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PATHOLOGICAL ASPECT OF GULMA - CONCEPTUAL FRAMEWORK

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ABSTRACT

Gulma is one of the illnesses that has gotten perplexing through time, eventually becoming a topic of scholarly study and discussion. Various ideas have been proposed on its pathophysiology and current analogues such as Phantom tumour and Gaseous tumour, both of which are non-specific in nature, with none having a practical approach in everyday practise. Diverticular illness can be located at Gulma sites such as Hridaya, Nabhi, Parshva and basthi. Diverticulum, as well as its later manifestations as Diverticulosis and Diverticulitis, are identical to Gulma and its many forms such as Vataja, Pittaja, Kaphaja, and Sannipathaja Gulma, as elucidated by our Acharyas. Ayurvedic treatment modalities can be applied appropriately by comparing this disease to diverticular disease, which is compared with justifications. This opens the door for further investigation into the classification of Gulma and its manifestation in comparison to diverticulitis, which calls for extensive clinical study.

Keywords: Diverticulosis, Phantom Tumor, Gaseous Tumor, Sannipathaja Gulma.

INTRODUCTION

Due to this ambiguity, many illnesses, like Gulma, were solely of academic concern in Ayurveda over time. The most prevalent word used to describe this illness is Phantom tumour, which is itself a nebulous phrase that may be interpreted and diagnosed in a patient in many ways by various medical professionals. This condition is interpreted differently by various writers. Due to the aforementioned factors, this disease is now a topic of scholarly curiosity, and the practical application of the therapeutic component is non-existent. The fact that Sushruta even explains surgical therapy suggests that when our predecessors used the name "Gulma," they were referring to a genuine illness. It's time to try to understand what they really meant and use those ideas to improve healthcare, rather than just using them as an intellectual talking point. In order to apply Ayurvedic concepts to this condition at least medically, if not surgically, this page attempts to analytically link the disease with currently diagnosed, and proven disease of Diverticulosis generally. Additionally, it will open up opportunities for understanding Dosha kinds and correlating them in order to apply therapy concepts.

Aim -To study concepts of pathological aspects of *Gulma*.

Objective

- To analytically examine Gulma with Diverticular sickness.
- To pave the way for Ayurvedic treatment in Diverticulosis and Diverticulitis

Review of Literature

A persistent expansion of the spleen or any glandular growth in the abdomen (consisting of that of the mesenteric gland) are interpretations of the time period which are substantial to medication in addition to others.

Definition of Gulmas:-

Internal tumors, which includes the ones referred to as phantom tumours, can shape somewhere within the frame among the intense confine of the areas of the coronary heart and the bladder (*Vasti*), due to the essential principles of the frame turning into deranged and aggravated by means of their respective or spe-

cific exciting reasons and elements. These accumulations occur in the cavity of the abdomen (*Koshtha*).

Number of Gulmas

The Gulma are reported to be of five different types and are round or spheroid in shape. They can be either stationery or mobile (lit. changing) in nature, and their mass and size can vary.

Localization and nomenclature –

They have 5 places in the abdominal hollow space Viz., the 2 aspects, the area of the coronary heart, the bladder (Vasti) and the location of the umbilicus.

Pathophysiology -

The Gulmas are so called because their root or base cannot be precisely localized, and their cause cannot be precisely determined, either because they originate in the aggravated condition of the local bodily Vayu, or because they are merely an accumulation of the deranged bodily Doshas in the affected locality, and because of the shrub-like large converse outline of the surface (Gulma-shrub). A Gulma does not exhibit the onset of any suppurated process in its mass or body since it is a self-contained aggregation of the disordered bodily Doshas and freely travels around in the cavity of its development, similar to a bubble of water. The Gulmas are the results of the independent or combined activity of the three Doshas, whereas in females, a distinct class of tumors closely linked to the distorted or vitiated state of the blood (menstrual fluid, etc.) is also recognized.

Premonitory Symptoms:-

The indicators that may be included as the premonitory symptoms of *Gulma* include a feeling of lassitude, a lack of appetite, discomfort and rumbling in the bowels, suppression of stool, urine, and flatus, an inability to eat food in its whole, an aversion to food, and an upward coursing of the internal *Vayu*.

Specific Symptoms:-

1. *Vataj Gulma*: The *Vataja Gulma* is distinguished by discomfort (Sula) in the heart and stomach (*Kukshi*), dry mouth and throat, suppression of *Vayu* (flatus), incorrect digestion, and any other symptoms that precisely describe the disturbed condition of the physiological Vayu.

2. Pittaj Gulma -

The *Pittaja* kind of sickness is characterized by fever, sweat, poor digestion, a burning feeling, thirst, body redness (*Anga-raga*), a bitter aftertaste in the mouth, and all other distinguishing signs of the disturbed Pitta.

