A CONCEPTUAL STUDY OF VATAJA GULMA W.S.R TO PATHOGENOMONIC OF INTESTINAL OBSTRUCTION - A REVIEW ARTICLE

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ABSTRACT

Gulma roga (tumor mass) is one of the Astamahagadha (one among 8 incurable disease) explained in Ayurvedic classics due to its severity and incurableness. Gulma is an Annavaha Sroto gata vikara in which Vata Dosha plays a major role in the samprapthi. All Bruhatrayi has mentioned Gulma as separate chapter which increases its importance. It is named as Gulma because its shape is similar to that of Shrub or Bush. It is a Sparshopalabhya (palpable mass), Paripinditatwath (hard and round in shape). Vataja Gulma is one of the types of Gulma which cannot be considered as tumor because of its unalike nature. Nidana (etiological factors), Samprapti (pathogenesis), Poorvaroopa (precursors symptoms) and Roopa (signs and symptoms) of Vataja Gulma is discussed in this article in detail, with consideration in terms of visible peristaltic wave. In modern science visible peristaltic waves are seen in almost pathognomonic of intestinal obstruction.

Key Words: Vataja Gulma, Peristaltic Movement, Intestinal Adhesions, Hernias, Colon Cancer, Intussusception

INTRODUCTION: The concept of Vataja Gulma in Ayurvedic science is very difficult to understand. While going through the different treatises it is understood that Vataja Gulma is a type of obstruction that develops in Mahasrotas (pakwashaya pitta kaphaashaye)¹. It can be compared to mechanical obstruction happening in the intestine where visible peristaltic movement is one of the most important clinical sign. The nidanas, samprapti, poorvaroopa & lakshans mentioned in Vataja Gulma are very similar to the visible peristaltic movement which is seen in intestinal obstruction condition. In modern science intestinal obstruction is due to so many conditions like Intussusception, Cancer of the colon, Abdominal Hernias and Intestinal Adhesions.² In this article an attempt is made to explore the concept of Vataja Gulma with the contemporary science.

MATERIALS AND METHODS: Data Selected from Ayurveda classics, Modern textual references, Digital helpline for Ayurveda Research Articles and so on are searched from JSS Ayurveda Medical College, library to compile the evidence the study of Vataja Gulma w.s.r to Pathognomic of Intestinal Obstruction.

NIDANA OF VATAJA GULMA

Vataja Gulma can be compared to benign neoplasms because many of the signs & symptoms and etiology, pathology of Vataja Gulma are like that of benign neoplasms developed in small intestine⁹.⁰

1. Garbhajanjya: Yadaa purusho vatalo garbharambhham prabhu vatabahula: Whoever developed immunodeficiency by birth. The modern views on this topic
reveals that “the familial predisposition and hereditary” play a role in the development of cancer.

2. Viharajanya:
- Jwara vamana virechana atisara ayatam karshanena—loss of weight due to fever, vomiting, diarrhea, and faulty procedure of shodhana therapy such as inducing vamana, virechana and asthapana basti etc, may cause irritation in koshtha.
- Deha atisamkshobhana — Repeated irritation due to motion of the body may cause vata prakopa.
- Atipeedana — Constant pressure or irritation on organ.
- Abhighata (bhyabhigahata)– Irritation due to external injury.
- Vichestana-virudhachesta -Balavta vigrahaadibhi: Improper activities leading to injury.
- Vata mootra pureesha veghadharana – Suppression of natural urges like stool, flatus and urine
- Asneha poorva vamana virechana – Faulty procedure of shodhana therapy causes irritation and provocation of vata in the koshtha.
- Anudheerna chardi mudheernaat – Inducing vomiting forcibly without occurrence of proper vega, irritate the koshtha and may cause vata prakopa.
- Bhubhikshita channani langhana plavanadi deha samkshobhanam– Indulging in physical activities such as jumping and swimming etc. soon after the intake of food cause irritation in the koshtha.
- Vyayama—Excessive physical activities.
- Vyavaya–Over sex cause aggravation of vata in general. Modern observation on this shows that penial cancers. The cancer of cervix linked to the factors such as, the age at first coitus, frequency of coitus, multiplicity of partners.
- Shoka - Sadness can cause vata prakopa.
- Yaana–Traveling leading to vata prakopa.
- Cankramana–Walking longer distance will cause vata prakopa.
- Vishamaaasanasthaanashayana– Sitting and sleeping on uneven surface.

