



EFFICACY OF BASTI IN MANAGEMENT OF ULCERATIVE COLITIS – A CASE REPORT

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ABSTRACT

Ulcerative Colitis is an idiopathic inflammatory condition of the large intestine which is frequently associated with inflammation of rectum but often extends proximally in a continuous manner through the entire colon. The clinical course of this ailment depicts an alternating course of remission and relapse with the typical presentation of diarrhoea, bloody stool, abdominal pain, faecal urgency and tenesmus. Medical treatment aims to curtail relapse of ulcerative colitis thereby preventing the long term sequelae and improving the quality of life of the patient. Explanation regarding the management of a similar condition can be traced from ancient Ayurvedic Samhitas, concerning a disease entity called *Grahani*. In this case, a 39-year-old male patient diagnosed with Ulcerative colitis was treated with *Basti* from the context of disease *Grahani* showed significant changes in clinical presentation without any impediments. In Ayurvedic classical literature, *Basti* is a prime treatment among purificatory therapies and application of this is considered as the best treatment modality for many gastrointestinal disorders. Recent clinical studies had also proved the efficacy of *Basti* as having an antagonistic effect on the inflammatory process of the intestinal mucosa with precipitation of healing mechanism.

Keywords: Ulcerative colitis, *Basti*, *Grahani*, *Ayurveda*.

INTRODUCTION: Ulcerative Colitis is an idiopathic inflammatory condition that exhibits symptoms depends on the extent and severity of the disease.¹ This ailment tends to begin in the rectum but often extends cranially affecting uniformly and continuously in proximal segments through entire colon.² An exponential increase in Inflammatory Bowel Disease (IBD) has been reported worldwide in the last 10 years. Condition is diagnosed from the data obtained from clinical history,

physical examination, radiological, endoscopic, histologic studies and laboratory investigations. Corticosteroids and immune suppressants remains the cornerstone of initial therapy, with further management hinges on timely decisions with use of therapies with cyclosporine or infliximab, and timely surgery with diverse modalities without compromising the health or safety of the patient.³ By considering the risks of surgery and due to the impact of having a permanent

ileostomy or ileoanal pouch, an efficient medical management is imperative. In Ayurveda the presentations of ulcerative colitis can be explained under the category of *Grahani* in which *basti* provides a significant change in therapeutic outcomes⁴. Recent clinical studies had also proved the therapeutic efficacy of aforesaid classical procedure, *basti* in reducing the signs and symptoms associated with Ulcerative Colitis.

CASE REPORT

A 39-year-old male patient came to the opd of Amrita School of Ayurveda (OPD No: 83635) with a twelve-week history of bloody diarrhoea. He had noticed an increased frequency of defecation associated with bleeding per anum occasionally for one year, thus he underwent allopathic medical care and was treated symptomatically with conservative management. But the condition reoccurred whenever he tried to stop the medication. Since last 3 months, he experienced frequent episodes of bloody diarrhoea. His

bowel episodes were 5 times per day associated with significant abdominal pain and weight loss of 5 kg over the last 3 months. Later on, he consulted a surgeon and as per the colonoscopy report he was diagnosed with Ulcerative colitis. Over the previous 4 weeks, he was under conservative management but did not notice any significant improvement in symptoms. He had a pulse of 86/min and a blood pressure of 134/82 mm Hg. Laboratory investigations revealed haemoglobin 10.3 g/dl, C-reactive protein (CRP) 36 mg/l, white cell count (WCC) 14000/mm³ and albumin 24 g/l. Other haematological examinations are found to be unremarkable. The colonoscopy examination demonstrated loss of vascularity, friability, ulceration and bleeding noted on the rectum, sigmoid colon, descending colon and splenic flexure, with normal appearance over regions of transverse colon, hepatic flexure, ascending colon, ileocecal valve and caecum (Fig :1)

BELIEVERS CHURCH MEDICAL COLLEGE	
St. Thomas Nagar, Kuttapuzha P.O. Thiruvalla -689103.	
DEPARTMENT OF GASTROENTEROLOGY	
Patient ID	[REDACTED]
Patient Name	[REDACTED]
Age/Gender	39 yrs Male
Visit Date	23-05-2019
Referred by	Dr. Rony Thomas
Consulted by	Dr. Rony Thomas MD DM DNB MRCP
Colonoscopy	
Indication	Bleeding PR
Instrument	Olympus CV 190
Endoscope	Olympus CIE/Q190
Disinfection	CIDEX-DPA 0.55% w/w
Premedication	Midazolam 2mg + Fortwin 30mg
Duration	Nil
Procedure	Scope introduced through anal canal and progressed. Findings visualised as reported below while withdrawing the scope
Preparation	Normal
Passed upto	Caecum
P/sic	Nil
Anal Canal	Normal
Rectum	Loss of vascularity, friability, ulcerations and bleeding seen
Sigmoid Colon	Loss of vascularity, friability, ulcerations and bleeding seen
Descending Colon	Loss of vascularity, friability, ulcerations and bleeding seen
Splenic Flexure	Loss of vascularity, friability, ulcerations and bleeding seen
Transverse Colon	Normal
Hepatic Flexure	Normal
Ascending Colon	Normal
IC Valve	Normal
Caecum	Normal
Biopsy	Taken
Impression	Left sided severe colitis- R/o ulcerative colitis
Comments	
Plan	
Dr. Rony Thomas MD DM DNB MRCP Consultant Gastroenterologist	

