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Case Study

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MANAGEMENT OF SEVERE ULCERATIVE COLITIS THROUGH AYURVEDA – A CASE REPORT

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ABSTRACT

Ulcerative colitis is a chronic inflammatory disease, which is hard to manage because of its relapsing property and drug dependency. Currently available conventional treatments have limitations; making it important to search its cure in Ayurvedic science. In Ayurveda *Raktaj atisara* (Ulcerative colitis) could be correlated with Ulcerative Colitis (UC) for which treatment protocols have been mentioned. A 66 years old female patient attended OPD complaining of loose motions with profuse bleeding, diffuse abdominal pain, low grade pyrexia, weakness, dizziness and loss of appetite. Based on above complaints she was diagnosed with *Raktaj atisara* (Ulcerative colitis). She had taken two courses of steroids in the last year and recently underwent transfusion of six-units platelet and 6-units of PRBC (packed Red Blood Cell) for blood loss. *Pittashamak* (~*pitta dosha* alleviating),

Raktastambhak (~hemostatic) and Grahi (~absorbent) treatment was given by Chandanadi lauha, Vasavleha, Kamdudha rasa, Yashtimadhu churna, Guduchi churna, Amalaki churna, Shandangpaniya and Posex capsule. Complete relief in symptoms (low grade pyrexia, loose motions with profuse bleeding) was achieved in three days. Follow-up was done after one month and showed no relapse of symptoms. Haemoglobin levels increased from 5.3gm/dL to 8.4gm/dL within a month. The observations reveal that Ayurvedic approaches are helpful in managing Ulcerative Colitis successfully.

KEYWORDS: Raktaj atisara, Ulcerative colitis, Shamana chikitsa.

INTRODUCTION

Ulcerative colitis is a diffuse non-specific inflammatory disease that affects the colonic mucosa and forms erosion and/or ulcers.^[1] Around 90% of all cases of ulcerative colitis are mild or moderate in severity; [2] and only 5–8% patients present with signs and symptoms of acute severe colitis. [3] India shows the highest prevalence of the disease among other Asian countries; [4] which makes an alarming situation for researching out the drugs which can be used on long term basis without any side effects. Several treatment protocols are available with the modern medicine which comprises of use of different oral drugs and corticosteroids. [5] Drug resistance, drug dependency, and side effects of these drugs are very high and surgical intervention is known as the curative procedure for ulcerative colitis. [6] Signs and symptoms of ulcerative colitis like rectal bleeding (may be associated with mucous), increased frequency of stool, sense of incomplete evacuation, urgency and tenesmus etc. [7] are also seen under the description of Raktaj atisara and hence management can be done using the same Ayurvedic principles mentioned for its management.

PATIENT INFORMATION

A 66 years old female patient attended OPD with loose motions 6-8 times a day with profuse bleeding, diffuse abdominal pain, low grade pyrexia, weakness, dizziness and loss of appetite for the past 20 days. Patient was a known case of ulcerative colitis for two years receiving treatment with steroids and mesacol for profuse bleeding from the last 20 days. But the patient was not relieved satisfactorily with the use of medicines. The patient was a known case of rheumatoid arthritis with a drug history of long-term use of methotrexate. History of 6 units platelet concentrate transfusion and 6-unit PRBC (packed Red Blood Cell) transfusion was given. There was no family history of hypertension and diabetes mellitus. The patient a vegetarian, food intake frequency and amount were irregular, and no alcohol/smoking/tobacco addiction was reported.

CLINICAL FINDINGS

Dry and coated tongue, Pallor (Panduta/vaivarnya) - present, Cyanosis (vaivarnya) / Clubbing (Asthidhatu vikruti) / Icterus (Peet varnta/vaivarnya) / Skin lesion (Twak vikar) / Lymphadenopathy (Lasika granthi shotha) - not present. Pulse- 108beats/min having low volume; blood pressure- 100/56 mmHg. Abdominal examination revealed- diffuse tenderness.

