

## AYURVEDA MANAGEMENT OF CROHN'S DISEASE

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### Abstract

In modern era the life style disorders are increasing day by day. Due to vitiated and irregular consumption of food, gastro-intestinal problems are most common in society. It is a Functional disorder, which is also considered as a psychosomatic disease in contemporary medicine. It is mainly diagnosed by its symptoms. *Ayurveda* considers that the dysfunction of *Agni*(enzymes) is responsible for undigested food which is responsible for various functional and structural defects in the gastro-intestinal tract. By taking a look on the sign and symptom of *Grahani*(small intestine), somehow it resembles to Crohn's disease. On detailed study it can be found that all the Crohn's disease patients develop nature of '*Grahanidosha*' at some stage of their illness. Treatment was accomplished in three phases, like *rukshana* (dryness), *shodhana* (purification), and *rukshana* with *vasthi* (medicated enema, They are treated more pronounced way with considering *Ayurvedic* concept of *Agni*. After complete treatment his Colonoscopy and Biopsy reports shows no ulceration which gives us a way to treat Crohn's disease with safe & effective *Ayurved* management. The scope of *Ayurvedic* approach to address such Crohn's diseases is discussed in this paper.

**Keywords:** Crohn's Disease, Grahani, Grahanidosha, Mandagni, Ayurveda.

### INTRODUCTION

Crohn's described this disease as terminal ileitis. Gradually it was recognized that the disease, though most frequent in the terminal ileum, It may affect any part of the intestine. It is now universally accepted that the disease also involves colon. Infact it may involve any portion of the G I tract from mouth to anus Symptoms like diarrhoea, abdominal cramps, nausea, weight loss, and sometimes rectal bleeding, low- grade fever and pain<sup>1</sup>, These disorders related to digestion and its absorption is broadly covered under the heading of '*grahani dōsha*' mentioned in *Āyurvedic classics*. *Āyurvedic* management of such diseases is rarely reported. The case reported here with the informed consent of the patient showed significant regression in the condition with no signs of relapse. The patient showed good response in short span of time and could completely stop the use of allopathic medicines. The scope of *Āyurvedic* approach to address such Crohn's diseases is discussed in this paper. The employed treatments were non invasive and cost effective, purely based on the principles of *Āyurveda*.

### Case Report

A 23yr old wellbuilt male presented with, abdominal pain and nausea since last 3months. He was associated with anal pain and mucosal discharge since then. He was asymptomatic 6 years back. The Patient had a history of Passing loose stools around 15-18 times per day along with mucous and blood stain on 2012 and managed with allopathic medications. In 2014 it was diagnosed as a case of Crohn's disease and he was on the medications listed in the table No.1for several months. Mild relief was attained with these medications. During the pain, he was taking an Antispasmodic drug. All the modern medications were stopped at the admission and he was allowed

to take the Tablet Nobel Spas. The present condition started with pain abdomen and was severe during morning hours. He was also complaining of nausea while taking food. Family history shows that Patient's mother also had the symptoms like frequent loose motion and acidity.

### Drug history

**Table No.1**

Date	Drug	Dose	Duration
22-08-2014	Tab Vegaz	2tab OD	4months
	Tab Rabekind	1tab OD	
	Tab Flovite	5times daily	
06-08-2014	Tab Tryptomer 10mg	1tab at bedtime	1month
	Tab Bifilac-Hp	1tab once daily A/F	
	Tab Ciplox 500mg	Twice daily A/F	
13-08-2014	Tab Omnacortil60mg	1tab once daily A/F	2months
	Tab Vegaz	1tab once daily A/F	
	Tab Folvite 5mg	1tab at bedtime	
	Tab Azoran 50mg	1tab once daily A/F	
4/17/2015	Tab Tryptomer 10mg	1tab at bedtime	6months
	Tab Azoran 75mg	1tab A/F	
	Cap BifilacHp	1cap A/F	
	Tab Rifagut 400mg	Twice daily B/F	
	Tab Tryptorner 10mg	1tab at bedtime	
1/17/2015	Tab Pantocid 40	1tab daily	4weeks
	Tab Budez CR 3mg	Twice daily A/F	
8/18/2015	Tab Rabekind 20mg	1tab once daily B/F	
	Tab Pantocid 40	1tab daily	
	Tab Azoran75	2tab OD	
	Tab Vegaz	1time daily	
9/11/2015 to till admission.	Tab Folvit 5mg	1tab once daily	6weeks
	Cap Sompraz-D	1cap at bedtime BD	
	Tab Zofer 4mg	1tab A/F	
	Tab Azoran 100mg	1tab at bedtime	
	Tab Triplent 25mg	1tab A/F	
	Tab Nobel Spas	2 times daily	