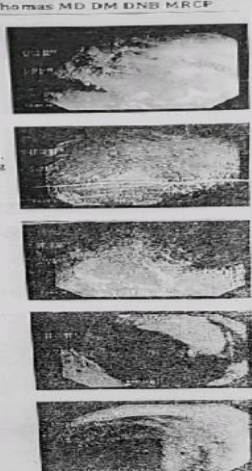


Fig 1: Colonoscopic findings before treatment

Dashavidha pareeksha:

Desham :Sadharanam

Dooshyam : Vata Pitta

Balam :Madhyamam

Kalam :Varsha
Agni :Vishamagni
Prakriti :Vata Pitta
Vaya :Madhyama
Satwam :Pravara
Satmyam :Sarvarasa
Aharam :Mishram
Ashtavidha pareeksha
Nadi :86/min
Mutra :Anavilam
Mala :Abadham
Jihwa :Anupalipita
Sabda :Prakritam
Sparsha :Anushnaseeta
Drik :Prakritam
Akriti :Madhyama

with the administration of *Basti* , oral administration of *Dadimadi ghruta* and Ayurvedic dietary advice including use of buttermilk and avoidance of hot, spicy, sour and heavy food items. Therapeutic administration of *basti* was scheduled for 8 days in *Yoga basti* pattern . *Dadimadi ghruta*(15gm) was given for initial 3 days in the morning before food and *Avipathy Chooranam* (30gm) was given on 4th day in empty stomach as a preparatory procedure for giving *Basti* . After initial 4 days, on the 6th day *Sthanika Abhyanga* with *dhanwantaram taila* and *Sthanika swedanam* was given. The patient was made to lie in left lateral position for administration of *basti*. *Basti* was given in empty stomach.

TREATMENT

After considering all laboratory investigations treatments were planned

Ingredients of Basti	Quantity
Makshikam	150 ml
Lavanam	15gm
Mahatiktakam Ghritam	150 ml
YashtimadhuKsheerapakam	150 ml
Yashtimadhu Kalkam	20gm

OBSERVATIONS AND RESULTS

Rectal Bleeding – Score	Score
No blood	0
Blood streaks in less than half of evacuations	1
Evidence of fresh blood in most of the evacuations	2
Bowel movements with fresh blood	3
BEFORE TREATMENT	2
AFTER TREATMENT	0

Frequency of bowel movements	Score
Normal for the patient	0
1-2 stools/day in addition to the usual	1
3-4 stools/day in addition to the usual	2
>5 stools/day beyond the usual	3
BEFORE TREATMENT	3
AFTER TREATMENT	1

