

**Case Study****EFFECTIVENESS OF MUSTA-TAKRA BASTI IN THE MANAGEMENT OF ULCERATIVE COLITIS (PITTAJA GRAHANI) – A CASE REPORT****S.M. Prasad Raj^{1*} Mahesh Kumar E.S.²**¹PG Scholar, ²Associate Professor, Department of Shalya Tantra, SDM College of Ayurveda and Hospital, Hassan, Karnataka, India.**KEYWORDS:** *Musta- Takra Basti, Pittaja Grahani, Kutajarista, Dadimastaka choorna, Ulcerative colitis.***ABSTRACT**

Ulcerative colitis is an idiopathic inflammatory bowel disease causing inflammation and ulcers in the rectum and colon. In India, the incidence rate of Ulcerative colitis is 6.02 cases per 100,000 inhabitants. It is manifested as ano-rectal bleeding with increased frequency of bowel evacuation, general debility. In the contemporary science Complications are more often and the disease may even relapse after a period of time. A 52 years old female Patient attended OPD with diffuse abdominal pain, loose stools 10-15 times a day with blood, debility and weight loss. Patient was known case of ulcerative colitis since 2 years receiving treatment from contemporary science but she was not getting any satisfactory relief. Patient was treated with the concept of *Pittaja Grahani* in Ayurveda. **OBJECTIVE:** To improve the signs and symptoms of the ulcerative colitis, to prevent from all possible intestinal and extra-intestinal complications related to ulcerative colitis finally to cure the disease. **METHOD:** *Takra-Mustadi Basti* was administered for 16 days along with other *Shamana Aushadies* and signs and symptoms were evaluated daily. **RESULT:** Patient responded well with much improvement in her general condition. Frequency of defecation is decreased, no bleeding per rectum and other signs and symptoms were relieved. **CONCLUSION:** This study can be useful for reducing the need of steroids and surgical processes in the patient of ulcerative colitis Hence Ayurveda treatment can be a promising alternative, safe and convenient treatment in the management of Ulcerative colitis.

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sm.prasad001@gmail.com**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]. Japanese Society of Gastroenterology defined Ulcerative colitis as a diffuse non-specific inflammatory disease of unknown origin that continuously effects the colonic mucosa starts from the rectum and often forms erosion and or/ ulcers. Lesions of this disease involve only mucosa and sub mucosa except for fulminant cases^[2].

The major symptoms of ulcerative colitis are diarrhoea, 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^[3].

Onset is typically insidious and gradual. Findings from abdominal examination are usually unremarkable. Diagnosis is best made with Sigmoidoscopy and Colonoscopy. It can occur at any age, often in the 30's with a second peak in the 50's or 60's^[4].

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 it's prevalence In India, the incidence rate is 6.02 cases per 100,000 inhabitants^[5]. However normal prevalence rate is 100-200/100000 and incidence is 10-20/ 100000/ yr^[6]. According to Indian Society of Gastroenterology, India shows the highest incident among

Asian countries. The increased incidence is related to the rapid westernization of lifestyles as well as environmental changes Caused by industrialization and urbanization^[7]. Ulcerative colitis is a disease with multifactorial origin. Involvement of genetic and environmental factors have been considered as causative factors though there is no any exact aetiology found for occurrence of Ulcerative colitis. Ayurveda medicine is very beneficial the treatment of ulcerative colitis, in Ayurveda disease like *Pittaja Grahani* can be correlated to Ulcerative colitis. *Shulam, Vidaaham, Gudpaaka & Raktapravritti* can be compared with rectal pain, inflammation, rectal ulceration and bleeding of ulcerative colitis^[8]. The treatment such as *Deepana-Pachana, Grahi, Stambhana, Raktha Vardhana* forms the mainstay of the treatment. So a trail using *Takra* and *Musta* as *Basti* in the management of Ulcerative colitis according to Ayurveda principles will be discussed in this paper.

Case Report

A 52 Year old female patient visited the OPD of the SDM College of Ayurveda Hassan for the complaints of frequent defecation 15-20 times per day associated with pain in abdomen, mucous mixed with stools, severe weakness, reduced appetite for 2 years.

A history of the present illness revealed that the patient was apparently normal 4 years back. She started with abdominal pain watery stools 6 times per day along with mucous and weakness. The symptoms aggravated on taking spicy and heavy foods.

After 6 months loose stools increased up to 15 times/day, frothy and stools stained with mucous and blood. For the same patient consulted a gastroenterologist, where the patient was diagnosed with ulcerative colitis by colonoscopy and biopsy. The patient underwent conservative management. As the patient was not getting better she visited our hospital.