### Examination

The physical examination that has been done revealed that both lower abdomen and right iliac fossa were presented with tenderness but without the rebound tenderness, swelling and discoloration. By doing per rectal examination, it was revealed that there was no fistula and fissure. The weight of the patient was 88kgs at the time of admission.

### Investigations

**Table 2: Showing Colonoscopy and Biopsy reports before and after treatment**

Colonoscopy	Date:5/8/2014(B/T)	Date: 15/11/2017 (A/T)
Findings	<ul style="list-style-type: none"> <li>Colonic Aphthae, Multiple small apthae noted from rectum till caecum with intervening normal mucosa.</li> </ul>	Terminal ileal erosions (Multiple erosions noted)
Biopsy	Date:8/8/2014(B/T)	Date:16/11/2017(A/T)
Findings	<ul style="list-style-type: none"> <li>Mild focal active ileitis in the terminal ileum.</li> </ul>	Multiple fragments of small intestinal mucosa they show

	<ul style="list-style-type: none"> <li>• Mild chronic active colitis in the caecum and ascending colon.</li> <li>• Moderate chronic active colitis in the transverse and descending colon.</li> <li>• Moderate to severe chronic active colitis in sigmoid colon and rectum.</li> </ul>	intact epithelium, tall villi and normal intraepithelial lymphocytes. No evidence of any chronic Inflammatory Bowel diseases , parasites, granulomas. Non- specific inflammation
Blood Routine& Liver function test	Date:8/8/2014	Date: 14/9/2017
Findings	Within the normal limits	Within the normal limits

**Diagnosis :** Grahani

**Table 3: Microscopic characteristics of inflammatory bowel diseases and the present case<sup>2</sup>**

	Crohns Disease	Chronic ulcerative colitis	Indeterminate colitis	Tuberculosis enterocolitis	Present Case
Site	Ileum70% Colon 15%	Recto sigmoid100% Entire colon40% ileum10%	Any level of colon-rectum 50%	Ileocecal area,lower ileum caecum	Ileocaecal area, colon and rectum
Ulcer	Longitudinal, Serpiginous	Irregular broad- based	Irregular	Transverse annular	Irregular, serpiginous
Fissure	Common	Rare	Common	Rare	Absent
Fistulation	Common	Extremely rare	Rare	Rare	Absent
Distribution	Skip area	Absent	Common	Common	Skip lesions
Wall thickening	Common	Rare	Minimal	Common	Thick
Pseudopolyp	Rare	Common	Common	Minimal	Present
Thickness Of Involvement	Transmural	Mucosal and submucosal	Transmural	Transmural	Mucosal
Granuloma	Common	Absent	Absent	Multiple	Absent
Lymphoid	Common	Common	Rare	Common	Absent
Odema And Fibrosis	Marked	Minimal	Moderate	Moderate	Marked
Crypt Abscess	Rare	Common	Rare	Common	-
Bleeding	Less Common	Usual	Rare	Rare	Less
Malabsorption	Common	Rare	Minimal	Less	Present

### Therapeutic Intervention

The interventions were done after ascertaining the *dōsha* (humour) involved. The involved *dōshas* were *pitta* (metabolic factor) and *kapha* (binding factor). Treatment was accomplished in three phases, like *rukshana* (dryness), *shōdhana* (purification), and *rūkshana* with *vasthī* (medicated enema).