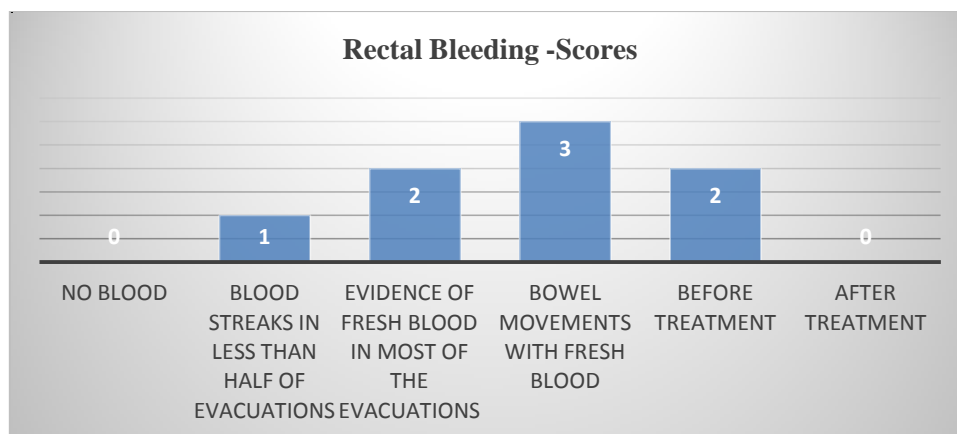


Chart 1 : Graphical representation of Rectal bleeding Scoring

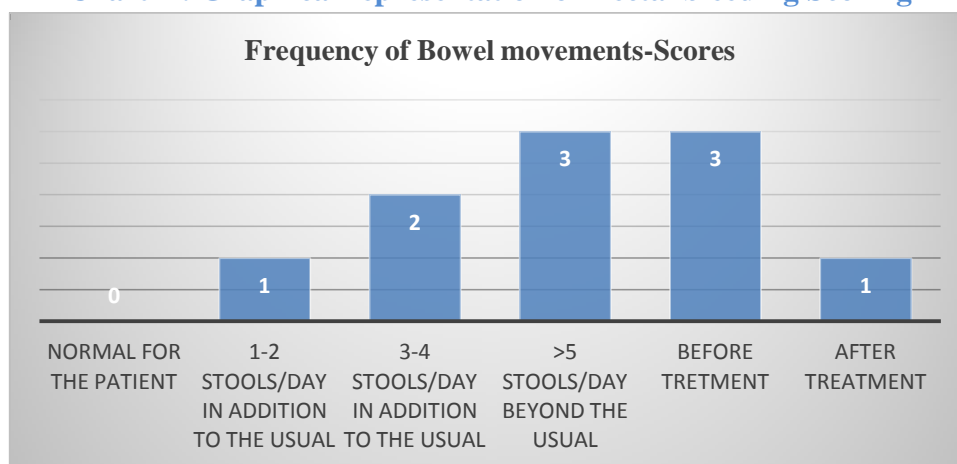


Chart 2 : Graphical representation of Frequency of Bowel movements Scoring

DISCUSSION: Ulcerative colitis is the inflammation of mucus membrane of large intestine, portrayed by patches of tiny ulcers in inflamed membranes. Aetiology of this ailment is unknown, but genetic, immune, psychological and environmental factors thought to play a major role. When these factors interact together, it triggers the immune dysfunction and bowel symptoms. Goal of treatment should be steroid free remission to avoid severe and partially disabling long term side effects of Immuno suppressants and corticosteroids, optimizing the mucosal healing, improving the Quality of life and preventing the complications.⁵ When the medical management fails, 20-30% of patient eventually needs surgery, to restore the health by removal of inflamed colon.⁶ In

Ayurveda *Basti* is considered best among all treatment modalities for this ailment. In this *Basti*, a homogenous emulsion prepared with *Lavana* , *Madhu*, *Mahatiktakam ghrita* ,*Yashtimadhu ksheerapaka* and *Yashtimadhu Kalkam* , passes through the colon and reaches up to proximal colon and probably results in desired therapeutic effect. As the *Basti* is a hyper osmotic solution, movement of solvents from cells of colon to lumen containing the enema facilitates the absorption of medicine. *Madhu* helps in absorption of medicine due to its *Yogavahi* property and precipitates mucosal healing due to *Sheeta Veerya* , *Madhura rasa*, *Kashaya anurasa*, *Vrana ropaka* and *Pitta- Kapha Shamana* property and increases potency of *Basti* whereas *Sneha*

dravya enhances the permeability of lipophilic cell membrane. In addition, the highly lipid soluble drugs and short chain fatty acids in the medicated ghee are readily absorbed from rectum which augments the systemic bioavailability of medication in presence of Na and K ions.⁸ Phytochemicals in medicated ghee and herbal decoctions enhances the gut health by its antimicrobial, anti-oxidative and immune system modulating properties. Studies have also reported about the mucosal healing activities of phytochemicals like flavonoids, alkaloids, tannins and glycosides present in the ingredients of this medical formulation. Compromised intestinal permeability and barrier dysfunction also plays a key role in pathophysiology of ulcerative colitis and the studies had proved the efficacy of phytochemicals in this *Basti* such as polyphenols, alkaloids, polysaccharides, terpenes and carotenoids in enhancing the intestinal permeability⁹. Rectal delivery modalities favours the delivery of high local concentrations of active medication to the site of maximal inflammation with curtailed systemic side effects, formulation retention, improvements in drug bioavailability, and drug release kinetics.⁷ Due to the therapeutic effect of *Basti*, there will be reduction in enteropathy protein, electrolyte loss, attack of inflammatory mediators on mucosa and facilitation of mucosal healing, thus helping in significant reduction of signs and symptoms in patients of Ulcerative Colitis.¹⁰

CONCLUSION: Ulcerative Colitis is a debilitating condition which lacks exact management guidelines for the complete cure. Considering the complications of medical and surgical management, *Basti* is definitely a better option for bringing

significant changes in signs and symptoms, thus improving the quality of life of patient. This case study provides a basis for a longitudinal study in large samples for further evaluation to substantiate its findings.

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