Dashvidha atura pariksha (~Tenfold examination)

Prakruti (body temperament) was Vatapitta. Vikruti (disease nature) was Pitta and Rakta pradhan. Sara (~excellence of tissues), Samhanana (~compactness of organs), Pramana (~measurement of body organs), Satva (~psyche), Ahara shakti (~power of food intake and digestive functions), Vyayam Shakti (~power of performing exercises) and Vaya (~age) was Avara. Satmya (~suitability) was found to be Madhyam.

Samprapti Ghataka (Pathogenesis)

Doshika predominance was Vataj pittaj. Dushya (~vitiated dhatus) were Purisha (~fecal matter) and Rakta (~blood). Srotas (~channels) involved were Purishvaha (~channels carrying stool), Udakvaha (~channels transporting water) and Annavaha (~gastrointestinal tract). Adhishthana (~source of origin) - Pakwashaya / Guda (~large intestine). Agni (~digestive and metabolic capacity) was Manda (~mild). Svabhava (~nature of disease) was Ashukaari (~acute).

TIMELINE

Timeline of events is described in schematic representation. [Figure 1]

DIAGNOSTIC ASSESSMENT

Previously diagnosed case of ulcerative colitis (on the basis of colonoscopy) and the patient was diagnosed as a case of Raktaj Atisara based on symptoms mentioned in Ayurvedic texts.

Colonoscopy (performed on 27/01/2020) was suggestive of jejunal bleeding (ulcer; as mentioned in the colonoscopy report), Colonic ulcers with oozing and SRH (stigmata of recent hemorrhage). CT Angiography of abdominal aorta (performed on 28/01/2020) was suggestive of Serpigeneous intraluminal hyperdensity in proximal jejunum likely to be extravasated contrast (as mentioned in the CT report). The colonic ulcers were probably secondary due to Non-Steroidal Anti-Inflammatory Drug (NSAID) induced enteropathy.

THERAPEUTIC INTERVENTION

Patient was admitted to the hospital and was given treatment on IPD basis from 31/01/2020 to 06/02/2020 (7 days). Shamana chikitsa was prescribed along with dietary modifications (soft diet). Oral medicines were given to the patient along with total bed rest because of exce ssive weakness (Table 1). The assessment of signs and symptoms was done pre-treatment, post- treatment and after the follow-up period (consisting of first follow up telephonically after 15 days and second follow up during the OPD visit after one month of discharge from the hospital) was over (Table 2).

FOLLOW UP AND OUTCOME

The patient was taking methotrexate, which was discontinued by the patient herself during the course of Ayurvedic treatment. After three days of administration of Ayurvedic medicines, the patient showed considerable relief in rectal bleeding, tenesmus and abdominal pain. Complete remission of symptoms was achieved in seven days and the patient was discharged with the same treatment protocol to be followed for the next 15 days (Posex capsule was withdrawn during this period) and first follow up was done (telephonically) after 15 days from the date of discharge. The patient was then asked to discontinue all the ayurvedic medicines and was asked to follow up on OPD basis after 15 days. On the day of the visit of the patient to the hospital (13/03/2020; after 1 month of discharge) there was no relapse of symptoms.

Table 1: Shamana Chikitsa.

Oral Medication	Dosage	
Vasavleha	10 gm thrice daily before breakfast, lunch and	
	dinner	
Chandanadi lauha	500mg twice daily after lunch and dinner	
Kamdudha rasa	250mg twice daily after lunch and dinner	
Giloy + Amalaki+ Yashtimadhu	1gm each after lunch and dinner	
churna		
Posex capsule	2 capsules twice daily after lunch and dinner	
	(each capsule 1.5gm)	
Shadangpaniya	30 mL; every 4 hourly	

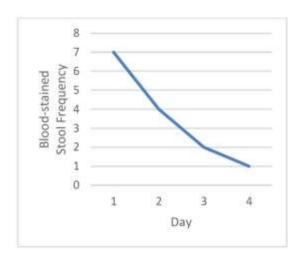
Table 2: Assessment Criteria

Severity grade from severe to remission of disease was achieved.

