

## GRAHANI- A CAUSE OF MALNUTRITION & ITS MANAGEMENT BY AYURVEDA

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### ABSTRACT

Malnutrition is a disturbance of the nutritional status resulting from a deficiency, excess or an imbalance of nutrients. It includes under nutrition and over nutrition. Malnutrition can be occurred by several ways, e.g. deficiency of essential nutrients, improper absorption and assimilation of nutrients. It may lead to group symptoms. Malabsorption syndrome is one of them. Malabsorption syndrome is characterized clinically by bulky, pale, frothy, greasy stool. Associated clinical features include weight loss, multiple nutritional deficiencies, anemia, dermatoses and bleeding tendencies. In *Ayurveda* it can be correlated with *Grahni Roga*. In *Astang Hridaya* this disease is introduced in the list of eight *Maharogas*. Clinical features of Malabsorption syndrome are also found in *Grahani Roga*. *Agni deepana* is the main principle of treatment told by all eminent authors and some other matters relevance has been reviewed. *Gangadharadi Vati*, *Vatsakadi Kashaya* and *Takrarishta* has shown definite significant result on the *Grahani Roga*.

**Keywords:** *Agnideepan*, *Grahani Dosha*, *Grahani Roga*, Malabsorption syndrome

### INTRODUCTION

What people eat is one of the major environmental influences on health, like immunoreactions & infections variation in nutrition can affect any organ of the body or several at once. Poor nutrition can lead to disease; however, disease may also precipitate malnutrition. Malnutrition can be occurred by several

ways, e.g. deficiency of essential nutrients and improper absorption and assimilation of nutrients. It may lead to a group symptoms- Malabsorption syndrome is one of them. In *Ayurveda* it can be correlated with *Grahni Roga*. In *Astang Hridaya* this disease is introduced in the list of *Eight Maharogas*.<sup>1</sup>

### The aims and objectives

- 1) To study *Grahani Dosh* and *Grahni Roga*- cause of malnutrition as described in *Ayurveda* & its comparison with Malabsorption syndrome
- 2) To study the best remedy for *Grahani Roga*

### DISCUSSION

There are two meanings of the word *Grahni*:

- (1) Organ and (2) Disease

#### **Grahani as an organ:**

- *Grahani* is the seat of *Agni* and situated above the *Nabhi* (Umbilical)<sup>2</sup>
- Sixth *Pittadharakala* is situated between *Amashaya* (Stomach) and *Pakvashaya* (intestine) receives and retains the food for digestion.<sup>3,4</sup>
- *Grahani* is small intestine where main digestive juices are secreted from Liver and Pancreas having properties of the *Pachakapitta*.

#### **Grahani as Disease:**

*Grahani Roga* is common disease in India & also superimposed over a pre-existing *Agni-Dusti*. It may also occur as a sequel of other disease like *Atisara* (Diarrhea).

- “*Durbalovidatiannam...Grahani gadah*”<sup>5</sup>
- “*Atisarenivruteapi...Grahanirogamahu*”<sup>6</sup>

*Grahani* is precipitated after *Atisara* (Diarrhea). A person who has been relieved of *Atisara* but it still having *Mandagni*, if he takes injudicious food, it leads to vitiation of *Agni* and then damages the organ *Grahani* and expels digested or Mal-digested substances. This

condition is termed as *Grahani Roga*. There may be three processes in the production of *Grahani roga* viz.

1. *Agni Daurbalya* (Weakened digestive power)
2. *DurbalaBala* (The holding capacity of *Grahani* is less)
3. *Dusta – Grahani* (The organ is damaged)

#### **Samprapti (Etiopathology) of Grahani-**

One who is suffering from *Atisara* or not taking *hitahara*, causes *Agnimandhya* (Impaired secretion of bile salt& pancreatic juice) which causes *Ama* formation (Undigested material). This will either cause *Srtorodha* (Obstruction) or *Suktibhva* (organic acid formation) leads to Improper *Sar-Kitta Vibhajan* (assimilation) and *Annvisha* (toxic substance) respectively. Improper *Sar-KittaVibhajan* makes *Dhatu Apusti* and *Dhatukshya* (Malnutrition). *Annvisha* irritates *Grahanikala* (membrane) leads to *Grahani Roga* which also cause *Dhatukshaya*.

#### **Difference between Grahani Dosa & Grahani Roga**

*Acharya Charka* has mentioned that *Vishama*, *Tikshana* and *Mandagni* may cause the *Grahani Dosa*<sup>7</sup> but *Grahani Roga* is the consequence of only *Mandagni*. *Chakrapani*<sup>8</sup> commented that in *Grahani Dosa*, *Grahani* passes the food in the stage of *Ama* (*Apakva*) because of weak *Agni* and affected by *Dosha*. It can be known that *Grahani dosha* is the previous stage of *Grahani Roga*. Functional disturbances of *Grahani* in relation with *Pachakagni* and in the holding of food, it will

lead to *Daurbalya & Balakshaya* (Malnutrition).

