	M.N.	Sh .S.

<i>Arochaka</i>	-	-	-	+	+	-	-
<i>Pratishyaya</i>	-	-	-	+	+	-	-
<i>Jwara</i>	-	-	-	+	+	-	-
<i>kasa</i>	-	-	-	+	+	-	-
<i>Shosha</i>	-	-	-	+	+	-	-
<i>Snigdha mukha</i>	-	-	-	+	+	-	-
<i>Snigdha netra</i>	-	-	-	+	+	-	-
<i>Shukla mukha</i>	-	-	-	+	+	-	-
<i>Shukla netra</i>	-	-	-	+	+	-	-
<i>Shwas</i>	-	-	-	-	-	-	-

Differential diagnosis of *Balshosha* with *Ksheeraja phakka*^{9 3-7}

<i>Differentiating factor</i>	<i>Balshosha</i>	<i>Ksheeraja phakka</i>
<i>Nidana</i>	<i>Three main causative factors are excessive day time sleep, excessive intake of cold water and feeding of Kapha vitiated breast milk</i>	<i>Main causes are intake of Kapha vitiated breast milk and wasting due to other illness</i>
<i>rupa</i>	<i>Wasting(kumara shushyati tat) is the main feature with arochaka, kasa, jwara, pratishyaya etc. dhatu kshaya is the main feature causing wasting of total body</i>	<i>Main feature is inability to walk at the age of one year. There is weakness of snayu sansthan and dhatu kshaya is not the prime feature</i>
<i>Type</i>	<i>No types described</i>	<i>Is one of the three types of Phakka roga</i>
<i>Age affected</i>	<i>Total childhood age may be affected</i>	<i>Only infants are affected</i>

Differential diagnosis of *Balshosha* with *Rajyakshma*^{9, 12-21}

<i>Differentiating factor</i>	<i>Balshosha</i>	<i>Rajyakshma</i>
<i>Nidana</i>	<i>Three main causative factors are excessive day time sleep, excessive intake of cold water and feeding of Kapha vitiated breast milk</i>	<i>Four main causative factors are Sahasa, Sandharana, Kshaya Vishamashana</i>

Purvarupa	No prodromal features described	<i>Pratishyaya</i> , excessive sneezing, <i>shleshma praseka</i> , <i>mukha madhurya</i> etc.
Rupa	Wasting(<i>kumara shushyati tat</i>) is the main feature with <i>arochaka</i> , <i>kasa</i> , <i>jwara</i> , <i>pratishyaya</i> etc.	Divided into <i>trirupa</i> , <i>shadarupa</i> and <i>ekadasha rupa</i> on the basis of presence of clinical features
Type of Dhatuk shaya	<i>Anuloma kshaya</i> only	Both <i>anuloma</i> and <i>pratiloma Kshaya</i>
Age affected	Only childhood age is affected	Any age group can be affected
Sankramakata (communicability)	Non- communicable	Is an infective & communicable disease

Principle of treatment of Balshosha

- *Nidanparivarjan*
- *Srotoshodhan (Vaman etc.)*
- *Dosashaman (Deepan, Paachan, Kaphasaman)*
- *Nutrition to the Dhatus (Balya, Bringhaniya, Rasayan therapy)*
- *Vagbhata mentioned following yoga for the management of Balshosha. The following drugs are powdered, mixed with honey and ghrita.*
- *Saindhava, Trikatu, Sharangeshta, Patha, Maha Kadamba. This is quite useful for anorexia in an emaciated child.*
- *Powder of Ashok, kutki, Panchkola mixed with ghrita can be given for anorexia and emaciation.*
- *Suspension of powder of Bera, flowers of Dhai and Amalki churna mixed with ghee can be given to the child.*
- *Powder of Pippali, Trikatu, Patha, Murva, Shatavri mixed with honey*
- *Payashya, Prithakparni mixed with honey and ghee*
- He mentions the use of *Shishu shoshnashak shodhana ghrita, Shishu shoshjit ghrita, Shoshnashak oil and Lakshadi Tail for Balshosha.*

Kashyapa has described and stated that *Balshosha* is the primary stage of *phakka Roga* as milk vitiated by kapha is termed as *Phakka Dughdha* and after intake the child becomes emaciated. Intake in continuation makes the bodily movements slow than usual that is finally leading to *Phakka Roga*.

