ROLE OF PICCHA BASTI (UNCTUOUS ENEMA) AND SANSHAMANA CHIKITSA IN THE MANAGEMENT OF JEERNA RAKTAAHTISAARA (ULCERATIVE COLITIS): CASE REPORT

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ABSTRACT
Ulcerative colitis is an inflammatory disorder which affects the mucosa and submucosa of the colon of the gastrointestinal tract. The dominant symptom is diarrhea, often associated with blood and mucus & Constipation due to rectal spasm in elderly. In addition, nocturnal defecation, abdominal pain (usually lower quadrant or rectal), fever, malaise and weight loss may also be reported. Localized rectal involvement may be characterized only by bloody diarrhea, with or without urgency, tendency, pain or incontinence with abnormal structural pathology in the descending colon, particularly sigmoid colon. Case Presentation: Patient having following chief complaints since one and half year; 1.Pain in abdomen which increased during empty stomach and after having meals, 2.Sticky stool defecation, 3.Mild abdominal pain during bowel defecation, 4.Burning sensation in abdomen after having spicy meal, 5.Blood mixed sticky stool defecation with reddish black in colour, 6.Frequent bowel defecation-4 to 6 times/day, 7.Weight loss within 4 to 6 months, 8.Decreased appetite, 9.Suffered from anxiety, 10.Decreased sleeping, 11.Feel generalized weakness & laziness, 12.Nausea after having heavy meal. GIT Examination: Palpation-Soft abdomen, Tenderness present in umbilicus region & hypogastric region, No Hepatospleenomegaly, No any lump, Normal in guarding, Rigidity. Diagnosis: Jeerma Raktahtisaara (Ulcerative colitis). Management: Through Piccha Basti (Uncuuous Enema Therapy) and Sanshamana Chikitsa (Oral Drug Therapy), a complete ayurvedic management. Outcome: Improvement in Bowel frequency, Blood in stool, Abdominal pain, Weakness, Red blood cells in stool and Pus cells in stool are observed which has been briefly describe. Discussion: Piccha Basti acts as Raktastambhaka, Vanranaopaka, Shothahara, Agnideepaka and Sangrah.

KEYWORDS: Ayurveda, Rakttahtisaara, Ulcerative colitis, Piccha Basti, Colon, Rectum.

INTRODUCTION
Ulcerative colitis is a form of chronic inflammatory bowel disease that causes non–granulomatous inflammation and ulcers in the rectum and colon.[1] Its incidence is raising especially in Northern India, due to erroneous dietary habits and faulty lifestyle. This is substantiated by the fact that urban areas have a higher incidence of Ulcerative colitis than rural areas, and high socio-economic classes have a higher prevalence than lower socio-economic classes.[2] The peak age of onset of UC is between 20 to 40 years of age, 10 per 100,000 persons are at risk.[3] A second peak occurs between the ages of 60 and 80 yrs. The male to female ratio for UC is-1:1.[4] In conventional Western medicine, some drugs like Sulfasalazine may give mild relief in signs and Even after taking steroid and Sulfasalazine drugs, patients suffer from the disease. So, the patients are always seeking some alternative therapy promising more effective and safer outcomes.

It is a very challenging disease affecting a patient during the most active period of his life i.e. 20 to 40 years of age. In modern medical science, there is no permanent curative and safe treatment for this disease.

A westernized environment and lifestyle are linked to the appearance of ulcerative colitis which is associated with smoking, unhealthy diet, medication use, stress etc. In Allopathic system of medicine drugs like 5–Amino salicylates, Glucocorticoids, Anti-TNF therapy etc. are

Understanding ulcerative colitis from ayurvedic point of view

From Ayurvedic point of view, Ulcerative colitis can be considered as a Pitta Pradhana Tridoshasa disease of Purishavaha Srotas. Nikana Sevana leads to vitiation of Pitta along with Vriddhii of Kapha and Vata. Vridhha Kapha and Vata cause the vitiation of Agni leading to Agnimandya. Excessive consumption of Pittaja-Ahara (Pitta aggravating foods) and Pitta aggravating regimen leads to vitiation of Pitta Dosha which further cause the vitiation of Rakta Dhatu. Doshha Sanchaya takes place in Grahani and Pakwashaya (Rectum and Colon) which results in Shoola (abdominal pain), Shotha (inflammation of intestine), Atisaara (Diarrhoea), Vrana (Ulcers) and Raktaasraya (bleeding per rectum) etc.

Vitiated Kapha blocks the channels causing further inflammation, mucus accumulation and oedema.

AIMS AND OBJECTIVES
1. To understand the role and efficacy of Piccha Basti in the management of Raktaatisaara (Ulcerative colitis).
2. To prove the role and efficacy of Sanshamana chikitsa followed by Piccha Basti in the management of Raktaatisaara (Ulcerative colitis).
3. To provide ayurvedic as well as modern pharmacological action of each drug in the management of Raktaatisaara (Ulcerative colitis).
4. To provide a large population suffering from Raktaatisaara (ulcerative colitis), a future possibility of safer treatment; this can be helpful in reducing the need of steroids and surgical processes.