### Malabsorption syndrome

In Malabsorption syndrome inadequate absorption of nutrients from the intestinal tract especially the small intestine can be seen. It is characterized clinically by bulky, pale, frothy, greasy stool. Associated clinical features include weightloss, multiple nutritional deficiencies, anemia, dermatoses and bleeding tendencies.<sup>9</sup> Malabsorption syndrome classified into three categories, it may denote the various stage of *Grahani Roga*:

- 1) Inadequate digestion (*Agnimandhya*): That is needed for the lipid processing. It occurs mainly due to three causes -
  - Pancreatic exocrine deficiency
  - Intra-luminal bile salt deficiency
  - Disaccharides deficiency

Due to above causes, the digestion of food can't happen properly, which can be considered as '*Agnimandhya*'. In Ayurveda as the main symptoms of *Agnimandhya* is improper digestion so it is the first stage of *Grahani Roga*.

**Table 1:** Clinical features of Malabsorption syndrome are also found in *Grahani Roga, Atisrustamvibddha.....*<sup>10</sup>

No.	<i>Grahani Roga</i>	Malabsorption Syndrome
1	<i>Ama or Pakva mala pravritti</i>	Stool – observed to be bulky, sticky and tend to float
2	<i>Balakshaya ,Alasya</i>	Weight loss, Malaise
3	<i>Trushna, Aruchi, Jvara, Daurbalya</i> etc.	Nutritional anemia
4	<i>Sasthi - Parvaruka</i>	Bone pain related to os-

- 2) Inadequate absorption (*Grahani Dosa*): There may be a defective uptake of nutrients due to damage or scarcity of the absorptive epithelium. E.g. mucosal damage, inadequate absorptive surface. In *Ayurveda* it can be correlated with *GrahaniDosa*, as per our classics the main function of *Grahani* or *Pittadharakala* are; *Grahana* (Receiving of food materials), *Pachana* (Digestion), *Shoshana* (Absorption), and *Sarakitta vibhajana* (Assimilation).

So, if there is any disturbance in the function of *Grahani*, proper digestion and absorption can't take place. Therefore this type of Malabsorption may be considered as *Grahani* disease.

- 3) Lymphatic obstruction (*Srotorodha*): There may be defective transport of absorbed nutrients from the mucosa of the systemic circulation due to lymphatic diseases e.g. Lymphoma, Whipple's disease, Lymphangiectasia.

In Ayurveda, due to improper digestion *Ama formation* occurs and that causes *Srotorodha*, so *Rasdhatu* can't circulate in body and it will lead to *Dhatukshaya*.

		teopenic bone disease
5	<i>Shunapada</i>	Hypoproteinemia
6	<i>Chirkalanubandhi, Vidahoannasya</i>	Hypovitaminosis- chronic Diarrhea, Glossitis/ Stomatitis
7	<i>Parsva-Uru-Griva Vedna</i>	Peripheral neuropathy
8	Chronic diarrhea lead to <i>Artavhinta</i> and <i>Strishuaharshanam</i>	Amenorrhea & Infertility

So we could say that in *Grahani Roga* there are some similarities in symptoms and it also cause malnutrition if timely not cured.

### Management:

Injudicious food intake is the important etiological factor as a result *Annavisa* is formed and *Agnidusti* takes place which plays an important role in causing *Grahani Roga*. *Agni-deepana* is the main principle of treatment told by all eminent authors.

The classic general guideline is available in the management of the *Grahani Roga*<sup>11</sup>

*Snehana* (oleation therapy) – Internal and external planned *Snehana* are essential before purification

- *Swedana* (fomentation therapy) – external planned *Swedana* after *Snehana* before purification
- *Shuddhi* (elimination therapy) – *Panchakarma* procedure as per requirement
- *Langhan* (fasting therapy) – Fast or light diet
- *Deepan* (the therapy for the stimulation of the power of digestion) – likely *Laghu*, *Ruksha*, *Ushna Dravyas* e.g. *Chitrak*, *Sunthi*, *Marich*, *Pippli*
- *Churna* (powdered drugs) – *Pathyadi*, *Bhunimbadi*, *Nagradi Churna*
- *Lavan* (recipes containing salt) – Increase taste, digestion and elimination of Dosa.
- *Kshara* (recipes containing alkalies) – The most powerful digestive formula e.g. *Kshargutika*
- *Sura*, *Asava*, *Arishta* (alcoholic preparation) – specific formula to increase the digestive secretions.

- *Takraprayoga* (varies recipes containing buttermilk) – The most efficient therapy to cure *Grahani Roga*.
- *Deepan sarpias* (medicated Ghee) – To maintain digestive power forever.