### First phase of management – *rūkshana chikitsa*

During the first phase of the management, *rūkshanachikitsa* was performed which included both internal and external medications.

## Internal Medications

Initially, *Chitrakāsava* (Fermented preparation using herbal drugs), *Chiravilwādi kashāyam* (prepared by boiling the drugs in water and reducing it), *Dhanwantaram gulika* (Tablet form) and *Vilwādilehyam* (Herbal paste) was administered internally for a duration of 3 days from 16-9-2017 to 18-9-2017.

## External Procedures

*Takradhāra* (Pouring of buttermilk processed with medicinal herbs like *Emblicofficinalis* (Gaertn.), *Cyperus rotundus* L. etc. done over the head for a period of 30 min.) and *udwartanam* (Hard massage to whole body with herbal powders) with *kolakulathadi choornam* (Powder of *Zizyphus jujube* Lam, *Dolichosbiflorus* Linn, *Phaseolus radiates* (L.) etc. ) was done for a period of 5days from 14/9/2017 to 18/9/2017.

## Second phase of management – *Shōdhana chikitsa*

Being *pitta* predominant condition *virêchana* (Purgation) was planned for the elimination of *Pitta*, which was also beneficial to eliminate *kapha* to some extent. After the *takradhāra* and *udwartanam* done in the first phase of treatment which acted as *pāchana* (Carminative in action) the very next day, *snehapāna* was started.

*Arōhanamātra snehapāna* (Increasing dose) was done with *Indhukanthagritam* (Ghee processed with *Aeglemarmelos*(L.)corr.), *Solanumxanthocarpum*, *Tribulusterrestris* etc.) was administered for a period of 5 days from 19/9/2017 to 23/9/2017 in increasing order till the *samyak snigdha lakshana* (saturation of body with ghee) are observed.

Next day *abhyanga* (whole body oil massage) with *KottamchukkadiTailam*(medicated oil prepared out of *Zingiber officinalis* Roscoe.*Acoruscalamus* (L.), *Aliumsativum* L. etc.) and *bashpasweda* (steam fomentation) was started and given for 3 days from 24/9/2017 to 26/9/2017.

On the third day after *abhyanga*, *TrivritLehyam*(*Operculinaturpethum* (L.), *ElettariaCardamom*, etc.. herbs processed with Jaggery)30gm was given for *virêchana* (purgation) on 26/9 /2017which resulted in *avarashuddhī* (Minimal therapy/purification). After the purgation *samsarjanakrama* (dietary regimen after purification/graduated diet) was followed for *avarashuddhī*

## Third Phase of management - *rūkshana with vastī*

In this phase, the main aim was to correct and stabilize the *agni* (digestive fire). For this purpose, it was planned to administer *takravasthī* (medicated enema ). As *vasthī* is having *kleda* (moist) nature. To control the *kledata* mild *rūkshana* was done with *Danyamladhāra* (Pouring of Fermented medicated liquid). Also, *shamana* line of internal medications was also advised at this stage.

## Internal medications

*Dhanwantaram gulika* (Tablet form), *Vilwādi lehyam* (Herbal paste), *Vilwādi gulika* (Tablet form) along with lukewarm water and *kaidariyādi kashayam* (prepared by boiling the drugs *Terminaliachebula* Retz, *Zingiber officinalis* Roscoe, *Trichosanthescucumerina* Lin. etc. in water and reducing it) was given for a period of 5days from 29/9/2017 to 3/9/2017.

*Takravasti* Medicated enema (1000ml) prepared out of *lavana* (Salt), *mākshikam* (Honey), *Dadimādi Grithm*(Ghee processed with– Punicagranatum (L.), Plumbagozeylanica L., Coriander etc.).