MATERIALS AND METHODS
1. Piccha Basti was administrated for 14 days before meal in appropriate amount 100ml, 100ml, 110ml, 110ml, 110ml, 110ml, 120ml, 120ml, 120ml, 130ml, 150ml & 180ml as per classical method of ayurveda.
2. Sanshamana Chikitsa was carried out through administration of Daadimaashakta churna, Akik pisti, Bilwa churna, Kutajaparpati, Kutajabilwa syrup, Ajamodaadi churna, Gandhaka vati, Bhrishta haritaki churna, Panchamrita parpati, Tablet Bowelcare, Shatapushpa churna, Ajamodadi churna, Jaatiphalaadi churna, Aamadoshantaka vati, Syrup Anarmix, Kutajaghanavati and Tablet Shatavari during 6 follow-up till 5 months of treatment.

- Study is carried out as per International conference of Harmonization-Good Clinical Practices Guidelines (ICH-GCP).

CASE REPORT
A. Presenting complaints with duration: A patient of name XYZ, age 35 years old & sex male having following chief complaints since One and half year, 1.Pain in abdomen which increased during empty

B. History of Present Illness: Patient was asymptomatic before one and half year ago. First of all, he developed pain in abdomen in umbilical region, nausea after having meals, blood mixed mucous stool defecation, burning sensation in umbilical region, weight loss and anxiety with abnormal appearance. He had history of allopathic as well as ayurvedic medication but there had no benefit. Patient came to N.I.A.-OPD for his proper treatment.

C. History of Past Illness
1. Patient had no H/O Diabetes mellitus, Hypertension, Dengue, Tuberculosis, Hpyothyroidism, Typhoid, Malaria, Hernia, Liver disease etc.
2. Patients had no H/O any type of Surgery, Sexual Disease, Communicable disease and Chronic Disease.

D. Dietary History
1. Type of diet: Vegetarian,
2. Regular food habit,
3. Dominant Rasa in diet-All with Salty, Acid, Bitter in dominancy,
4. Alcohol Addiction-No,
5. Smoking Addiction-Yes, 3-4 cigarette/day.

E. Family History:
1. Type of family: Single family with 3 members including female baby,
2. No any relevant treatment history of family member.

F. Socio-economic status: Middle higher.

Examination of patient
A. Ashtavidha Pariksha (Eight-fold Examination)
1. Pulse-Rate-76/min, Rhythm-Regular, Volume-Normal, Tension-Normal, Force-Normal
2. Stool-Amount-less than normal, Colour-Reddish black, Smell-Foul, Nature-Sticky, Appearance-Blood mixed stool defecation
3. Urine-Amount-4 to 5 times/day, Colour-Pale yellow, Smell-Pungent odour
5. Touch-Normal in sensitivity, feel both cold & hot touch, Moist in nature, Afebrile, Normal in colour.

6. Eye-Normal in vision, No redness, No H/o Cataract, Glaucoma, Retinal detachment.

7. Appearance-Lean & thin body build-up, Normal in appearance.


B. Dashavidha Pariksha (Ten-fold Examination)
1. Prakriti-Vata-Pittaja
2. Vikriti-Dosha-Dushya Samoorcchana,
3. Pitta Pradhan Kapajavikriti
4. Sara-Madhayama
5. Samhanna-Madhayama
6. Pramana-Madhayama
7. Satva- Madhayama
8. Saatmya-Madhayama
9. Ahara-Shakti-Madhayama
10. Vyayaama Shakti-Madhayama
11. Vaya-Madhayama

C. Srotasa Examination
1. Pranavaha Srotas-NAD
2. Udakavaha Srotas-NAD
3. Annavaha Srotas- Anamabbidhala (Lack of desire for food), Avipaka (Indigestion)
4. Rasavaha Srotas-NAD
5. Raktavaha Srotas-NAD
6. Mansvaha Srotas-NAD
7. Medovaha Srotas-Alasya (Lethargy)
8. Ashtivaha Srotas-NA
9. Majavaha Srotas-NAD
10. Shukravaha Srotas-NAD
11. Manovaha Srotas-NAD
12. Arthavaha Srotas-NAD
13. Mootravaha Srotas-NAD
14. Purishavaha Srotas- Rakayuktara Purish tyaga (Blood mixed stool defecation), Picchila Mala tyaga (Sticky stool defecation with mucous)
15. Swedavaha Srotas-NAD

D. General Physical Examination: Appearance-Normal, Symmetrical, Temp.-Afebrile, P/R-76/min, R/R-20/min, B.P.-110/90 mmHg, Weight-49kg, Height-5 fetes & 5 inches. Pallor-Absent, Jaundice-Absent, Cyanosis-Absent, Oedema-Absent, Lymph node-Cervical/Axillary/Inguinal-No any sign of lymphadenopathy. Skull, Oral cavity/Throat, Neck, Nose, Ear, Eyes, Hair, Bones, Joints, Nails & Skin-Normal in appearance without any deformity.