### Treatment of different associated conditions:

- In *Kaphaja* type of *Grahani Vamana Karma* (Emesis) with *Ruksha*, *Deepan* and *Titka Raspradhana Dravyas* (dry, digestive stimulant and bitter taste drugs should be used). Weak patient with excessive aggravated *Kapha* should be treated by alternatively *Ruksha* and *Snigdha* therapies.
- *Sama* condition should be treated with medicated *Deepniya Ghrita* after proper examination e.g. *Panchkolghrita*
- In *Pittja* type of *Grahani Tikta*, *Deepan* and *Madhur Rasapradhana* drugs (bitter digestive stimulants with sweet ingredients) should be given.
- In *Vataja* type of *Grahani* medicated *Ghee* with *Amla*, *Lavan Raspradhana Dravyas* (sour, salty ingredients) should be used.

### Dietary management<sup>12</sup>:

**Avacharana** - Compound drug with four types of *Amla Dravyas* (*Vrikshamla*, *Amlvetas*, *Dadim* and *Badar*), 5 types of *Lavan* (*Saindhav*, *Suvarchal*, *Bida*, *audbhida* and *Samudra*), *Trikatu* (*Sunth*, *Maricha*, *Pippli*) and *Sarkara* (sugar) as per mentioned quantity in texts should be added daily in cooked food to enhance metabolism.

**Yavagu** - 5 types of medicated *Yavagu* (rice recipe with *Ghee*, curd and medicine) should

be added in daily intake to maintain intestinal mucosal membrane and enhance absorption.

**Yusha** – medicated soup with *Ghee* or oil and *Marich* (Black pepper) use to increase gastric secretions.

**Mutton soup** – medicated with *Amla* and *Snigdha Dravya* for proper nourishment.

**Drinks** – *Takra* (buttermilk), *Arnal* (a sour drink), *Madhya* and *Arishta* (a type of alcoholic drink) should be used to clear the channels and increase digestive capacity among of them *Takra* is choice of drink.

The above mentioned recipes with dietary regimen will work as fuel and when appropriately administered they will stimulate the power of digestion.

Some work has been done on *Grahani Roga* in *Kayachikitsa* Department, I.P.G.T. & R.A.Jamnagar.

1. *Grahani Roga Nidana Evam Chikitsatmaka Adhyaya*<sup>13</sup> – *Gangadharadi vati* including *Gngadhra Churna*, *Hingvasataka Churna* & *Kutajatwak Churna* in equal proportion was taken and modified into the tablet form as per convenient. Dose and duration was 3 to 10 gm/day 10 days to 2 months duration respectively. 40 patients of *Grahani Roga* were registered. *Gangadharadi vati* can be claimed dramatically efficacious in controlling symptoms and also increases appetite with Hb%.

2. Study of concept of *Agni* in relation to *Grahani* and its management by *Vatsakadi kashaya*<sup>14</sup>. Total 16 patients were treated in two groups.

- Trial Group- 7 patients treated with *Vatsakadi kashaya*, 30 ml/thrice daily for 5 week

- Control Group- 9 patients treated with *SvarnaParpati* 100 mg/thrice daily for 5 week

In *VatajGrahni* out of the *Vatsakadi kashaya* group of patients 81.44% relief was observed. In *Pittaja Grahani Vatsakadi kashaya* was little more effective 82.3% then the control group 69.44%. In *Kaphaja Grahani Vatsakadi kashaya* was effective to the 76% and in control group 75%.

3. Studies on the effect of *Takraishta* in *Grahani Roga* with particular reference to *Agni*<sup>15</sup>. Total 18 Patients divided into three groups.

- Test group- *Takraishta* 30ml thrice/day with equal portion of water for 4 week
- Control group- ingredients of *Takraishta* in powder form was given with *Takra* for 4 week
- Known Ayu. Control group- *Pancamruta parpati* 500mg thrice/day with water for 4 week

Both the group Test and Control showed marked (83.33%) of appetite to their normal status. *Takraishta* has been shown definite significant result on the number of motion/24 hours ( $p < 0.01$ ) being similarly effective on the consistency of the stool (82.33%). Hb% was increased significantly in the patients of *Parpati* group ( $p < 0.05$ ). There was significant rise in S.total protein ( $p < 0.05$ ) in control group. The freshness of buttermilk has more contribution in regards to nutritive property of *Takra* than formation. *Takraishta* yielded highly significant result in regards B.M.R. ( $p < 0.001$ ).

*Gangadharadi vati* has shown efficacy on controlling the symptoms of *Grahani Roga*, whereas *Vatsakadi kashaya* was better in *Pit-*

taj type of *Grahani Roga* and *Takrarishta* is definitely useful in *Grahani Roga* patients who have developed Malabsorption syndrome.