Aharaajanya nidana
- Langhana–Frequent fasting may cause constipation as well as malnutrition which in long run may cause the Vataja Gulma.
- Sheeta rooksh ahara– Intake of cold and dry food may cause vata prakopa in annavahasrotas leading to constipation, hence may cause Vataja Gulma.
- Navodaka paana–Excessive intake of fresh rain water one of the cause of Vataja Gulma.
- Atimadya paana –Alcohol abuse predisposes to the development of cancer of liver, esophagus and oropharynx
- Vatala ahara atimatra sevana– Habit of eating pungent, bitter and astringent food followed by repeated langhana may give rise to provocation of vata in the koshtha and leads to constipation, malnutrition and deficiency of vitamin A and E. These are risk factor of developing colonic cancer because vitamin E has some protective influence by its antioxidant action.

The above said factors are very important etiology of Vataja Gulma explained which is like that explained in modern science. Any irritation whether from motion, heat or acrimony may cause cancer. The above said etiologies in one- or other-way cause irritation, which leads to gulma or cancer.
Samprapti of Vataja Gulma: -

Nidana sevana

Vata gets aggravated

There the Gulma attains hard & firm then will be present in Srotas

Extends into adjacent tissues in the lumen of Kosta forming

Attaches to lumen of intestine

Finally, Gulma gets non capsulated in Srotas

Get lodged in Pachamanashaya & Pakwashaya

Vataja Gulma

The above said description of samprapti of Vataja Gulma that are mentioned by various authors are similar to that of pathology of tumor. Gulma is compared to malignant tumor because both are growths, which do not attain paka and wasting of the body muscles occur. When gulma develops sufficiently bigger in size, it obstructs the srotas leading to obstruction in pachyamanashaya or pakwashaya.7

Purvarupa of Gulma–
1. Udgarabahulya – Repeated belching.
2. Pureesha bandha: - Constipation.
3. Anannabhilasha – No desire for the food.
4. Antrakoojana - Gurgling sounds in the intestine.
5. Atopa - Barborygmi sound
6. Urdhwavatvatvam - Upward movements of vata. (antiperistalsis)
7. Vit mootranilasanga – Constipation, scanty urination, and retention of flatus.
9. Admana – Distension of the abdomen.8

Lakshana of Vataja Gulma.

Charaka and Vagbhata have presented Vataja Gulma with the triads of Sthana, samsthana, rujavikalpa

Sthana – Means location or site of the Vataja Gulma.
Samsthana - Means shape of Vataja Gulma.
Ruja – Means the nature of pain, which occur in Vataja Gulma.
Vikalpa – Means Kshane kshane anyathwam– the location, shape, and the pain which occurs in Vataja Gulma is not constant. There is frequent change in the location of the lump (gulma), frequent change in shape of the lump and frequent change of intensity of pain (paroxysm of pain).8

1. Sthanavikalpa – Means frequent change in the place of gulma, because it is sancari guna. Vataja Gulma moves from place to place within the abdomen (koshtha). It may move from nabhi to basti, or left parshwa to right, or from basti to parshwa etc. The movement (Sanchara) of Vataja Gulma is a unique presentation, which is compared to visible peristaltic wave produced due to intestinal obstruction due to tumor (small or large gut).
2. Samsthavanikalpa - Samsthana means shape of Vataja Gulma. Vikalpa means ‘Kshane kshan eanyathatwa’ i.e. frequent change in shape of Vataja Gulma.
In Vataja Gulma the lump doesn’t have constant shape. It keeps on changing its shape, during the movement of vata (movement of peristalsis). It may be either round or elongated, sometimes small or big in shape. This condition of Gulma can be compared to visible peristalsis observed in intestinal obstruction. Visible peristalsis mimics an alternatively appearing and disappearing mass or a tumor. Here, the actual tumor is not visible because of dilated loop of intestine. The visible peristaltic wave itself appears like moving tumor, but it is false tumor. During the process of hyper peristalsis, the lump appears in different shape.