E. Systemic Examination
1. Respiratory Examination: Inspection-B/L symmetrical chest wall, No any scar marks, No any skinny lesions at chest region from front to back side both, No any deformity of chest wall like Kyphosis, Lordosis, Scoliosis etc. Palpation-No Tenderness in chest region, Percussion-Resonant sound present, Auscultation-B/L equal air entry, No added sound present.
2. Cardiovascular examination: Inspection-
Normal precordium, Palpation-No Tenderness in cardiac region, Percussion-Cardiac dullness present, Auscultation-S1 & S2 normal, P/R-76/min.

3. GIT Examination-Inspection: Smooth skinny, No dilated superficial vein, No any rashes/ lesions/ pigmentation like Erythema No spider angiomatid, Scaphoid abdomen, No any surgical & scar mark, Normal umbilicus without any bulging or inversion, Pulsations are not visible over abdomen, No hernial like structure like Incisional hernia, Umbilical hernia & Inguinal hernia. Palpation-Soft abdomen, Tenderness present in umbilicus region & hypogastric region. Sensory system, Impcts.

4. CNS Examination-Higher system examination
Have good consciousness, Intelligence, Behaviour, memory & speech. Rt. Handed, have normal gait, all cranial nerves are well intact. Motor System-Have normal Nutrition, Tone, Power & Co-ordination without involuntary movements, Sensory system-Have normal touch, pain & pressure in sensation. Reflexes-Superficial reflexes, Deep tendon reflexes & Organic reflexes are within normal limits. Cerebellar sign- Sign of meningeal irritation, Neck rigidity/Kerning sign/Brudzinski signAbsent.

A. Laboratory Investigation


E.21/02/2019- Hb-14.9, Haematocrit-43.9-High, Total erythrocytes count-4.8, Total Leucocyte count-2500, Platelet count-2.2, M.C.V.-91.0, M.C.H.-30.8, M.C.H.C.-33.9, N%-46, L%-48, E%-2, M%-4, B%-0, F.B.S.- 85.2mg/dl, L.F.T.-Total Bilirubin-Seumn-0.4mg/dl, Direct Bilirubin-Seumn-0.2 mg/dl, Indirect Bilirubin-Seumn-0.2 mg/dl, Total Protein-Seumn-7.6g/dl, Albumin-Seumn-4.5g/dl, Globulin-Seumn-3.1g/dl, A/G Ratio-1.5%, SGOT/AST-26.4IU/L, SGPT/ALT-31.0IU/L, SGOT/SGPT Ratio-0.9%, Alkaline phosphate-Seumn-273U/L. Lipid Profile-Cholesterol-Seumn-212.3mg/dl, Trigliceride-Seumn-112.8mg/dl, HDL cholesterol-Seumn-60mg/dl, VLDL cholesterol-Seumn-22.6mg/dl, LDLcholesterol-Seumn-129.7mg/dl, Total cholesterol/HDL cholesterol Ratio-3.5%, LDL/HDL cholesterol. R.F.T.-S.Creatinine-1.0mg/dl, S.Uricacid-5.2 mg/dl, S.Urea-30 mg/dl. Urine Analysis (R & M)- Physical Exam.-Volume-15ml, Colour-Pale Yellow, Deposits-Absent, Appearance-Clear. Chemical Exam.-pH-5.5, Spec. grav.-1.020, Protein-Absent, Sugar-Absent, Ketone-Absent, Blood-Absent, Bile Salts-Absent, Bile Pigm.-Absent. Micro. Exam. RBC-NIL, Pus cells-NIL, Epithelial cells-NIL, Crystals-Absent, Casts-Absent, Other-Absent.

B. sigmoidoscopy (26/11/2017)

C. Histopathology report (23/11/2017) Impression
1. Features are of ulcerative colitis with activity and chronicity.
2. Negative for dysplasia or malignancy.
**D. Colonoscopy report (21/05/2018)**

**Impression**
Ulcerative colitis.

**E. Biopsy (01/11/2018)**

**Site**: Sigmoid colon, **Procedure Performed**: Resection, **Cross**: Received multiple, Grey-white, Soft tissue bits, measuring 0.5 cm in all.