## CONCLUSION

In *Grahani Dosa*, *Grahani* passes the food in the stage of *Ama (Apakva)* because of weak *Agni* and affected by *Dosha*. It can be known that *Grahani Dosha* is the previous stage of *Grahani Roga*. Funtional disturbances of *Grahani* in relation with *Pachakagni* and in the holding of food, it will lead to *Daurbalya & Balakshaya* (Malnutrition). *Ayurvedic* management for Malabsorption syndrome is as follows-

- Inadequate digestion we should use *Langhana* (fasting), *Deepan* and *Pachana* drugs. e. g. *Panchkola*, *Shadushna* etc.
- Inadequate absorption – we should use medicated Ghee e.g. *Tiktaghrita*
- Lymphatic obstruction- *Takra*, *Madhya*, *Arnal*, *Asava*, *Arishta*, *Kshar Kalpna* should be used. e. g. *Takrarishta*, *Drakshasava*, *Madhvasava* etc.
- Gluten and lactose free diets are recommended in Malabsorption syndrome as per modern science likewise rice and butter-milk are preferred according to *Ayurveda*.

## REFERENCES

- Prof. K R Srikantha Murthy, *Astanga Hridaya*, vol-II. Reprint 2013, Chaukhamba Krishnadas Acadamy, Varanasi. Nidans-thana, 8/30. Page no. 83
- Shashtri Girijashankar Gujarati, *Charak Samhita*, Part 3. 3<sup>rd</sup> Edition 1996. Sastu sahitya vardhak karyalaya, Ahmedabad. Chikitsasthana, 15/55-56. page no.653
- Vaidya Jadvji Trikamji, *Sushrut Samhita*, Nibandhsangrah Commentry of Dalhana-charya, Chaukhmba Surbharti Prakashana, Varansi, 2008. Uttattantra, 40/169. Page no. 709
- Prof. K R Srikantha Murthy, *Astanga Sangrah of Vridha Vagbhata*, vol-II. Reprint 2012. Chaukhmba Orientalia, Varansi, Sharirsthana, 5/23. Page no. 64
- Shashri Girijashankar Gujarati, *Charak Samhita*, Part 3. 3<sup>rd</sup> Edition 1996. Sastu sahitya vardhak karyalaya, Ahmedabad.. Chikitsasthana, 15/50-51. page no.651
- Vaidya Jadvji Trikamji, *Sushrut Samhita*. Nibandhsangrah Commentry of Dalhana-charya, Chaukhmba Surbharti Prakashana, Varansi, 2008. Uttattantra, 40/167. Page no. 709
- Shashri Girijashankar Gujarati, *Charak Samhita*, Part 3. 3<sup>rd</sup> Edition 1996. Sastu sahitya vardhak karyalaya, Ahmedabad. Chikitsasthana, 15/71, page no.651
- Shashri Girijashankar Gujarati, *Charak Samhita*, Part 3. 3<sup>rd</sup> Edition 1996. Sastu sahitya vardhak karyalaya, Ahmedabad. Chikitsasthana, 15/50-51, page no.651-652.
- Davidson's Principle and Practice of Medicine, 18<sup>th</sup> Edition, Page no.618-620.
- Shashri Girijashankar Gujarati, *Charak Samhita*, Part 3. 3<sup>rd</sup> Edition 1996. Sastu sahitya vardhak karyalaya, Ahmedabad. Chikitsasthana, 15/51-69, page no.652-657.
- Dr. Ramkaran Sharma And Vd. Bhagvandas, *Charak Samhita*, Vol.1 Edition Reprint 2014, Chaukhamba Sanskrit series office Varansi ,Chikitsa sthana Chapter 15/196 to 200. Page no.65 to 67

12. Dr. Ramkaran Sharma And Vd. Bhagvash, Charak Samhita, Vol.1 Edition Reprint 2014, Chaukhamba Sanskrit series office Varansi ,Chikitsa sthana Chapter 15/111 to 119 to 200. Page no.45, 46
  13. Dr. B.S.Tamagonda, Dr. C.P.Shukla, Dr. S.K.Vashishtha; Grahani Roga Nidana Evam Chikitsatmaka Adhyayana, 1976, I.P.G.T. & R.A., GAU. Jamnagar.
  14. Dr. P.S.N.Bhatt, Dr. S.K. Mishra, Dr. Gurdipsingh; Study of concept of Agni in relation to Grahani and its management by Vatsakadi kashaya. 1980, I.P.G.T. & R.A., GAU. Jamnagar.
  15. Dr. R.M. Pathak, Dr. S.K. Mishra, Dr. Gurdipsingh; Studies on the effect of Takraishtha in Grahani Roga with particular Reference to Agni. 1981, I.P.G.T. & R.A., GAU. Jamnagar.
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