



EFFECTIVE MULTIDRUG THERAPY IN THE MANAGEMENT OF ULCERATIVE COLITIS – A CASE STUDY

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Article Info	ABSTRACT
<p>Received 15/12/2015 Revised 27/01/2016 Accepted 10/02/2016</p>	<p>Ulcerative Colitis is a type of inflammatory bowel disease causing inflammation and ulcers in rectum and colon. It is characterized by gradual onset of diarrhea (\pm blood and mucus). Perforation and bleeding are two serious complications of ulcerative colitis. Patient of ulcerative colitis bear a lot of social, psychological and financial burden. Presently since there is no permanent treatment of ulcerative colitis, a multidrug Ayurvedic treatment was evaluated in present case report.</p>
<p>Key words: Ulcerative Colitis, inflammatory bowel disease, Rectal bleeding, Colonoscopy, Ayurveda, Raktaj atisara, Grahanikapat rasa, Kutajghana vati, Mustakarista, Lavanbhaskar powder, Bael powder</p>	

INTRODUCTION

Ulcerative Colitis, a type of inflammatory bowel disease, is a relapsing and remitting disease characterised by acute non infectious inflammation of the colorectal mucosa [1]. The major symptoms of ulcerative colitis are diarrhea, rectal bleeding, tenesmus, passage of mucus and crampy abdominal pain. The severity of symptoms correlates with the extent of disease. Although ulcerative colitis can present acutely. Symptoms usually have been present for weeks to months [2]. Emotional stress, Intercurrent Infection, Gastroenteritis, anti-biotics or NSAIDS therapy may all provoke a relapse [3]. The prevalence of ulcerative

colitis varies significantly from one country to another. There is no reported data from India on incidence of ulcerative colitis and its prevalence [4]. However normal prevalence rate is 100-200/100000 and incidence is 10-20/100000/yr [5] Although ulcerative colitis can occur at any age, the incidence peak in age group 15-25 years and 55-65 years [6].

Patient of ulcerative colitis have significant social, psychological and financial trauma along with an impaired health related quality of life. Since the incidence of ulcerative colitis increasing worldwide there will be an



ever-increasing economic impact on health system and economy of world [7].

Presently there is no permanent treatment for ulcerative colitis and the treatment is guided toward control of symptoms with minimum side effect from drugs. Normal treatment goal include improving quality of life to as close to normal as possible, maintaining remission, avoiding surgery, minimizing the risk of steroid dependence and minimizing risk of treatment associated complications [8].

Present day treatment include 5-ASA, corticosteroids, immunomodulators, anticytokines, antibiotics, and occasionally surgery [9] but the achievement of treatment goal is illuded. That's why we tried to find out a useful treatment modality from Ayurvedic resources. Ayurveda quotes several clinical condition viz. pattik atisara, raktaj atisara, shokaj atisara, raktaj pravahika having symptoms resembling to ulcerative colitis [10].

The present treatment regimen include Grahanikapata Rasa, Kutajghana Vati, Mustakarista, Lavanabhaskar Powder and Bael Powder. Grahanikapata Rasa is a organometallic preparation containing mercury, sulphur, nutmeg and cloves [11]. Kutajghana Vati is a medicine having Kutaj as its main ingredient [12]. Lavan Bhaskar is a poly-herbo mineral preparation which increases digestive capacity having samudra lavana and sourachal lavana as its major composition. [13]. Mustakarista is a type of Ayurvedic medicine prepared through special procedure of fermentation containing Cyperus scariosus (R.Br.) as its main ingredient [14]. The powder of unripe fruit and stem bark of Bilva (Aegle marmelos L.) are very useful in raktaj atisara (diarrhea mixed with blood) and colitis [15].

Case Presentation:

A 28 year old female patient having OPD Registration no-4231/10-11 came to OPD of Shyamadas Vaidya Sastra Pith complaining of bleeding per rectum, increased frequency of soft stool associated with mucous and intermittent abdominal pain since last 6 months. The symptoms started 6 month ago with an episode of onset of passage of liquid stool mixed with blood and abdominal cramps.

Brief History:

Patient was normotensive, euglycemic and euthyroid. Patient was having non-vegetarian diet habit and also was a non-smoker. Patient was married with a living child of 4 years age. The near relatives of patient did not have any history of autoimmune disorder or any type of chronic abdominal ailment.

Base line Finding:

Patient was malnourished (wt=40 kgs). On examination abdomen was mildly tender in left iliac region

and liver was slightly palpable. The biological and hematological findings are mentioned in table no. 1.

Diagnosis:

Patient was diagnosed as having ulcerative colitis based on the combination of clinical features and colonoscopic findings including examination of mucosal biopsies.

In this case along with presence of specific features of ulcerative colitis, first in the series of colonoscopy revealed multiple discrete ulcer with reddish margin in ileum and multiple discrete ulcer with sloughed base between 8mm to 10mm size in caecum. Biopsy was taken which confirmed the diagnosis.

Assessment criteria:

Patients were assessed monthly based on improvement of clinical features and colonoscopic findings were documented at 6 month interval. Biochemical and hematological investigations were done for assessing the improvement as well as observing the complications/toxicity of treatment if any.

Case conception and Treatment Selection:

Ulcerative Colitis currently considered as inappropriate immune response to endogenous commensal microbiota within the intestine / colon with or without some involvement of autoimmunity. In Ayurveda ulcerative colitis is correlated with several clinical condition viz. pattik atisara, raktaj atisara, shokaj atisara, raktaj pravahika. In Ayurveda basic pathology of this diseases hinges towards mandagni (low digestive capacity) and inability of intestine to absorb water due to inflammation. So the treatment goal includes Agnideepan (increasing appetite) and drugs which help to arrest the increase liquidity of stool (purish stambhana).