**Management**: Plan during Admission in IPD

**Table no: 1.** (Given during admission in IPD of P.G. Department of Kayachikitsa, NIA, Jaipur.)

<table>
<thead>
<tr>
<th>A. Shodhana Chikitsa: Piccha Basti (Uncutous enema)</th>
<th>B. Shamana Chikitsa: Oral Drug Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>During I.P.D. Admission: For 14 days (From 21/02/2019-08/03/2019)</td>
<td>During I.P.D. Admission: For 14 days (From 21/02/2019-08/03/2019)</td>
</tr>
<tr>
<td><strong>Contents of Piccha Basti</strong></td>
<td><strong>Before Meals</strong></td>
</tr>
<tr>
<td>1. Shalmali Vrinta Kashaya (Decotion Preparation)</td>
<td>D. Dadimaashtaka choorna- 3gm</td>
</tr>
<tr>
<td>2. Mahatikka Ghrita (Medicated)</td>
<td>Akika Pishiti- 1 gm</td>
</tr>
<tr>
<td>3. Madhu (Honey)</td>
<td>Bila choorna- 2gm</td>
</tr>
<tr>
<td>4. Godugdha (Cow’s milk)</td>
<td>Mixture of these drugs had taken as B.D. before meals with fresh butter.</td>
</tr>
<tr>
<td>5. Kalka dravya (Paste Preparation)- Manjishtha choorna, Mocharasa choorna, Lodhra choorna, Nagakeshara choorna, Yashtimadhu choorna, Rasaanjana choorna.</td>
<td><strong>After Meals</strong></td>
</tr>
<tr>
<td>6. Syringe-60ml, Cathetor-8 No &amp; Globs.</td>
<td>Kutaja-Parpati Vati- 2 Tab. B.D.</td>
</tr>
<tr>
<td></td>
<td>Syrup Kutaja Bila-15ml TID.</td>
</tr>
<tr>
<td></td>
<td>Amadoshantaka Vati- 2 Tab. B.D.</td>
</tr>
<tr>
<td></td>
<td>Gadhaka Vati- 2 Tab. B.D.</td>
</tr>
</tbody>
</table>

**Method of preparation of piccha basti**

1. First of all, unequal amount of Mahatikka Ghrita and Madhu were mixed properly.
4. Lukewarm cow’s milk mixed with above preparation.
5. Ratio of mixing of each drug (preparation) of Piccha Basti had described in below chart.

**Procedure of administration of piccha basti**

1. The procedure involves the Poorva Karma, Pradhana Karma and Paschat Karma.
2. Piccha Basti was given for 14 days.
3. Duration of Piccha Basti cycle 14 days depend on the severity of disease and Bala of the Patient.
4. Patient is explained about the Pathya-Apathya Ahara-

**Vihar (Do’s & Don’ts) before the Basti treatment.**

**I. Poorva karma (Early procedure)**
It involves Snehana of abdomen, back, thigh and legs followed by Nadi Sveda.

**II. Pradhana karma (Main procedure)**
1. Patient is asked to lie down in the left lateral position.
2. Sukhosha Sneha is applied in the anal region and on the Basti Netra.
3. Basti Netra is introduced gradually & patient is asked to breath in.
4. Basti Dravya is pushed into the rectum till a little quantity is remained in the Putaka (to prevent Vayu to enter into the Pakvasha)
5. Withdraw the Netra gradually.

**Schedule of piccha basti in accordance with ratio of each content.**

**Table no: 2**

<table>
<thead>
<tr>
<th>Day wise</th>
<th>Ghrita (Medicated)</th>
<th>Madhu (Honey)</th>
<th>Shalmalivrinta Kashaya (Decotion)</th>
<th>Kalka Dravyas (Paste)</th>
<th>Godugdha (Cow’s Milk)</th>
<th>Matra (Total Amount)</th>
<th>Pratyagamana Kala (Holding Time)</th>
<th>Upadrava (Complication)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>15 ml</td>
<td>10 ml</td>
<td>25 ml</td>
<td>25 ml</td>
<td>100 ml</td>
<td>20 min.</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2nd</td>
<td>15 ml</td>
<td>10 ml</td>
<td>25 ml</td>
<td>25 ml</td>
<td>100 ml</td>
<td>25 min.</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>3rd</td>
<td>15 ml</td>
<td>10 ml</td>
<td>25 ml</td>
<td>25 ml</td>
<td>110 ml</td>
<td>30 min.</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>4th</td>
<td>15 ml</td>
<td>10 ml</td>
<td>25 ml</td>
<td>25 ml</td>
<td>110 ml</td>
<td>27 min.</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>5th</td>
<td>15 ml</td>
<td>10 ml</td>
<td>25 ml</td>
<td>25 ml</td>
<td>110 ml</td>
<td>39 min.</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
III. PASCHITA KARMA (POST PROCEDURE)
1. Patient is asked to keep lying for 3-4 mints for better absorption of drug from anal region.
2. Patient is advised to take light diet.