Chakradutta describes the condition as *Ahindika* or *Ahitundika* which is commonly called *Sukhandi*.²³

Parigarbhika⁸:-

मातुः कुमारो गर्भिण्याःस्तन्यं प्रायः पित्बन्नपि।कायाग्निसादवमथुतन्द्राकाश्यारुचिभ्रमैः॥ युज्यते कोष्ठवृद्ध्या च तमाहुः पारिगर्भिकम्। रोगं परिभवाख्यां च युज्यान्नाग्निदीपनम्॥

The word *Parigarbhika* means to humiliate or disrespect. Thus *Parigarbhika* indicated the disregarded child consequent to the pregnancy. A successive early pregnancy in the mother makes the child to be prematurely weaned. When the mother feeding adequate amount of milk but the milk has poor quality in respect to nutrients that is not enough to meet the body demands, this can give rise to *Parigarbhika*. Sign and Symptoms are fever, vomiting, cough and anorexia.

Clinical features of *Parigarbhika*

- *Agnimandya*
- *Vamathu* (nausea and vomiting)
- *Tandra* (drowsiness)
- *Karshya* (emaciation) vertigo

- *Aruchi* (poor appetite)
- *Brama*(vertigo)
- *Kostha vriddhi* (distention of the abdomen)

Treatment of *Parigarbhika*

Principle

1. *Agnideepana* is the main stay of treatment in *Parigarbhika*
2. *Guru* and *Snigda bhojan* after *Agnideepana*.

Compound drug-

1. A *Grita* made with *Pippali*, *Pippalimula*, *Chitrak*, *katuki* etc. with *Dahi*, *Kanji*, *Suramanda* should be given.
2. *Vidarikanda*, *Yava*, *Godhum* and *Pippali Churna* mixed with ghee should be given. Balanced nutrition should be maintained by giving milk along with honey and adequate amount of sugar
3. *Bhibhitak phalamajja*, *Yastimadhu*, *Kakoli*, *Ksheer-Kakolli* should be boiled in goat's milk and should be prescribed in *parigarbhika* patients.

*Shuska Revati*²² :-

..... पुरीषं हरितद्रवम् । जायते शुष्करेत्यां क्रमात् सर्वाङ्गसंक्षयः । केशशातो अन्नविद्वेषः स्वरदन्यं विवर्णता ॥
नानावर्णपुरीषत्वमुदरे ग्रन्थयः सिराः । रोदनं ग्रद्धगन्धित्वं दीर्घकालानुवर्तनम् ॥

Features of *Suska Revati*

Sn.no	Features of <i>Shuska Revati</i>	Koch's abdomen
1.	The child passes loose greenish stool, sometimes of various colours	+
2.	The abdomen present nodular feelings and appearance of prominent veins over it	+
3.	The child becomes gradually emaciated	+
4.	Associated features- i. fall of hairs ii. aversion from food iii. weak voice iv. discolouration v. excessive cry	+ + + + +/-

Treatment of *Shuska Revati*

- Treatment of *Skand Grah*(except *Dhupan* for *Skanda*)
- *Udvartan* with *Vacha*, *Aswagandha*, *Hingu* and *Sarsap churna*
- *Lepan*-with fecal matter of crow, vulture and donkey.
- *Dhupan* with *Shalyak*, *Kulir Kapal*, *Meshasringi* and nail and hairs of goat, elephant and donkey
- *Snan* and *Bali-snan* should be done under dried tree and at the same time *Bali* of *Masha*, *Madya* and *Shuska Mamsa* should be offered under that tree.

Modern aspect^{3,11}:-

After understanding the Ayurvedic definitions of Malabsorption, referring to modern, Malabsorption is the impaired nutrient absorption at any point where nutrients are not getting absorbed in the body resulting in under nutrition and malnutrition. Proteins, carbohydrates, fats, vitamin enriches cells and tissues for proper functioning of every organ of body. Protein is saved in two compartments i.e. somatic (protein saved in skeletal muscles) and visceral (protein stored in deep compartments of neck, head, trunk). We have already discussed about PEM earlier, considering the classification in reference to degree of the condition there is – Primary PEM (where there is deficiency of dietary protein and calorie) and Secondary PEM (caused by disease leading to secondary PEM). There is another classification considered according to symptoms – (1) Kwashiorkor – where there is deficiency of dietary protein. It is also known as Wet or Swollen or Oedematous malnutrition.

(2) Marasmus – deficiency of energy calorie. It is also termed as dry malnutrition or Non-Oedematous malnutrition.

Diagnostic criteria:-

- **Gomez classification:** Gomez classification is the oldest system of classification for classifying under nutrition in children based on percentage of weight and age.

