



## NIDANA KARATWA OF GRAHANI, ARSHAS AND ARBUDA W.S.R TO COLON CANCER

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### ABSTRACT

In the pathogenesis of every disease *Agni* plays a vital role. Understanding of *Agni* in a subject must be the prime aim of a physician before planning the treatment. In case of *Guda Pradeshagata Arbuda*, *Dhatwagnimandya* which occurs as a sequel of *Jataragnimandya* can be considered. On a retrospective analysis it is evident that *Grahani* and *Abhyantara Arshas* have an inevitable role in the causation of *Guda Pradeshagata Arbuda*. Pathogenesis of all the above diseases initiates due to *Agni Dusti*. Metabolic derangement and adenomatous polyp along with altered gut micro biota contribute to the pathogenesis of colon cancer. Many studies have proved the involvement of gut brain axis in the causation of colon cancer.

**Keywords:** *Grahani*, *Abhyantara Arshas*, *Guda Pradeshagata Arbuda*, Colon cancer

**INTRODUCTION:** As per Ayurveda *Agni* is responsible for the existence of life.<sup>1</sup> Same *Agni* :when get disturbed is responsible for the manifestation of disease, mainly of *Annavaha* and *Pureeshavaha Srotas*.<sup>2</sup>The major diseases that occur due to impairment of *Agni* in *Annavaha* and *Pureeshavaha Srotas* are *Grahani* , *Abhyantara Arshas* and *Guda Pradeshagata Arbuda*. On a close observation it's evident that *Grahani*, *Abhyantara Arshas* and *Arbuda* share common causative factors.<sup>3</sup>The symptomatology of *Grahani* has a close relationship with IBS. The long standing IBS which results in the formation of adenomatous polyp. These polyps can be understood as *Abhyantara Arshas*. Studies have been proved that subjects with adenomatous polyp have high risk of colon cancer (*Arbuda*). Colorectal cancer is the fourth most common cancer in the world with 1.3 million new cases each year and

a 5-year prevalence rate of 3.2 million. Colorectal cancer (CRC) is the third most common cancer in men (663,000 cases, 10.0% of the total cancers) and the second in women (570,000 cases, 9.4% of the total cases) worldwide. Incidence rates of CRC vary 10-fold in both sexes worldwide<sup>4</sup>.

### AIM AND OBJECTIVES OF THE STUDY

- *Niadana karatwa* of *Grahani*, *arshas* and *arbuda*

### MATERIAL AND METHODS

Analysis of Etiopathogenesis of *Grahani*, *Abhyantara Arshas* and *Guda Pradeshagata Arbuda* in relation to colon cancer is discussed in this article with both Ayurvedic and contemporary references.

### OBSERVATIONS AND RESULTS

#### **Nidana (Causative Factor):**

Strength of *Grahani* is *Agni* and *Agni* resides in the *Grahani*, that is why when *Agni* is vitiated, *Grahani* also becomes

vitiated<sup>5</sup>. When the *Doshas* are vitiated it will secondarily cause weak functioning of *Agni*. Hence before onset of *Arshas*, the subjects will be having longstanding *Agnimandya*. When the status of *Agni* is depressed, there will be *Malasanchaya* (accumulation of *Mala*) which signifies

dysmetabolism. On analysis of *Nidanas* of *Arshas* it points towards *Agni Dusti*<sup>6</sup>. Though specific *nidanas* for *Arbuda* is not mentioned in *samhithas* while considering *Tridosha Dusti* in disease *Arbuda*, *Agni dusti* can be considered<sup>7</sup>.

**Table no1: Showing Agni Dustikara Nidanas<sup>8</sup>**

Agni Dusti Nidana		Probable Doshha involved
<i>Abhojana</i>	Excessive fasting/ starvation	<i>Vata</i>
<i>Ajeerna Bhojana</i>	Eating during indigestion	<i>Vata/Pitta/Kapha</i>
<i>Ati Bhojana</i>	Overeating	<i>Kapha</i>
<i>Vishamashana</i>	Irregular eating	<i>Pitta</i>
<i>Asatmya Bhojana</i>	Consumption of unwholesome food	<i>Vata/Pitta/Kapha</i>
<i>Guru Ahara</i>	High calorie diet	<i>Kapha</i>
<i>Ati Sheeta Ahara</i>	Freezed food items	<i>Vata/Kapha</i>
<i>Ati Ruksha Ahara</i>	Excessively rough food items	<i>Vata</i>
<i>Sandusta Ahara</i>	Contaminated food	<i>Vata/Pitta/Kapha</i>
<i>Vireka Vamana Sneha Vibhrama</i>	Improper administration of therapies	<i>Vata/Pitta/Kapha</i>
<i>Vyadhi karshana</i>	Emaciation due to disease	<i>Vata</i>
<i>Desha Vaishamya</i>	Faulty adaptation in respect to place	<i>Vata/Pitta/Kapha</i>
<i>Kala Vaishamya</i>	Faulty adaptation in respect to Time	<i>Vata/Pitta/Kapha</i>
<i>Rutu Vaishamya</i>	Faulty adaptation in respect to Season	<i>Vata/Pitta/Kapha</i>
<i>Vega Vidharana</i>	Suppression of natural urges	<i>Vata</i>