3. Kaphaj Gulma -

The illness's *Kaphaja* form is characterized by a sensation of wetness throughout the body, an aversion to eating, lethargy, vomiting, water brush, a sweet taste in the tongue, and all other specific symptoms of a disordered *Kapha*.

4. Sannipataj Gulma-

The *Kaphaja* type of sickness is distinguished by a feeling of wetness throughout the body, an aversion to eating, lethargy, vomiting, water brush, a sweet taste on the tongue, and all other distinctive symptoms of a disturbed Kapha.

5. In females an additional one is caused due to *Raktha*.

Pathogenesis

A person with emaciation due to fever, vomiting, diarrhea, or excessive panchakarma may consume *Vata*-causing foods, engage in strenuous exercise, induce vomiting, consume slow-digesting foods, and undergo emesis and purgation therapies without oil and sudation therapies.

Dosha vitiation causes pain in upper and lower gas-

trointestinal tract, leading to a *Gulma* of one or multiple doshas, with palpation indicating Granthi.4 because of bad habits and meals Five different varieties of Gulma in the shape of Granthi are brought on by vitiated doshas. It occurs between the umbilical and cardiac areas, and its size can fluctuate, making it either mobile or immobile(5). Common *Gulma* symptoms include anorexia, dysuria, constipation, borborygmi, flatulence, and an upward *Vata* movement.(6)

Differentiating Diagnosis of Gulma and Vidradhi

It may be asked, how is it that *Gulma* though caused by, and involving the co-operation of the same deranged *Doshas* as an internal abscess, does not suppurate, while the latter (Vidradhi) does run into suppuration. The answer is that a *Gulma*, though caused by the same deranged *Doshas* as a *Vidradhi*, does not

resort to any deranged organic matter such as flesh, blood etc., while, on the contrary, in a case of *Vid-radhi*, the deranged flesh and blood of a locality are in themselves transformed into an abscess.

Without a definite root of its own, a *Gulma* is like a water bubble that is free to float and move around inside a cavity of the body, etc. Because of this, a Gulma never suppurates. Suppuration only forms in an abscess because it mostly consists of flesh and blood, as opposed to a Gulma, which is made entirely of exacerbated Doshas and does not contain any such organic material. As a result, a Gulma never suppurates.(7)

Diverticulosis Coli -

Diverticula are the out herniation of the mucosa and sub mucosa of the colon through the muscle wall. Diverticular disease, as it is commonly known a, is rare under 30 years of age and is seen more commonly as the age advances. Diverticulosis is often asymptomatic and detected incidentally at autopsy finding, however a proportion of patients have symptoms such as abdominal pain, distention, constipation, and intermittent bleeding. Increased intraluminal pressure due to low fiber content of diet causes hyperactive peristalsis and thereby sequestration of mucosa and sub mucosa. Muscular weakness of colonic wall at the junction of muscular and sub mucosa (10) Diverticulosis Diverticula are acquired and are most common in the sigmoid and descending colon of the middle-aged people. Asymptomatic diverticula are present in over 50% of people above 70 years of age. Symptomatic diverticular disease supervenes in 10to 25% of cases while complicated diverticulosis (acute diverticulitis, pericolic abscess, bleeding, perforation or stricture) is uncommon.

Pathophysiology

A life-long refined diet with a relative deficiency of fiber is widely thought to be responsible and the condition is rare in populations with a high dietary fiber intake, such as in Asia, where it more often affects the right side of colon. It is postulated that small-volume stools require high intracolonic pressure for propulsion, and this leads to herniation of mucosa between the taeniae coli. Diverticula consists of pro-

trusions of mucosa covered by peritoneum. There is commonly hypertrophy of circular muscle coat. Inflammation is thought to result from impaction of diverticula with fecaliths. This may resolve spontaneously or progress to cause hemorrhage, perforation, local abscess formation, fistula and peritonitis. Repeated attacks of inflammation lead to thickening of bowel wall, narrowing of lumen and eventual obstruction.

Clinical features

Usually, accompanying constipation or spasms cause symptoms. Suprapubic or in the left iliac fossa, colicky discomfort is noticed. In bouts of diverticulitis, there is local discomfort, guarding, stiffness (left-sided appendicitis), and occasionally a palpable lump. The sigmoid colon may also be palpable. There may be fever, diarrhea, or rectal bleeding during these episodes. (11).

Features of diverticulosis are fullness of abdomen, bloating, flatulence (12)

Pathogenesis-Colonic diverticula form in adults as a result of increasing intraluminal pressure in the colonic wall. The location of a blood vessel's entrance via the inner circular muscle coat is a vulnerable point for herniation because the outer longitudinal muscular coat of the colon is incomplete and still forms the taenia coli.