A. Shamana chikitsa (Oral drug administration therapy)
Follow up period: 5 Months: Mentioned in Table no: 3.

<table>
<thead>
<tr>
<th>1st Follow up Period: 11 days.</th>
<th>4th Follow up Period: 42 days.</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 8/3/2019 to 18/3/2019</td>
<td>(From 2/5/2019 to 13/6/2019)</td>
</tr>
<tr>
<td>1. Dadimaashtaka churna-3gm+Akika Pishhti-1gm+Bilwa churna-2gm B.D. with fresh butter before meals.</td>
<td>1. Dadimaashtaka churna-3gm+Panchamrita Parpati-250mg+ Akika Pishhti-1gm+Bilwa churna-2gm TID with fresh butter before meals.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd Follow up Period: 20 days.</th>
<th>5th Follow up Period: 16 days.</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 19/3/2019 To 07/4/2019</td>
<td>(From 14/6/2019 to 30/6/2019)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd Follow up Period: 24 days.</th>
<th>6th Follow up Period: 23 days.</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 08/4/2019 To 1/5/2019</td>
<td>(From 1/7/2019 to 23/07/2019)</td>
</tr>
</tbody>
</table>

Diet: Patient was kept on Pitta-Shamaka, Laghu, Grahi and Pathya food.

Criteria: Table no: 4.

<table>
<thead>
<tr>
<th>Inclusion Criteria</th>
<th>Exclusion Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Colonoscopy diagnosis of ulcerative Colitis.</td>
<td>2. Patient who had complications like Anal fistula, Anal fissure, Piles etc.</td>
</tr>
<tr>
<td></td>
<td>3. Patient with any other associated disease like Ascites, Hepatitis etc.</td>
</tr>
</tbody>
</table>
Single case with a classical picture of *Raktutissaara* (Ulcerative colitis) was randomly selected irrespective of age, sex, and chronicity from the OPD and IPD of the National Institute of Ayurveda, Jaipur.

Duration of Clinical Trial including follow-up period:
5 Months.

Criteria for assessment
The improvement in the patients was assessed on the basis of relief in the signs and symptoms of the disease together with laboratory investigations. All the signs and symptoms were given grade scores and assessed before as well as after treatment. Changes in haemoglobin, ESR, and body weight were also recorded before and after treatment. Reductions in the doses of steroid and sulfasalazine drugs were also recorded.

A) Grading on severity of disease: Table no: 5.

<table>
<thead>
<tr>
<th>Symptoms and signs</th>
<th>Score</th>
<th>(1) Bowel frequency</th>
<th>(2) Blood in stool</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Bowel frequency</td>
<td>Score</td>
<td>1 or 2 times in a day</td>
<td>0</td>
<td>No bleeding</td>
</tr>
<tr>
<td>(2) Blood in stool</td>
<td>Score</td>
<td>3 or 4 times in a day</td>
<td>1</td>
<td>Occasional bleeding in stool (not daily)</td>
</tr>
<tr>
<td>(3) Abdominal pain</td>
<td>Score</td>
<td>5 to 7 times in a day</td>
<td>2</td>
<td>Bleeding daily but less than 4 times in a day</td>
</tr>
<tr>
<td>(4) Weakness</td>
<td>Score</td>
<td>8 to 12 times in a day</td>
<td>3</td>
<td>Bleeding daily and 4 to 8 times in a day</td>
</tr>
<tr>
<td>(5) Red blood cells in stool</td>
<td>Score</td>
<td>More than 12 times in a day</td>
<td>4</td>
<td>Bleeding daily and more than 8 times in a day</td>
</tr>
</tbody>
</table>

Value of each score in proportion to percentage (%): Table no: 6.

<table>
<thead>
<tr>
<th>A. Score (B.T.)</th>
<th>Severity Grading (%) (Signs &amp; Symptoms)</th>
<th>B. Score (A.T.)</th>
<th>Improvement Grading (%) (Signs &amp; Symptoms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Absent (0%)</td>
<td>0 No Improvement (0%)</td>
<td>0</td>
<td>0 No Improvement (0%)</td>
</tr>
<tr>
<td>1 Mild (25%)</td>
<td>1 Mild Improvement (25%)</td>
<td>2</td>
<td>2 Better Improvement (75%)</td>
</tr>
<tr>
<td>2 Moderate (50%)</td>
<td>2 Moderate Improvement (50%)</td>
<td>3</td>
<td>3 Better Improvement (75%)</td>
</tr>
<tr>
<td>3 Severe (75%)</td>
<td>3 Better Improvement (75%)</td>
<td>4</td>
<td>100% Completely Improvement (100%)</td>
</tr>
<tr>
<td>4 Highly Severe (100%)</td>
<td>100% Completely Improvement (100%)</td>
<td>4</td>
<td>100% Completely Improvement (100%)</td>
</tr>
</tbody>
</table>

B.T. =Before Treatment, A.T. =After Treatment.

B.) RESULT

Improvement in disease: After *shodana & shamana chikitsa*: Table no: 7.