*Ambastādi Gana kalka* (Herbal paste), *Chiravilwādi kashayam* and buttermilk were given for a period of 7days from 28/9/2017 to 3/10/2017 without *anuvāsana vasthī*.

*Danyamladhāra* (Pouring of Fermented medicated liquid prepared with the puffed form of rice, Panicumsumatrense Roth, Paspalumscrobiculatum, Zingiber officinale Roscoe. etc.. over the body) was done for a period of 7 days from 28/9/2017 to 3/10/2017.

**Table 4:Internal medications administered**

SI No.	Formulation	Ingredients	Dose
1	<i>Chitrakāsava</i>	1. PlumbagozeylanicaL. 2. Zingiberofficinale Roscoe 3. Piper longum L. 4. Piper nigrum L. etc. along with honey	25ml twice daily A/F
2	<i>Dhanwantaramgulika</i> (Tablet)	1. Elettaria cardamomum (L.) 2. Zingiber officinale Roscoe 3. TerminaliachebulaRetz. Etc	2 tablet twice daily A/F
3	<i>Vilwādilehyam</i> (jaggery based herbal preparation-herbal paste)	1. Aegle marmelos (L.)corr.) 2. CyperusrotundusL. 3. Cuminumcyminum L.	1 teaspoon twice daily A/F
4	<i>Kaidariyādikashayam</i> (decoction prepared out of herbs)	1. Terminalia chebula Retz. 2. Zingiber officinalis Roscoe 3. TrichosanthesdioicaRoxb. etc..	20ml of each decoction along with 60ml boiled and cooled water twice daily on empty stomach B/F
5	<i>Chiravilwādikashayam</i> (decoction prepared out of herbs)	1. Holopteleaintegrifolia (Roxb.) 2. PlumbagozeylanicaL. 3. Boerhaaviadiffusa L. etc..	20ml of each decoction along with 60ml boiled and cooled water twice daily on empty stomach B/F
6	<i>Vilwādigulika</i>	1. Terminalia chebulaRetz 2. Aegle marmelosL. 3. Ocimum sanctum Linn. etc...along with goats urine	1 tablet twice daily A/F
7	<i>Indhukānthamgrithm</i>	1. Aeglemarmelos L. 2. Oroxylumindicum (L.) Kurz 3. SolanumindicumLinn. 4. SolanumxanthocarpumSchard. 5. Tribulus terrestris.	Increasing dose (30ml,50ml,85ml, 130ml,150ml)

**Table 4: Following parameters were used in assessing the condition of the patient on the zeroth day, after the treatment and one month after discharge**

Criteria	B/T	A/T	After 1month (follow up)	After 2month (follow up)
Abdominal pain	4-6(moderate)	3-4(mild)	(0-3)Reduced	0
Diarrhoea	3times per day	Daily once	Absent	Absent
Blood mixed stools	Absent	Absent	Absent	Absent
Weight	89	84	85	89
Appetite	Good	Good	Good	Good
Fever	Absent	Absent	Absent	Absent
Anal pain	Moderate	Moderate	Mild	Absent
Fistula and fissure	Absent	Absent	Absent	Absent
Anal ulcer	No ulcer	No ulcer	No ulcer	No ulcer
Mucous discharge	Moderate	Mild	Mild	Absent
Tenderness over Right iliac fossa	Grade 2	Grade 1	Grade 0	Grade 0
Medication	He was treated with long course of above said medications (Table 1)	Stopped above said medications(Table1) only Tab Nobel spas was taken with a gap of 2-3 days	Tab Nobel spas was taken with a gap of 5-6 days	Tab Nobel spas was taken with a gap of 8-9 days

## RESULT

Before the treatment abdominal pain was moderate but at the end of the course of treatment, it got changed to mild. At the end of one month at first follow-up abdominal pain remained the same but during the second follow up the abdominal pain was resolved completely. When the patient got admitted the grade2 tenderness was there over right iliac fossa. After treatment, it was reduced to grade1. Tenderness was absent from the first follow up itself.