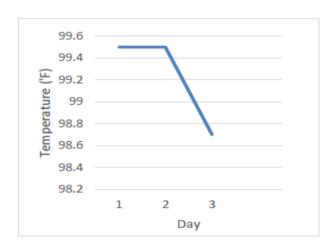
Sign and symptoms	Before treatment	After treatment
Blood-stained stool	>6 time /day	1-2 stools/day without bleeding
		P/R (within 3 days)
Fever	>99.5 F	No fever (within 3 days)
Tachycardia	>90 bpm (108 bpm)	No tachycardia (within 3 days)
Anemia	5.3g/d L	8.4g/d L (after 1 month)
ESR*	79 mm/Hr	56mm/Hr (after 1 month)

^{*}ESR – Erythrocyte sedimentation rate

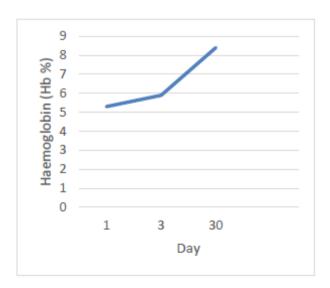
Legends for Graphs



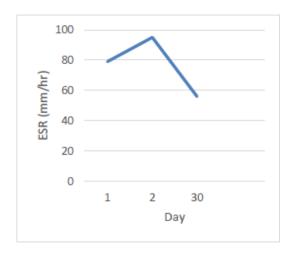
Graph 1: "Resolution of blood-stained stools.



Graph 2: "Resolution of fever"



Graph 3: "Increase in Haemoglobin levels".



Graph 4: "Decrease in ESR Levels"

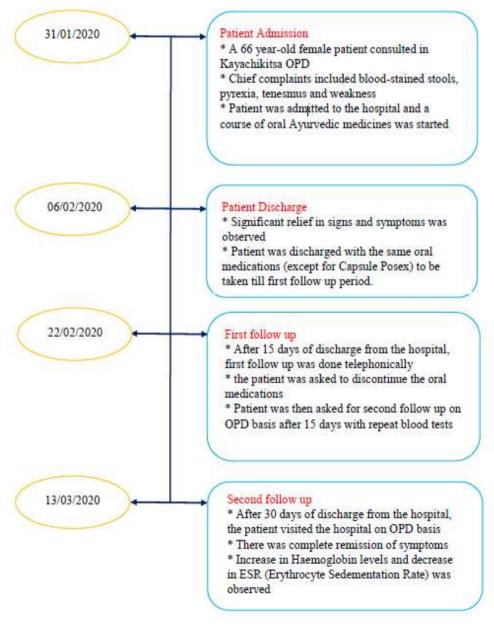


Fig. 1: Schematic Representation - Timeline of Events.

DISCUSSION

The main causative factor in ulcerative colitis is unknown but as per Ayurveda, the *Nidana* (~etiologic factors) causing *Pitta vruddhi* (~increased *pitta*) can lead to *Pittaja atisara*. If *Pitta* aggravating *Nidaan* is not avoided during the course of *Pittaja atisara* then it may lead to *Raktaja atisara*. [8] *Rakta-piita-shamak* (*Rakta* and *Pitta* pacifying) and *Shonitasthapana* (~anti- hemorrhagic) treatment was given along with *Pathya* (~wholesome diet) including light digestible food predominant in *Kashaya rasa* (~astringent taste) like *Moong dal yush* (~split green-gram soup), *Khichadi* (~thick gruel made of rice and green-gram) etc. Significant decrease in blood-stained stools (Graph.1), fever (Graph.2) and Erythrocyte Sedimentation Rate (ESR) (Graph.4) accompanied by increase in hemoglobin levels (Graph.3) was achieved. Severity grade from severe to remission of disease was achieved.