On physical examination she looked pale and afebrile. Her heart rate was 102/min, Blood pressure (110/70mm of Hg) and respiratory rate (18/min) were normal. There was no clubbing, lymphadenopathy and skin lesion. Her height was 153 cm and weight was 41 kg. Abdomen was soft,

mild tenderness present in lower abdomen but there was no guarding & no organomegaly. No abnormality was noted in the perianal region and no signs of inflammation in any joints.

Rectal Examination

Inspection: No perianal inflammation in the form of fissure, fistula or no external pile mass is noticed

DRE: Normal tonicity, no mass, blood mixed mucous discharge present on the examining finger.

Proctoscopy: Multiple ulcerations with mild bleeding seen at upper anus extending towards rectum.

Haematological investigations: Hb-7.2 g/dl, white cell count 7800 cells/CMM, ESR was 76mm in 1st hr.

Abdominal ultrasound revealed normal study.

Colonoscopy showed Continuous ulceration with oedematous mucosa, loss of mucosal fold and erosions from rectum up to caecum.

Colonic biopsy revealed loss of architecture of glands with few glands showing cryptitis with infiltration of lamina propria by eosinophils, plasma cells with few glands showing mucin depletion with a foci of lymphoid aggregates features suggestive of Chronic Colitis. So the diagnosis of ulcerative colitis was made. It can be co-related with *Grahani* in Ayurveda

Treatment

The Ayurvedic management planned was *Basti* mainly for *Deepana* (Increase digestive power), *Pachana* (Digestant), *Stambhana* (Astringent), *Grahi* (Anti-Diarrhoeal) and *Raktha vardhana* (Increase blood).

Kala Basti (Medicated decoction enema) was administered for 16 days.

Anuvasana (Medicated enema) – *Dadimadigritha* – 80 ml.

Niruha

- *Saindhava Lavana* (Rock salt) – 12 grams
- *Madhu* (Honey) – 80 ml.
- *Kalka- Dadimastaka Choorna, Amalaki, Musta (Cyperus rotundus), Daruharidra (Berberis aristata)* – 10 grams each.
- *Sneha – Dadimadi Gritha* – 80 ml.
- *Kashaya – Musta – Takra* – 250 ml.

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Basti	A	N	A	N	A	N	A	N	A	N	A	N	A	N	A	A

Oral medicine

- *Dadimastaka choorna* 5 grams QID with *Takra* (Buttermilk) after food.
- *Kutajarista* 15 ml with 30 ml luke warm water three times a day after food.

The patient was advised to take the oral medication for 1 month, and then review after a month. She was also explained with do and don'ts of *Ahara-Vihara* (food habit and regimen) as avoidance of *Amla* (sour), *Tikshna* (pungent), spicy, *Pitta-Vardhaka Ahara*, *Adhyashana* (repeated eating before the prior digestion of food), *Diva-Swapna* (day time sleep), *Ratri-Jagrana* (Night awakening), sleeping after meal, over exertion, heavy meals, non-vegetarian diet etc.

Result

On the 5th day of treatment the patient reported reduction of frequency of bowel reduced

Table 1: Observation

Signs & Symptoms	Before Treatment	5 th Day	10 th Day	16 th Day	1 st Month
Frequency of stool	10-15 times per day (loose)	10times/day (semi-solid)	6 times/day	3 times/day (semisolid)	1-2 times/day (semi solid)
Blood in stools	Present with each defecation	Present	Reduced	Absent	Absent
Mucous in stools	Present with each defecation	Present	Absent	Absent	Absent
Pain in abdomen	Continuous in whole abdomen	Pain reduced	Pain reduced	Absent	Absent
Appetite	Reduced	Improved	Improved	Good	Good
Weight	41 KG	41 kg	42 kg	43 kg	44 kg
Haemoglobin	7.2 GM%				8.4 gm%

DISCUSSION

- **Musta** (*Cyperus rotundus*) has *Katu* (pungent), *Tikta* (bitter) and *Kashaya* (astringent) taste *Laghu* (light) and *Ruksha* (dry) properties, *Sita* (cold) potency and *Katu* (pungent) taste after digestion.
- It is *Kapha-Pittahara* (reduces Kapha and Pitta Dosha), *Deepana* (increases digestive fire), *Pachana* (digests undigested material), *Grahi* (water absorbing), *Jwarahara* (antipyretic), *Atisaraghna* (anti-diarrhoeal), *Kanduhara* (antipuritic), *Vrana Shodhana and Ropana* (Wound cleansing and Healing).^[9,10,11]
- *Cyperus rotundus* has the properties of antimicrobial activity, anti-laceration/ulcer activity, analgesic activity, anti-inflammatory activity, anti-diarrhoeal activity, antipyretic activity due to the presence of the chemical constituents such as flavonoid, Tannin, tri

by 10 times per day. *Phenayukta* and *Raktayukta Purisha* (mucous and blood-mixed stool) were seen occasionally. Improvement was observed in *Kshudha* (appetite) *Udarashoola* (distension and pain abdomen) was relieved. On the 10th day, the frequency of bowel reduced to 6 times per day. Mucous- and blood-mixed stool was completely stopped. Improvement was noted in weakness, appetite, and reduced sleep. Frequency of stools reduced to 3 times per day and complete relief was reported in all the other signs and symptoms by the patient on the 15th day. On the 30th day, there was no any previous complaint reported by the patient and improvement in *Bala* (general strength), *Varna* (complexion), *Agnideepti* (appetite), and body weight was achieved. The patient was on follow-up till 6th month, without any single episode of relapse.