Anal pain which was Moderate at the time of admission was found unchanged even after the treatment. But after taking medications for one month it got changed to mild and doing follow up after two months the patient got full relief from the anal pain. In the case of medications the patient was given with the medicines which are described in table no 1. After treatment, the above said medications were stopped and was advised to take tab Nobel spas with a gap of 2 to 3 days. One month after follow up he was advised to take the same medicine with a gap of 5 to 6 days. Two months after follow up also the same medicine were advised to be taken by the patient with a gap of 8 to 9 days but without pain.

## DISCUSSION

Today there is a tremendous increase in lifestyle disorders because of changes in the dietary and behavioural pattern. These will affect the functions of GIT. The symptoms of Crohn's diseases include abdominal pain, bowel disturbance i.e. diarrhoea, constipation, nausea, vomiting, abdominal pain, alteration in appetite and indigestion<sup>3</sup>. By analyzing the symptom complex we can find similarities with the *grahanī roga* mentioned in Ayurveda texts. As per Ayurveda, primary causes of *grahanī* disease are *Mandagnī*<sup>4</sup>(poor appetite and poor digestion), irregular, improper, irrelevant or



incompatible diet habits. Non-following of the healthy diet habits<sup>5</sup> (*Pathyā*) in certain digestive disorders, especially the conditions of post diarrhoea etc., are also one of the important causes of this disease. In Ayurveda *Grahanī* is known as *Agni Adhithāna*<sup>6</sup> (site of *agni* or *pitta*). *Grahani* and *agni* are interdependent and whenever *agni vikriti* (especially *Mandagnī*) occurs, cause improper digestion of ingested food which leads to *grahanī dosha*<sup>7</sup>. Any vitiation or inflammation to this particular part by imbalanced Doshas (*vāta*, *pittā*, *kapha*) can cause a wide variety of symptom similar to that of Crohn's disease<sup>8</sup>, other inflammatory bowel diseases and any pathology anywhere across the digestive system. Degree and nature of symptoms may vary as per the *dōsha* predominance and involvement. The main *dōshas* involved here in the present case study are *pittā* and *kaphā*.

The interventions were done after ascertaining the *dōsha* (humour) involved. Based on *dōsha* involved, *pittā kaphahara* (*pittā* and *kaphadosha* pacifying) line of treatment was accomplished at three phases, like *rukshana*, *shōdhana*, and *rūkshana* along with *vasthī*. In the *shaman chikitsā* (treatments aimed at mitigating the *dōsha*), internal medication and external procedures were included. The internal medicines helped in *mridu shōdhana* (mild purification) as well as helped in *srotō shōdhana* (clearing the channels). The decoctions given were Kaidaryadi Kashayam and chiravilwadi kashayam. Kaidaryadi kashayam is of *tridhōshahara* in nature. The main ingredients possess the qualities of anti-ulcer and are indicated in *grahanī roga*. Chiravilvadi Kashayam is of *katu* (pungent taste), *tiktā* (bitter taste) *rasa pradhana*, *tīkshna* (sharpness), *rūksha guna* (dryness) and *ushna vīrya* (hot potency) *oushada*. Which was used mainly aiming on strengthening the *agni* (enzymes). The main ingredients of chiravilvadi kashayam possess antimicrobial and antioxidant activity. The fermented liquid is *pitta kaphahara* (pitta kapha reducing) in nature and when the phytochemical properties of the major drugs present in the liquid are analysed majority of them have anti-inflammatory, antibacterial and antioxidant activity<sup>9</sup>. *Tricosanthes dioica* is known to have anti ulcerous effect in polyherbal preparation and proved useful in wound healing<sup>10</sup>.

The external procedure performed in the second phase includes *takradhāra* and *udwartana*. Both are having the *rūkshana* property. So it might have helped in *kapha Shamana* and reducing the *kleda* (moistness). *Takradhāra* is an excellent cure for chronic *pitta* aggravated diseases and considered as a *rūksha shīta* (Brings dryness and coolness to body) treatment. Due to *rūkshata takradhāra* reduces *kapha* and due to *shīta* (cold) it reduces *pitta*, and thus becomes an ideal choice in this condition<sup>11</sup>.