Treatment Plan: The treatment plan and medicines were categorized in three types

- Drugs increasing digestion: Lavan Bhaskar Powder
- Drugs decreasing frequency and liquidity of stool: Bael powder, Mustakarista, Kutajghana vati
- Drugs acting specifically on the concerned disease: Grahanikapata Rasa

The drug regimen was

- Kutajghana Vati- 2 pills (500mgs) twice daily with 15 ml Mustakarista mixed in 100 ml water
- Grahanikapata Rasa- 2 pills (250mgs) twice daily
- Lavan Bhaskar Powder- 3 gms twice daily
- Bael Powder- 3 gms twice daily

The treatment regimen was carried out for 2 years.


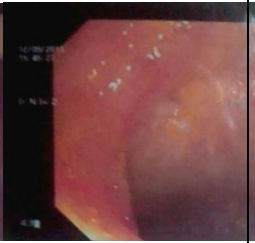










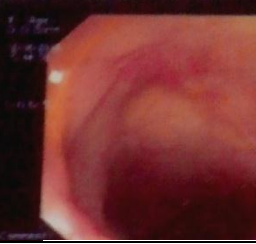

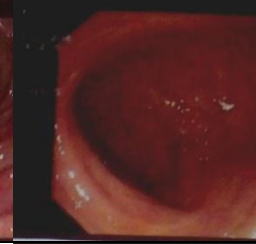

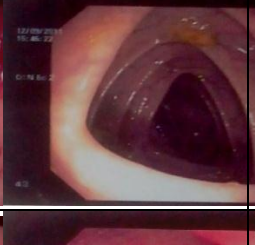



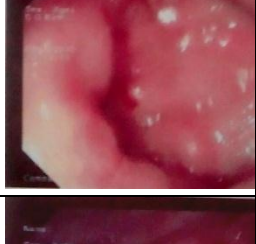
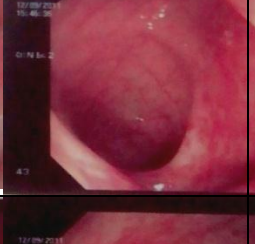




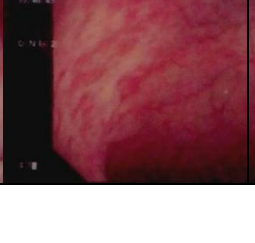



Case progress:

Patient was advised to stop milk and milk products along with sour, hot and spicy food article. The patient started to show symptomatic improvement after 1



month. The frequency of stool came down to 2/day in 2 months. Bleeding per rectum stopped in nearly 2 months period and abdominal cramp diminished in 1½ months period. Patient was observed for nearly 2 years and apart

from 2-3 episodes of abdominal discomfort, the presenting symptoms of patient did not appear. Colonoscopy done on regular interval also confirmed the improvement.

	0 Day	6 Months	1 Year	1½ Years	2 Years
Fig - 01					
Fig - 02					
Fig - 03					
Fig - 04					
Fig - 05					
Fig - 06					

End Point Findings:

After completion of 2 years of treatment the patient was not having bleeding per rectum, pain abdomen

or loose stool. Colonoscopy done at 2 years of treatment (figure enclosed) revealed only few ileal ulcers along with



better appearance of colon. Blood hemoglobin which was 8.2 gm/dl before treatment elevated to 10.4 gm/dl.

Otherwise no major changes of blood reports along with serum urea, creatinine and LFT were noticed.

Table 1. Blood Reports before and after treatment

Blood Report	Before Treatment	After Treatment
Hemoglobin	8.2gm/dl	10.4 gm/dl
Total Count	6.1 thou/cmm	4.2 thou/cmm
ESR	32	08
FBS	98 mg/dl	88 mg/dl
PPBS	1114 mg/dl	116 mg/dl
LFT- Total Bilirubin	1.1 mg/dl	0.9 mg/dl
ALT	55 Unit/Lit	62 Unit/Lit
AST	45 Unit/Lit	35 Unit/Lit
ALP	115 Unit/Lit	82 Unit/Lit
Total Protein	8.3 gm/dl	7.8 gm/dl
Lipid Profile-		
Total Cholesterol	94 mg/dl	118 mg/dl
LDL Cholesterol	76 mg/dl	84 mg/dl
HDL Cholesterol	54 mg/dl	46 mg/dl
Triglyceride	35 mg/dl	55 mg/dl
Urea	44 mg/dl	36mg/dl
Creatinine	1.1 mg/dl	0.8 mg/dl
Sr. Sodium	128 mmol/L	134 mmol/L
Sr. Potassium	4.5 mmol/L	3.8 mmol/L
Sr. Chloride	104mmol/L	106mmol/L

Treatment Implication:

Based on colonoscopic findings as well as the improvement of symptoms it can be safely concluded that the above treatment regimen worked well in case of ulcerative colitis. The treatment was basically symptomatic i.e. Bael powder, Kutajghana vati, and Mustakarista decreases the liquidity of stool and hence the frequency. Lavan bhaskar powder increases the digestive capacity and Grahaniapat rasa works well on the inflamed intestine.

CONCLUSION

Based on above findings it can be safely concluded that the above mentioned treatment regimen

worked well on ulcerative colitis. Further large scale studies are suggested.

ACKNOWLEDGEMENT: None

STATEMENT OF HUMAN AND ANIMAL RIGHTS

All procedures performed in human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This article does not contain any studies with animals performed by any of the authors.

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