First series	90% - 75%
Second series	75% - 60%
Third series	60% and below

- **Criteria Indian paediatrics association**

Grade of malnutrition	Weight for age of the standard (median)%
Normal	>80
Grade 1	71- 80 (mild malnutrition)
Grade 2	61- 70 (moderate malnutrition)
Grade 3	51- 60 (severe malnutrition)
Grade 4	<50 (very severe malnutrition)

• **WHO/FAO EXPERT COMMITTEE CLASSIFICATION:-**

Nutritional status	Body weight as% standard for age	Oedema	Deficit in weight for height
Under weight	80-60	0	Minimal
Nutritional dwarfism	<60	0	Minimal
Marasmus	<60	0	++
Kwashiorkor	80-60	+ / ++	+ / ++
Marasmic kwashiorkor	<60	+	++

Treatment

MANAGEMENT OF PEM: Management of PEM depends on –

- Nutritional status
- Degree of hyper metabolism
- Expected duration of illness
- Associated complications.

❖ **The goals are:**

- To minimize weight loss
 - To maintain body mass
 - To encourage body mass repletion or growth.

Chikitsa Sidhanta Ayurveda

The management of *karshaya* should be done as following:

- *Nidana Parivarjan*: *karshaya* is a *Vata Pradhan vyadhi* which is leading to *Agni dushti*. So avoiding *Vata Ahara Vihar* will prevent *Dhatu Kshaya*.
- *Agni Depana* and *p achana dravya*
- *Samshana chikitsa*: Providing conservative treatment like *shishushosh nashakaghrita*, *swarn yoga*, *vidarikandadi Ghrita*.
- *Brimhana chikitsa*: it is very useful as it nourishes *dhatu* which prevents *dhatu shaya*. *Brimhana dravya* are *Guru*, *sheeta*, *madhur*, *mridu*, *snigdha*, *bahal*, *sthoor*, *pichila*, *mand*, *sthir* and *slakshan* in nature that contribute in nourishment of *dhatu*. *Brimhana Dravya* to mother also.
- *Pathya sevana*
- *apthya tyaga*.

For Mothers

a) **Extirpation of vitiated Doshas**

- *Snehana* and *Swedana* should always be done to soften the body.
- *Shushruta* advised the oral decoction of *Nimba* with *Honey* and *Pippali*. This is repeated 3-4 and 6 times.
- *Agnivesha* describes decoction of *Vacha*, *Priyangu*, *Madanphala*, *Kutaja* and *Sarshapa* is indicated to taken to induce vomiting.
- *Haritki* can be used either with cow's urine, honey and *Triphala* (*Triphala* alone for laxative effect).

b) **Pathya Bhojan**

After extirpation, a regime diet is followed in a balanced state.

- *Yuva*, *Godhum*, *Shaali* or *Shastika dhaanya* with the dals of *Mudga*, *Masoora* and *Kulutha* made in the form of *Yusha* in which *Trikatu* and *Saindhavam* are added.
- Vegetables: twigs of *Nimba*, *Vetra*, *Vaartaaka*, *Amalaki* and *Naadi Saaka*.
- The meat soup of *Rabbit*, *Chataka* and the black antelope.
- Water boiled with *Aswagandha*, *Saptarni* or *Kutuki* should be used for drinking purpose.
- *Kashyapa* advises use of oils and ghee as suggested in *Vaajeekarna adhyaya*.

c) **Medications**

- *Stanya vishodhana* drugs: the *Paatha*, *Sunthi*, *Devadaaru*, *Musta*, *Murva*, *Gudchi*, *Kutaj beeja*, *Kiraata*, *Kutuki* and *Saariva*.

- *Stanya vardhan* drugs: the roots of *Veerana, Shaali, Shastika, Ikshu, Vaalika, Darbha, Kusa, Kaasa, Gundra and Utkataka. Kusamoola and Kaarpasamoola* are said to have Galactogenic effects. *Vidaari kanda* also have good Galactogenic effects. These drugs should be used with honey in cases of vitiation by Kapha and Ghritam in other cases either in the form of *Churana* or *Kwatha*.be followed.

DISCUSSION:

It can be said that kuposhan janya vyadhi/vikara are growth and developmental deficiency. On a wide spectrum the kuposhan vyadi are termed under karshaya. Parigarbhika, ksheeraj and garbhaj phakka are caused by alpa poshanansa in milk feeded by mother to the child. Balshosha, parigarbhika, phakka *Roga* all are closely relatable to protein energy malnutrition. The Causes of diseases may differ but deformities shown are similar in different ways. Leaning of body, vomiting, fever, diarrhoea are the common conditions seen in context to malnutrition. The management of sign and symptoms are done by understanding the pathogenesis of vyadi and treating it with *bhrighana* therapy as it results in *Dhatu Poshana* and with suitable *Aahar Vihara* sevana.

CONCLUSION: -

On the basis of above description it is clear that many nutritional disease explained in *Ayurveda* but in d in scattered manner in Ayurvedic text. in this article systematic study of these conditions with references provide us insight in to hazards of nutritional deficiency and represents different aspects of Nutritional deficiency disorders their sign symptoms and proper understanding of pathogenesis of the conditions as well as effective management.

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