<table>
<thead>
<tr>
<th>Signs and Symptoms</th>
<th>A. Score (B.T.)</th>
<th>B. Score (A.T.)</th>
<th>Difference (A.T.-B.T.)</th>
<th>Improvement (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Bowel frequency</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>Moderate Improvement (50%)</td>
</tr>
<tr>
<td>(2) Blood in stool</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>Better Improvement (75%)</td>
</tr>
<tr>
<td>(3) Abdominal pain</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>Better Improvement (75%)</td>
</tr>
<tr>
<td>(4) Weakness</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>Better Improvement (75%)</td>
</tr>
<tr>
<td>(5) Red blood cells in stool</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>Completely Improvement (100%)</td>
</tr>
<tr>
<td>(6) Pus cells in stool</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>Completely Improvement (100%)</td>
</tr>
</tbody>
</table>

B.T. =Before Treatment, A.T. =After Treatment.

Plan of study and treatments
1. Performa compiled with detailed clinical history and physical examination of the patients.
2. Investigations like Hbg%, E.S.R.

After confirming the diagnosis, patient was given the

following treatment–

A) Shodhana chikitsa- Picchha Basti for 14 days.
B) Shamana chikitsa- Mentioned below.

DISCUSSION
About piccha basti
A. Charaka Samhita, Chikitsasthavana-19, Atisarachikitsa\(^{12}\)
1. Ghrita with one-fourth quantity of Tila Taila (Sesamum oil) cooked with Shutupushpa, Shatatvari, Madhuka, Bilva and milk should be used as unctuous enema. If after administering unctuous enema and undergoing dietetic regimen thereafter, diarrhoea is still there, then Piccha Basti (Slimy enema) should be applied.

2. The fresh leaves stalks of Shalmali should be wrapped around with fresh Kashra grass and plastered with black earth. This should be heated on cow-dung fire. When the outside earthen plaster is dried well, it should be brought down and the stalks of Shalmali are taken out. Then they are pounded in a mortar and a bolus of 40gm. Therefrom is pressed in boiled milk and filtered. Then it is mixed with 640gm. of Tila oil and Ghrita 640 gm. added with the paste of Madhuka in adequate quantity. This enema should be administered to the patient massaged beforehand. When the enema comes out, the patient, after bath, should take food with milk or meat-soup of wild animals (or birds). This enema, acting as evacuative as well as sustaining, overcomes quickly too advanced disorders of Pittaja diarrhoea, fever, oedema, Gulma, chronic diarrhoea and Grahani disorder.

3. In case a patient passes blood little but frequently and with pain and Vayu having obstruction does not move or move with difficulty, the aforesaid Piccha Basti (slimy enema) should be administered to him. Or unctuous enema of Ghrita prepared with Prapauandrika should be given.

B. Susuruta Samhita, Uttaranatran-40, Atisara pratishadadhyaya\(^{13}\)
1. Cold infusion prepared of petioles of Shalmali kept overnight should be taken after mixing with honey and Yastimadhu. The method of cold infusion is as follow- the powder of drugs is kept in equal quantity of water for a day and night, then after pressing the juice is strained through a piece of cloth 40 ml juice mixed with honey and Madhuyashti each 10 gm. Should be taken.

2. When the patient passes blood mixed in small amount with pain frequently and flatus is also obstructed, slimy enema is useful. Piccha Basti-Slimy enema, prepared of slimy plants-Badar, Airavati, Shela, Shalmali etc. mentioned in the context of non-unctuous enema (Chi.Ch.-38). Acharya Jejata, however, says that slimy enema be prepared of Kapittha, Shalmali etc. plants to be mentioned hereafter after extracting their juice by the method of Putapaka and mixing it with milk. Or the paste of Kapittha etc. may be mixed with plentiful milk and used as slimy enema.

3. Piccha Basti is named so because of its Picchil property which means it is sticky or lubricant. Because of this property it has ulcer healing effect.

Moreover, it is Agnideepaka and Sangrahi due to its contents.

Pichcha basti- indications
Acharya Charaka has described Piccha Basti for the treatment of Pravahika (Dysentry), Gudabhransha (Rectal prolapse), Raktastraava (Bleeding per rectum) Jwara (Fever)\(^{14}\) Pitta-Aitasaara, Shotha (Inflammation), Gulma, Ajeerna (Indigestion), Aitasaara (Chronic diarrhoea) and Grahani Dosha.\(^{15}\) Acharya Sushrutsa has also given the similar indications of Pichha Basti.

This enema, acting as evacuative as well as sustaining, overcomes quickly too advanced disorders of Pittaja Aitasaara (diarrhoea), Jwara (fever), Shotha (Oedema), Gulma, Pravahika (chronic diarrhoea) and Grahani (IBD) disorder.

When the patient passes blood mixed in small amount with pain frequently and flatus is also obstructed, slimy enema is useful. Piccha Basti-Slimy enema, prepared of slimy plants-Badar, Airavati, Shela, Shalmali etc. mentioned in the context of non-unctuous enema (Chi.Ch.-38). Acharya Jejata, however, says that slimy enema be prepared of Kapittha, Shalmali etc. plants to be mentioned hereafter after extracting their juice by the method of Putapaka and mixing it with milk. Or the paste of Kapittha etc. may be mixed with plentiful milk and used as slimy enema.