3. Raja vikalpa - means frequent change in nature of pain. The abdominal pain, which occurs in Vataja Gulma, is not constant. There is no regularity in occurrence of pain (paroxysm of pain).

4. Aniyamitavipulanuvedana– There is irregularly acute and sometimes mild pain in abdomen.

5. Muhuraadhamatimuhrupalpatwam –The round mass at times gets inflated and at times get decreased in the abdomen, because of instability of vata.

6. Pipilikaasampracaraivaangeshu – Often there is a feeling as if ants are crawling on the abdomen. (This sensation occurs due to hyper peristalsis.)

7. Sphurana ayama sankoca supti harsha pralayodaya bahula: –There is frequent disappearance and appearance of throbbing, extension as well as contraction type of feeling in the abdomen, numbness and horripilation felt by the patient. (This is felt because of hyper peristalsis.)

8. Pureesha Sangha– (Constipation) – The Gulma (tumor) produces obstruction in the intestine and causes severe pureesha and vatasanga. Even in intestinal obstruction, the constipation and failure to pass gas through the rectum are invariably present. Absolute constipation is the cardinal feature of intestinal obstruction, where neither faces nor flatus is passed.

9. Antrakoojana. The gurgling sound of intestine occurs because of obstruction caused due to mass of gulma. It is compared to barborygmi sound explained in intestinal obstruction. It is rumbling noise of varying quality and intensity produced by peristaltic movements of bowel, propelling gaseous and liquid contents. This symptom is very important to confirm intestinal obstruction.

10. Admana– Distension of abdomen which occurs due to collection of vata and pureesha sanga. The modern views on intestinal obstruction reveals that “distension of abdomen is the hallmark of all the forms of intestinal obstruction”.

11. Krushatwa– Wasting of the muscles is the important cause of Vataja Gulma. In modern angle krushatwa is considered as cachexia, patient with advanced and disseminated cancers terminally have asthenia (emaciation) and anorexia together referred as cancer cachexia.

12. Urdhvatatatva- vata traveling in upward direction in abdomen, it can be compared to antiperistalsis. Vomiting occurs due to antiperistalsis.

13. Udavarta- is defined as upward movements of vata in koshtha i.e. upward movements of intestines. This is one of the important sign of intestinal obstruction.

14. Aruci–Anorexia is commonly observed in cancer.

15. Agnimandya /Anannabhilasha– Severe loss of appetite and no desire for food.

16. Jwara – Rise of body temperature is commonly observed in gulma. Modern
explanation reveals that fever of unexplained origin may be presenting feature in some malignancies.

17. Pleeha Vruddhi - Enlargement of spleen.
18. Avipaka/udavarta/anaha – Indigestion, flatulence
20. Krusha/twak/nakha/nayana/vadana – Color of skin, nails, eyes and face turn dark, this occurs due to anemia.

DISCUSSION
The prime dosha in generation of Gulma is Vata. Any type of Vata, especially Apana or Samana type of Vata alone or with Pachaka Pitta / Kledaka Kapha can initiate the pathogenesis by Amshamsha Kalpana. In general, Gulma can be understood in terms of tumor but different types of Gulma is described by its own signs & symptoms. Acharyas mentions the first character itself is sancari guna which not a nature of tumor. Because the unmovable is the main character of the tumor. All the other signs and symptoms like abdominal pain, borborygms and hyperperistaltic waves are supportive of Intestinal Obstruction.

CONCLUSION: According to modern science, visible peristaltic movements are due to obstruction in the intestine. This may be due to tumor which is developed in the gastrointestinal tract or other causes like intussusception, hernias, and intestinal adhesions. The modern description reveals the peristaltic waves appear like moving mass. Hence, Vataja Gulma can be understood in terms of visible peristaltic movements because of its Sthana, Samsthan, Ruja vikalpa and also pathology explained in Vataja Grahani elucidates that it’s a moving mass which changes in structure wherever it lodges. So. We can conclude that its nothing but a Pathognomonic of Intestinal Obstruction, exhibiting clinical sign as visible peristaltic movement.

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