Probable mode of action of intervention

Yashtimadhu churna (Powder of Glycyrrhiza glabra Linn.) has Madhura rasa (~sweet), Guru (~heavy) and Snigdha (~ununctous) gunas, Madhur vipaka (~sweet at end of digestion) and Sheeta veerya (~cold potency). Because of Madhura rasa and Sheeta veerya it pacifies Pitta.^[9] It is best Vrana shotha hara (~wound/ulcer healer).^[10] Hence its Pitta-shamana and Vrana-shothahara actions helped achieve reduction in the blood-stained stools.

Amalaki churna has all Rasa except Lavana (~salty), Sheeta veerya (~cold in potency), Laghu (~light) and Ruksha (~drying, absorbing) Gunas (~property) and Madhura vipaka (~sweet taste at the end of digestion). It pacifies Pitta dosha due to Madhura, Tikta kashaya rasa, Sheeta veerya and Madhura vipaka. Amalaki has Stambhana (~styptic property), Vrana ropana (~ ulcer healing property) and Shonit sthapana (~hematinic) property. Hence it might have helped in the reduction of bleeding along with increase in Hemoglobin levels along with its healing properties.

Guduchi churna has Tikta (~bitter) and Kashaya (~astringent) Rasa, Guru (~heavy) and Snigdha (~unctuous) Guna and Madhura vipaka (~sweet at the end of digestion). It pacifies all three Doshas. It has Sangrahik (~stops excessive secretions), Balya (~strengthening), Agni deepaniya (~increases digestive fire), Jwara nashini (~antipyretic) and Raktavardhak (~hematinic) properties. Hence due to its Sangrahika and Raktavardhaka properties it might have helped in reduction in bleeding/mucous secretions and hence maintaining the normal Hemoglobin levels. The Jwarahara properties helped in pacifying the fever and bringing the ESR within normal ranges.

Kamdudha rasa is a well-known formulation having Pitta shamana (~Pitta dosha alleviating), Rakta stambhan (~hemostatic), Sangrahik (~consolidating) and Sheet veerya (~cold potency) properties because of Sudha varga as main ingredients. Suvarna gairik bhasma decreases the Kshobha (~ulcers/irritation) in small and large intestines. Vranaropak (~wound-healing), Balya (~strengthening), Raktapittanashak (~pitta-blood pacifying), Jwarnashak (~antipyretic) properties. [13] Due to its above said properties it might have helped by healing the ulcers, bringing back normal strength and in the reduction of fever.

Chandanadi lauha is a drug of choice for Jwara (~fever). It possesses Pitta shamana (~pitta alleviating) property as maximum constituents have Madhura rasa (~sweet in taste) and Sheeta veerya (~cold potency). Lauha bhasama being major constituent possess haematinic activity and thus helped in increasing haemoglobin levels. [14]

Vasaavleha is prescribed in Raktapitta (~pitta-blood pacifying); is astringent to taste, having Sheeta veerya (~cold potency), Laghu (~light), Stambhan (~absorbent) and Raktastambhak (~haemostatic) properties which helped in reduction of bleeding. [15]

Shadangpaniya having Grahi (~absorbent), Trishnanashak (~thirst pacifier), Jwarnashak (~anti pyretic), Sheeta (~cold) properties and is used in dehydrated conditions which helped in pacifying the fever and dehydration due to its above said properties. [16]

CONCLUSION

A fulminated case of ulcerative colitis was well managed with Ayurvedic intervention showing its potential in acute symptoms as well the treatment significantly alleviated the symptoms within three days with no relapse even after one month of follow-up. No sideeffects were observed during the treatment period and thereafter. This study paves the path for future studies in the treatment and understanding of management of diseases of the Gastrointestinal disorders. The studies conducted at a large scale and with easy and costeffective management protocols can provide a better quality of life (QoL) to the patients suffering from Ulcerative colitis.

Declaration of patient consent

Authors certify that they have obtained patient consent form, where the patient has given her consent for reporting the case along with the images and other clinical information in the journal. The patient understands that her name and initials will not be published, and due efforts will be made to conceal her identity, but anonymity cannot be guaranteed.

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Conflicts of interest: There are no conflicts of interest.

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