- terpenoids, sesquiterpenes, cyperolone, cyperone, copaene, cyperene, cyperenone.^[12]
- **Takra** (Buttermilk)- *Deepana*, *Pachana*, *Sangrahi* and *Tridoshahara*. *Laghu Guna* and *Deepana* properties of *Takra* helped to correct the *Agni Due* to its *Madhura Vipaka* helped in the balance of *Pitta*. Also, its *Vatahara* property helped to correct the vitiated *Samana Vayu*. The *Grahi* action of *Takra* subsided *Drava Mala Pravrutti* which has been proved to restore the bacterial flora of the intestinal mucosa. Hence *Takra* was major diet administered throughout the course of treatment.
- **Amalaki**: It is *Rakthapittahara* (reducing the bleeding), *Deepana* (increases digestive fire) and *Stambana* (Astringent property / Stopping) so it helps in reducing the bleeding and also

helps in Digestion and *Vrana Ropana* (healing of ulcer).^[13]

- It has various chemical compositions Emblicanin A & B, Puniglucanin, Pedunculagin, 2-keto-gluconolactone (Vitamin-C equivalents). Ellagic acid, Hexahydroxy-diphenic acid and conjugates tannins, alkaloids, phenolic compounds, amino acids and carbohydrates. Its fruit juice contains the highest vitamin C (Ascorbic acid).
- It has various pharmacological activities such as Anti-ulcer activities, Antioxidant, Immunomodulation, antipyretic and analgesic activities, anti-inflammatory, gastroprotective properties.^[14]
- **Daruharidra:** It is *Shothahara* (Anti-inflammatory), *Vedanastapana* (Analgesic), *Vranashodhana* (Wound cleansing), *Vrana Ropana* (Wound healing) and especially used in *Amatisara* (Undigested food as Dysentery).^[15]
- *Berberis aristata* contains berberine, berbamine and various tannins, flavonoids, alkaloids, and phenolic compounds they have stomachic, astringent, antiperiodic, antipyretic, Anti-inflammatory anti-diarrheal, anti-dysenteric activity and wound healing property.^[16]
- **Dadimadigritha:** It contains Dadima, *Dhanyaka*, *Chitraka*, *Shunthi*, *Pippali* and *Gritha*. It is *Tridosahara*, it has Qualities such as *Deepana*, *Pachana*, *Raktavardaka* so helps in proper Digestion and increases *Raktha*.^[17]
- **Dadimastaka Choorna** – *Twakshiri*, *Chaturjata*, *Yavani*, *Dhanyaka*, *Ajaji*, *Chavyamoola*, *trikatu*, *Dadima* and *Sita*- It is *Tridosahara* does *Deepana*, its Qualities includes *Grahi*, *Hrdyam*, *Atisaraghna*, *Soolahara* and especially *Grahanibalya* so it helps in Digestion, improves metabolic activities, promotes appetite and It reduces loose stools. *Dadimastakachoorna* can be used for conditions like *Grahani* where *Agnimandya* is the chief pathology.^[18]
- **Kutajarista** is explained in *Bhaisajyaratnavali*, *Atisaradhikara*. It contains *Kutaja*, *Draksha*, *Madhuka*, *Gambhari*, *Guda* and *Dhataki Pushpa* it is indicated mainly in diarrhea, dysentery and other gastrointestinal manifestations.^[19]

Modern pharmacological researches carried out on *Holarrhena antidysenterica* bark confirm its activity against both acute and chronic amoebic dysenteries^[20]. It is also found that this drug has potent immune-stimulatory^[21] effect. Antidiarrheal activity^[22], antimotility and antisecretory^[23] effect of *Kutajarista* have been established in castor oil and magnesium sulphate induced diarrhoea models.

Overall, due to the improvement in *Agni* (digestion and absorption), *Bala* (strength), and *Varna* (complexion), body weight of the patient was also improved.

CONCLUSION

In this case study, Ulcerative colitis was successfully managed through Ayurveda, modern science has various treatment modalities but the complication and relapsing of disease is most common. Ayurveda treatment can be a promising alternative, safe and convenient treatment in the management of ulcerative colitis as it can be useful for reducing the need of steroids and surgical procedures in the patient of ulcerative colitis. This treatment protocol could be explored further on larger sample and standardisation of treatment protocol can be carried out.

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