The absence of bulk and fibre in the diet raises the intraluminal pressure in the colon due to increased peristaltic activity. Diverticulosis patients frequently have contraction of the circular muscle ridges, which can seal off sections of the colon and raise pressure in the closed segments, pushing a diverticulum out of the weak area between the ridges. Diverticulosis is the medical term for the disorder where there are several diverticula in the colon. The diverticula, which are located next to the taeniae coli, typically extend beyond the colon's wall and range in size from 0.5 to 1 cm. Diverticula are frequently not seen from the colon's exterior surface because they often protrude into the appendices, epiploic ae, or pericolic fat. The diverticulum is frequently blue when it is visible due to the faecal materials it contains. The majority of colonic diverticula have a flask-like form, a thin neck where they pass through the colon's muscle, and a bulbous body. (13)

DISCUSSION

When we read the aforementioned information about diverticulosis/diverticulitis, we learned that the definition or literary meaning of Gulma is Shrub, which is a little bushy shrub with branches. The barium enema will seem like a hacksaw if the diverticula are just on one side of the colon; if they are all around the colon, it will resemble a little plant with branches. The places are analogous in other ways. The heart or epigastric region is a common location for esophageal diverticula like Zenker's and Gastric diverticulum. A protrusion or out pouching in the lower small intestine is known as Meckel's diverticulum.

The bulge is analogous to what is described and is congenital (existing from birth), being a leftover from the umbilical cord. Diverticulum can be present in the intestines on both sides as well as in the colon on the left side of the abdomen. Bladder diverticulum develops in BPH and urethral stricture patients. It has been noted that diverticula occasionally develop in the uterus. Diverticula in the uterus are not covered in this article; only diverticular disease is.

An acquired diverticulum won't often bulge out in the early stages unless there is an overwhelming amount of pressure, as when constipation is present. As an alternative, it can manifest when the weak wall is under internal pressure and disappear when the pressure is relieved. Sigmoid diverticula are mostly stable, whereas diverticula that develop in the small intestine and become chronic move with the segments during peristalsis.

There won't be any pathological modifications to the wall of a simple diverticulum. No pathology will be discovered if the diverticular tissue is taken out and examined. It only performs as a diverticulum in vivo in respect to the surrounding tissue. Only in cases of infection or diverticulitis are inflammatory/infection changes seen.

This demonstrates that *Gulma* does not include *Dhatu* and does not suppurate as a result (barring the presence of additional components). It is a part of the un-

derlying tissue, just like a water bubble, which cannot be referred to be water because it has no independent life. Diverticulum arises in the early stages in response to pressure and disappears in response to relaxation. Without its base, no tissue can be said to as a diverticulum. Diverticulosis and *Gulma* both exhibit signs and symptoms of digestive issues.

Despite being referenced, *Gulma* in various places is not specifically defined. Except for its mention in one of the classics, bladder diverticulum, also known as *Vasthi Gulma*, is not given much prominence. Diverticular abscess, chronic diverticulitis, and acute diverticulitis are all indicators of infection and blockage, and they correlate to the signs and symptoms of *Vataja*, *Pittaja*, and *Kaphaja Gulma*. Simple diverticulum issues frequently result from constipation; thus, it is important to have regular bowel movements, especially in the early stages of the condition. This greatly reduces the risk of the disease's progression and the complications that follow. Treatment for this illness in Ayurveda focuses on improving digestion.

Even surgical excision, which is recommended in Ayurveda, implies that it cannot be visualized. A hot pot must generate a vacuum, and the sucked tissue must be removed. The tissue is plainly one that is weak and swells when a person's internal pressure rises, like in the case of obstructed intestines. Suppuration is a complication of chronic diverticulitis, which is recognized in Ayurveda as well. A phantom tumor, as many propose, cannot be correct since it is merely a gaseous expansion that does not need to be surgically excised because the gas travels about and excision of any specific section would not fix the problem; referring to it as a gaseous tumor by some invokes the same logical fallacy. We may reasonably assume that the ailment Gulma mentioned in the classics was diverticulosis, albeit it may have undergone a name change since Sushruta's time. The digestive system was given priority in explaining the indications, symptoms, and treatment of the disease despite the fact that other regions, such as Vasthi, were identified as the locations of occurrence. Ayurvedic practitioners are recommended to experiment with the drugs indicated in the classics, particularly to improve the digestive system. It is encouraged to do more study to properly apply the treatment approaches by linking difficulties of diverticulosis/diverticulitis to those of *Gulma* of various *Doshas*.

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