From the above *nidanas* it can be inferred that the *Nidanakarata* begins from *Jataragnimandya* mainly due to faulty food habits which results in *Samana Vata Dusti*. This in turn in due course of time causes *Pitta* and *Kapha Dusti*.<sup>9</sup>

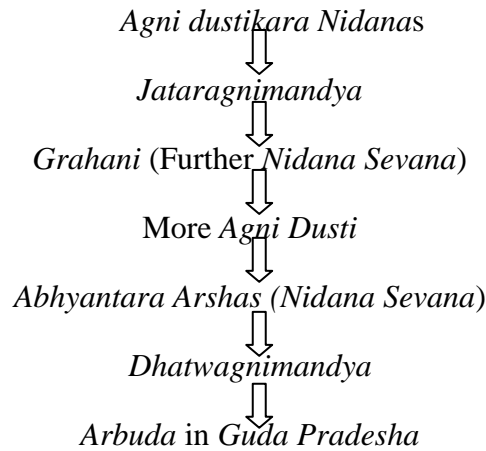
*Arshas* and *Grahani* are considered as *Santharpanottha vikara*<sup>10</sup>. Considering the *Adhistana* of *Arshas* and *Arbuda* it was found that both have *Mamsa* and *Meda* as *Adhistana*<sup>11</sup>. Further *Arshas* is a type of *Adhimamasagatha Vikara*<sup>12</sup> and *Arbuda* is a type of *Mamsa Pradoshaja Vikara*<sup>13</sup>,

both are included under *Mamsa Vrudddhi Lakshana*<sup>14</sup>.

**DISCUSSION:** Impairment of *Agni* plays a pivotal role in the causation of *Grahani*. On a detailed analysis it is clear that *Nidanas* of *Grahani Vikara* is pointing towards *Agni Dusti*. Disease *Grahani* in due course of time will lead to disease *Abhyantara Arshas*, where there will be further *Agni Dusti*. This stage of *Abhyantara Arshas* (Inner side of rectum) is considered as *Asadhya*<sup>15</sup>. Thus continuously hampered *Jataragni* will result in *Dhatwagnimandya*<sup>16</sup>. This

Dhatwagnimandya results in Guda Pradeshagata Arbuda.

**Diagram 1: Showing Samprapthi analysis of Grahani, Abhyantara Arshas and Guda Pradeshagata Arbuda**



### Interrelationship of Gut Brain Axis with intestinal flora in causation of Colon cancer:

Intake of low fibre rich diet, Consumption of alcohol, Intake of Freezed aerated drinks, junk foods, contaminated food leads to intestinal disturbances in the form of loss of appetite, nausea, altered bowel habit, difficulty in emptying the bowel. This is due to disturbed GI motility, secretion and permeability which hamper mucosal immune function. Alteration in mucosal immune function leads to activation of viscera sensory mechanism which causes changes in gut micro biota.

The micro biota plays a myriad of roles in human health and disease, from entraining immune system development and maintaining homeostasis to influencing autoimmune diseases and allergies that cannot simply be parsed into strict pathogenesis and commensalism.

Tumor formation in the colon begins with the transition of a normal epithelium to a state of hyperplasia, in which cell proliferation is increased. As this occurs, epithelial architecture loses its characteristic shape and organization and becomes dysplastic. This dysplasia has the potential to develop into a non malignant adenoma, which usually is a polyp that

grows from this region of hyper proliferative epithelium and protrudes into the colonic lumen. In response to other changes in the tumoral genetic and immunological microenvironment, adenomas can invade into the sub mucosa and become cancerous<sup>17</sup>.

**CONCLUSION:** On analysing *Nidanas* of *Grahani*, *Abhyantara Arshas* and *Guda Pradeshagata Arbuda* it is clear that the underlying pathogenesis starts at the level of *Agni*. This *Agni dusti* is primarily due to *Jataragni*. Later stages of the disease are also contributed by *Dhatwagnimandya*. Hence the concept of colon cancer can be understood by *Nidanakaratawa* of *Grahani*, *Abhyantara Arshas* and *Guda Pradeshagata Arbuda* in Ayurveda, where *Nidana Parivarjana* must be considered as primary line of treatment for better prognosis.

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