Probable mode of action of poorva karma
1. Snehana and Svedana prior to Basti do Anulomana of Apana Vayu and thus, Basti becomes more efficacious.
2. Abhyanga also causes vasodilatation in skin and muscle by stimulating receptors of sympathetic nervous system. Vasodilatation increases blood flow and helps to remove toxins.

Probable mode of action of pichha basti (Uncutuous enema)
Possible actions of Piccha Basti
2. Rakstastambha (Haemostatic agent).
4. Pitta Shamaka.
5. Agnideepaka.

(A) About piccha basti (Uncutuous enema) and it’s each drug content: Ulcerative colitis is a disease of Purashavaha Srotas which is caused by Pitta Pradhana Vata doshas. Green Shalamal leaves stalks Kwatha has
properties of Pitta-Vata shamana and also Vrana-Shodana and Ropana which help in healing ulcers in the colon by Basti Karma.

IBD can be considered as Grahani Dosha in Ayurveda. According to Ayurveda, Ulcerative colitis is a disease of Parishavaha Srotas. It is primarily a disease of Pitta dosha with varying degrees of Vata involvement. The latter determines how extensively the inflammatory process will spread proximally and the development of extra intestinal manifestations. The excessive consumption of Pittajja Ahara and Vihara initially damages both Rakta Dhatus (blood tissue) and Mamsa Dhatus (muscle tissue), leading to formation of Ama that gets deposited between the villi in the intestines, forming a smooth coating that impairs the normal function and immunity of the intestines. Vata Dosha in the lower colon is also aggravated and in the early stages blocks the Pitta and Kapha channels, causing inflammation, mucous accumulation and oedema. The site of Ulcerative colitis is colon. The Sthana of Vata Dosha is Pakwashaya (colon). Dosha involved in ulcerative colitis is Pitta dosha, so we can infer that Pitta resides in Vata sithana Pakwashaya. Hence, tackle the Sthaniaka dosha first and followed by treating Pitta dosha and there is no treatment that is equal to Basti in treating Vata dosha. Through Basti one can treat Eka Dosha, Samsarya and Sannipata condition. In Ayurveda, Rakataisara is mentioned as an advanced stage of Pittatisara. Piccha Basti is mentioned as a management of Rakataisara in Charaka Samhita. Piccha Basti reduces inflammation due to its Grahi, Deepana Dravyas and Picchila Guna. Also, it improves the function of Apana Vata. Samsamana Yogas, along with the dietary modifications, gives the maximum benefit.

It also has Stambhana properties that help in reducing the bowel frequency and check bleeding.

1. Mahatikata ghrita (Medicated): It has capacity to manage the diseases caused due to excessive Pitta dosha. It contains drugs of Tikta Rasa because that is responsible for pacifying Pitta Dosh, Pittaja Vyadhi and RaktaVyadhi. It is very useful for skin diseases such as Syphilis, Eczema, Leprosy, Erysipelas, Bleeding disorders, Bleeding piles and chronic ulcer etc. It provides relief from Rashes, Inflammation, Pain, Boils and any kind of pus discharge along with other symptoms. It is also effective in managing Bleeding disorders. It controls bleeding in piles, Colon ulcers, Peptic ulcer, Gastric and Duodenal ulcers.

2. Madhu (Honey): Experiments and studies on honey have shown that honey is Antiseptic, Antimicrobial, Antipyretic, Anti-inflammatory, Antiallergent, Antitoxic, Sedative, Laxative, Antianemic, Antioxidant, Healing & Cleansing (external and internal wounds & ulcers), Moisturizing and Blood-purifying. It promotes rehydration, easily digestable, stimulates immunity, and is beneficial for all types of skins diseases. Research has also indicated that honey may possess anti-inflammatory activity and stimulate immune responses within a wound.[18] In vitro studies of H. pylori isolates which cause gastritis have been shown to be inhibited by a 20% solution of honey. Even isolates that exhibited a resistance to other antimicrobial agents were susceptible. Unlike most conventional antibiotics, it has been reported that honey dose not lead to development of antibiotic-resistant bacteria, and it may be used continuously.[19]

According to research-based reviews on honey, it has been shown to decrease the severity and duration of diarrhoea. Honey also promotes increased Potassium and water intake, which is particularly helpful when experiencing diarrhoea. Research that took place in Lagos, Nigeria suggests that honey has also shown the ability to block the actions of pathogens that commonly cause diarrhea.[20]

3. Shalmali-vrinda kashaya (Decoction preparation of fresh & green stalks of leaves of Salmalia malabarica)[21]: In Ayurveda, this plant is used for its various medicinal properties like – Aphrodisiac, Astringent, Stimulant, Tonic, Anti-diarrheal, Anti-dysentery, Anti-microbial and Anti-pyretic.