*Snehapāna*<sup>12</sup> and *virechana*<sup>13</sup> was performed in the second phase of treatment because *Snehapāna* by virtue of its *dōshautkleshana* (increasing the *dōsha*) separates toxins accumulated in the patient's body. The separated morbid *dōsha* are eliminated by *virêchana*. *Virêchana* with *trivrut lehyam* was performed because it is the treatment of choice for the aggravated *pitta*. It helped in the removal of the vitiated *dōsha* and *kleda* out of the body along with toxins at the cellular level. An *avarashudhi* (minimal purification) was attained in this condition as drastic purgations are contraindicated here, but there was a remarkable improvement in the patient. *Dhanvantaram Gulika* is *vāta kapha hara* (reduces *kapha dōsha*) in nature, *āma pāchana* (biotoxin neutralizing), *shūlāpaha* (relieves pain). So it is indicated in *grahanī rōga* because of its *grahi* (absorbant) quality. Most of the drugs possess the antimicrobial qualities, antihelminthic quality and antioxidant qualities<sup>14</sup>. *Vilwadi tablet* is known for its antibacterial activity and is reported to be beneficial in gastroenteritis. The herbal paste

prepared using anti-inflammatory and antipyretic drugs helped in reducing oedema and preventing secondary infection in the wound<sup>15</sup>. Most of the ingredients possess the Antioxidant, Antiulcer, Anti-diarrhoea, Antipyretic and Antibacterial activities.

After *shōdhana*, *dhanyāmla dhāra* and *takravasti* were performed in the third phase of treatment. *Dhanyāmladhara* which improves blood flow removes excess *kapha* from the body. Its individual components showed anti-inflammatory and antimicrobial activity.<sup>16</sup> Here in *takra vastī*, *takra* has got more *grāhi* (absorbent)<sup>17</sup> and *Stambhana* (blocking therapy) properties. The individual ingredient of the combination of *Vastī*<sup>18</sup> may have its own action. But when all these drugs are mixed together the effect will be more enhanced. The overall effect of this *vastī* is said to be having *sangrahīguna*<sup>19</sup> (absorbent). *Ambastādi gana*<sup>20</sup> is used as *kalkadravya* in preparation of the *vastī*. It is having some amount of *Deepana*(carminative), *Pāchana*(digestive), and *Krimighna* properties, whereas it definitely does *Sangrāhikarma*. As explained in *phalashruti* it is also good in case of *pravāhika* (dysentery) and it does *vranaropana* (wound healing). So definitely this *yoga* is playing a very important role in the management of conditions like *grahanī*. *Vastī* is not merely the enema, one which exerts the local cleansing effect, rather it is a highly complex and systemic therapy having a wider range of therapeutic actions and indication. It exerts its action by endocolonic (action inside the colon), encolonic(action on tissues of colon) and diacolonic (for systemic action) ways<sup>21</sup>. *Vastī* influences the normal bacterial flora thus it increases the endogenous synthesis of Vitamin B12, Vitamin K etc. *Vastī* makes the whole metabolism normal. Production of thiamine with the help of bacteria, which is necessary for nerve conduction and which is produced in large intestine, may be controlled by *Vastī*<sup>22</sup>. The outcome was a combined effect of both *shamana* and *shōdhana cikitsa*.

## CONCLUSION

For successful treatment, proper assessment of the involved *dōsha* is very necessary. In this case, the presentation resembled *Grahanī* and *pittakapha hara* line of treatment was adopted. Both internal and external purification along with wholesome diet is vital for the successful management. It helped in arresting the progression of the condition and complete relief from pain. All other associated signs and symptoms resolved completely with no signs of relapse. The present case indeed gives a ray of hope for the management of Crohn's diseases through Ayurveda.

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