Study the Effect of Yashtyadyam Ghrita in the Management Of Balashosha W.S.R. To Undernutrition

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Introduction

Equilibrium of Doshas and freedom from all the disease is health for this purpose thesages studied the sacred Ayurveda.

Ayurveda gives importance to Kaumarbhritya because this age determines how the person will become later on in his life. Balashosha is result of improper nutrition. Balshoshawhich can be correlated with undernutrition (P.E.M.) is one of such disease occurring in children due to hampered nutrition or Dhatuposhana. Thus, Balashosha can be defined as a condition in which child is emaciated acharya Vagbhata has mentioned three main causative factors for Balashosha viz excessive sleep in h excessive intake of cold water and excessive intake of kapha vitiated breast milk.

Undernutrition contributes to 60% of the 10million death globally that occurs every year among children under five years of age. The prevalence of underweight children in India is among the highest in the world. Undernutrition includes both protein-energy malnutrition and micronutrient deficiencies.

YashtyadyamGhrita mentioned in Ashtanghridya by Vagbhata is best in Balashosha. Hence an attempt was made to study the effect of YashtyadyamGhrita in the management of Balashosha (undernutrition). In a present study the anabolic effect of Ayurvedic drug i.e. YashtyadyamGhrita was studied in the under nutrients children and the results were found very encouraging and promising.

Aim And Objectives

AIM:
- To study the effect of YashtyadyamGhrita in the management of Balashosha w.s.r. to undernutrition.

Objectives:
- To study the Balashosha and undernutrition (according to Ayurveda &Modern text.)
- To study the effect of YashtyadyamGhrita in undernutrition.
- Efforts to avoid severe consequences of malnutrition in children.
- To establish beneficial effect of ancient mode of treatment in modern era.

Review Of Ayurvedic Literature

Utpatti:-

The term Balshosha is used by AshtangHridya and AshtangSangraha. In other Ayurvedic text it might have been described in another way.

Acharya Charaka in AshtounidatukiyaAdhaya has condemned eight types of condition in human being, which is extreme at its own. One of them is Karshya i.e. extreme emaciation.

In ShoshapratishedhtyaAdhyaya, Sushruta has defined Shosha as- Shrivelingsof Rasa, Rakta, etc. Dhatus is called as “Shosha”.

In KashyapaSamhitadescription of VyadhijanyaFakka has similarities with Balshosha.
In Madhav Nidan the babies fed with breast milk which is vitiated by VataDosha shows symptoms similar to Balshosa i.e. Krushangata, Kshamswar, constipation

Saindhantik Vivachan Of Balshosa:

Causes of Balshosa
- Excessive sleep
- Excessive intake of water
- Intake of breast milk vitiated by KaphaDosha.

Purvaroop:
- Anorexia
- Pratishyaya
- Fever
- Cough

Roop:
- Excessive emaciation.
- Wasting of muscles of thighs, buttocks and arms.
  Excessively emaciated person is unable to tolerate excessive physical exercise, hunger, thirst, cold and hot climate.
- Such people are often subjected to chronic diseases, cough, wasting and dyspnoea

Samprapati flow Chart:
Excessive Sleeping during day time, excessive consumption of cold water and breast milk vitiated by Kapha

Kapha along with Vatadoshdushty

Agnimandya

Rasavahastrotasobstruction

Subsequent Dhatus nourishment unable

Poor nutrition of tissue

Emaciation of the child

Treatment:
Balshosa is disease related with dhatu and its nourishment. Hence the treatment should be aimed at agitation of Jatharagni i.e. DeepanPachan along with proper nourishment i.e. Brimhana.
Modern Review Of Literature

Undernutrition:
It is a condition in which there is an inadequate consumption and poor absorption or excessive loss of nutrients.

Malnutrition:
It is a condition that develops when the body does not get the proper amount of protein, energy, vitamins and other nutrients which needed for maintaining healthy tissues and function of organs.

Protein Energy Malnutrition:
It is manifested primarily by inadequate dietary intake of protein and energy either because of the dietary intake of these two nutrients are less than required for normal growth.

Kwashiorkor:
weight loss and oedema are accepted as the main criteria to identify Kwashiorkor. Growth retardation, skin changes (lesions), abnormal hair, swollen belly, lack of growth, lack of stamina, loss of muscle tissue, vomiting, diarrhoea, hepatomegaly and children have a well-nourished appearance with some retention of body fat and even though sometissue wastage and weight loss are present, it may be over shadowed by the oedema.

Marasmus:
growth retardation and muscle wasting without oedema. UnderweightThe child is malnourished but does not have any features of marasmus or Kwashiorkor.

Diagnostic criteria for Malnutrition
Classification according to the Indian academy of paediatrics (IAP):

<table>
<thead>
<tr>
<th>Grade Of Malnutrition</th>
<th>Weight For Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORMAL</td>
<td>&gt;80%</td>
</tr>
<tr>
<td>Grade I</td>
<td>71-80%</td>
</tr>
<tr>
<td>Grade II</td>
<td>61-70%</td>
</tr>
<tr>
<td>Grade III</td>
<td>51-60%</td>
</tr>
<tr>
<td>Grade IV</td>
<td>&lt;50%</td>
</tr>
</tbody>
</table>

Age Independent Indices to diagnose undernutrition:
1. Mid Upper Arm Circumference (M.U.A.C.)
2. Skin Fold Thickness

Clinical Sign Of Malnutrition:

<table>
<thead>
<tr>
<th>SITE</th>
<th>SIGNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face</td>
<td>Moon face (kwashiorkor), simian facies (marasmus)</td>
</tr>
<tr>
<td>Eye</td>
<td>Dry eyes, pale conjunctiva, periorbital oedema</td>
</tr>
<tr>
<td>Mouth</td>
<td>Angular stomatitis, glossitis, spongy bleeding gums (vitamin C), parotid enlargement</td>
</tr>
<tr>
<td>Teeth</td>
<td>Enamel mottling, delayed eruption</td>
</tr>
<tr>
<td>Hair</td>
<td>Dull, sparse, brittle hair, hypopigmentation, broomstick eyelashes, alopecia</td>
</tr>
<tr>
<td>Skin</td>
<td>Loose and wrinkled (marasmus), shiny and oedematous (kwashiorkor), dry, follicular hyperkeratosis, patchy hyper and hypopigmentation (crazy paving or flaky paint dermatoses), erosions, poor wound healing</td>
</tr>
<tr>
<td>Nails</td>
<td>Koilonychia, thin and soft nail plates, fissures or ridges</td>
</tr>
<tr>
<td>Musculature</td>
<td>Muscle wasting, particularly buttocks and thighs; Chvostek or</td>
</tr>
</tbody>
</table>
Management Of Malnutrition:

Management of Mild - Moderate Malnutrition:
The patients are best managed in their own homes. The parents of such children are educated about the inadequacy in child’s intake and guided how to correct it.

Management of severe acute malnutrition:
1. Stabilization phase: Focus restoring homeostasis and treating medical complications and usually takes 2 to 7 days of inpatient treatment.
2. Rehabilitation phase: Focus on rebuilding wasted tissues and may take several weeks.

Materials & Methods:

60 diagnosed patients of Balshosha (undernutrition) attending OPD of Kaumarbhritya department of Ayurved Rugnalaya were selected randomly and divided equally into two groups.

Drugs:
Group A: Trial Group - YashtyadyamGhrita
Group B: Control Group – Goghrita.

Preparation of YashtyadyamGhrita:
YashtyadyamGhrita containing Yashtimadhu, Pippali, Lodhra, Padmak, Uttar, Chandan, Talishpatra, Sariva and Goghrita is prepared by the procedure given in Sharangdhar Samhita Sneha Kalpana Adhyaya.

Plan Of Study:
Selection of patients:
Open randomized controlled trial design was studied. Patients with the clinical features of Balshoshacoming under grade I & II were selected after screening with inclusion and exclusion criteria.

Study period: 8 weeks (60 days)
Follow ups: Assessment on 0–15th–30th–45th and 60th days.

Criteria For Selection Of Patient:
Inclusion Criteria:
1. Children age between 1 - 5 yr.
2. Children from grade 1st and 2nd undernutrition according to IAP classification.
3. Children of either sex, irrespective of religion socioeconomic status and food habit.
Exclusion Criteria:-
1. Severely malnourished children (grade IIIrd and IVth malnutrition of IAP).
2. Children suffering from infectious and chronic systemic disorder.
3. Children with chromosomal, genetic, metabolic or congenital disorder. Other systemic illness like T.B & HIV etc.

Subjective Criteria:-
○ Daurbalya.
○ KshudhaAlpata.

Objective Criteria:-
○ Weight for age.
○ Mid arm circumference.

Drug Regimen

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Group - A (Trail Drug)</th>
<th>Group-B (Control Drug)</th>
</tr>
</thead>
<tbody>
<tr>
<td>YashtyadyamGhrita</td>
<td></td>
<td>Goghrita</td>
</tr>
<tr>
<td>Time</td>
<td>Twice in a day. before a meal.</td>
<td>Twice in a day. before a meal.</td>
</tr>
<tr>
<td>Number of patient</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Anupan</td>
<td>KoshnaJal.</td>
<td>KoshnaJal.</td>
</tr>
<tr>
<td>Dose</td>
<td>2 - 10 Gm.</td>
<td>2 - 10 Gm.</td>
</tr>
<tr>
<td>Rout of administration</td>
<td>orally</td>
<td>Orally</td>
</tr>
</tbody>
</table>

Observations
Wilcoxon sign rank test and Paired t test for subjective and objective criteria respectively are used.

Result
Comparatively the effect of YASHTYADAMGHRITA (Group A) is significant than GOGHRITA (Group B) for Daurbalya, Kshudhaalpata, Weight, and Mid Arm Circumference of BALASHOSHA.

Discussion
Balshosha which can be correlated to undernutrition (PEM) of modern science is one of such disease i.e. occurring in children due to hampered nutrition or Dhatuposhana. Regarding to Samprapti of Balshosha, there are two main entities i.e. Vata-Kapha, Prakopa and Strotorodha, which ultimately leads to improper nutrition and emaciation of Dhatu. The goal of treatment is to provide adequate calories for dual purpose to replace the losses and build up nutrition to promote growth. Yashtyadyamghrita mentioned in Ashtanghridya by Vagbhatta is the best in Balshosha.

Conclusion
Most of the patients of Balshosha are between the ages of 1-5 years and male and female are equally affected by Balshosha. Statistical analysis showed that there is significant improvement in weight, height, mid upper arm circumference, Daurbalya and Kshudhaalpata in both groups. But trial group shows overall better results as compared to control group.

It concluded that comparison between trial and control groups showed insignificant results on most of the parameters. This may be due to around same, mean score found in both groups. It means that the result of control group was as good as the results of trial group. Trial Group shows better results individually.

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