4. Mocharasa (Resin of Salmalia malabarica)[22]: Mocharasa-reddish brown colored secondary metabolite in the form of exudate from Silk-Cotton Tree (Salmalia malabarica).[23] Mocharasa is one among such drugs used as Haemostytic agent in different formulations indicated in bleeding condition and its therapeutic uses are described in various Ayurvedic treatise. It can be used in bleeding disorders like Menorrhagia-bleeding uterine disorder, Hemoptyosis, Influenza, Acute dysentery, Malena, Ulcers, Wound, Inflammation etc. due to its Astringent, Hemostatic, Demulcent, Cooling and binding properties.[24] The drug which prevents the repeated excretion of stools is known as Parishosrentusrniya. It is mainly indicated in Samnipatatisara and Grahnani. The Anti-diarrheal concept according to Ayurveda is based comprised of two terms of Grahi and Sthambhana. The drug which acts as appetizer and digestive while absorbing the fluids is known as Grahi. The Grahi and Sangradi dravya are predominant in Prithvi and Vayu mahabhutas. Acharya shushrata pointed out Vayu mahabhutha is responsible factor for Drava shoshana while Acharya Sharangdhara consider Ushna veerya responsible for it.[25] The drug which rectifies the vitiated blood and provides normalcy known as Shonitasthapana drugs that acts as Anti-hemorrhagic. Another term Rudhira Samsthapana that represents those drugs which act as nourishing and haemetic.[26]

5. Yashtimadhu (Glycyrrhiza glabra)[27]: It has Anti-inflammatory, Analgesic, Anti-oxidant and ulcer healing properties. Licorice root contains triterpenoid saponins (4–20%), mostly glycyrrhizin, a mixture of potassium
and calcium salts of glycyrrhizic acid. Anti-ulcer properties of saponins have been reported. Principally glycyrrhizin reduces ROS generation which is the potent mediator of tissue inflammation. β-Glycyrrhtrinic acid is the major metabolite of glycyrrhizin has shown anti-inflammatory properties in different animal models.

6. Lodhra (Symplocos racemosa): In Sanskrit, Lodhra is also known as Rodhra (Rodhaka) which literally means one which stops or arrests. This name is given due to its therapeutic efficacy to stop abnormal bleeding. Due to this property, it is used to normalize menstrual bleeding. It is effective medicine for Rakutipitta or varieties of bleeding disorders and includes bleeding from Anus (Guda), Vagina (Yoni), Nasika (nose) etc. Lodhra is considered to have grahi property. Grahi means “enhancing absorption”. The herbs which are grahi help absorption in the colon as well as other parts of the body. Excess fluids are absorbed, making the body firm and strong. It improves the digestion and its Grahi property is helpful in problems like Diarrhoea, Abdominal inflammation, Intestinal paralysis and bowel complaints. It is considered the best herb for Rakutipitta. Rakutipitta including all kinds of bleeding disorders like Epistaxis (nasal haemorrhaging), Vaginal, Anal bleeding and piles. The reason for Rakutipitta is high or aggravated Pitta in the blood which happens to people with dominant Pitta dosha or people who eat too much acidic food resulting in acidic pH of the body. The cool and light nature of Lodhra pacifies Rakutipitta and alleviates haemorrhaging and all kinds of bleeding disorders. It constricts the smaller blood vessels, controlling bleeding. It is also a great medicine for anaemia.

Lodhra is anti ulcerogenic and haemostatic. Bilva is known to have antiinflammatory, antioxidant, and mast cell stabilizing effects along with protective effect in inflammatory bowel disease.

7. NAGAKESHARA (Mesua ferrea): All the bleeding disorders occur due to the Pitta imbalance. It is mostly the blood capillaries, Menorrhagia, Metorrhagia & Epistaxis because it pacifies the Pitta that maintains the heat imbalance. It cures excessive bleeding. It acts as Aphrodisiac and Haemostatic. Its main action is on the blood capillaries, due to its Kashaya rasa (astringent) and Sheeta virya (cool nature). The Anti-inflammatory and Anti-microbial properties of Nagakesara make it the perfect remedy for wounds and sores. It is also used in the treatment of rheumatism and scabies. Great haemostatic, various parts of this tree are used to stop bleeding and eventually heal the wounds. Nagakesara oil is especially used to reduce swelling and bring back the original texture of the skin. Xanthene also possesses Antiulcer activity in albino rats by pyloric ligation method. Treated animals showed high ulceration, Hemorrhage and perforation while pretreated animals showed scattered hyperemia and occasional hemorrhage.

8. Rasanjana(Rasauta: Semi-solid preparation of Berberis aristata): For preparing Rasauta, roots and lower stem of Daruhaldi (Berberis aristata) is cooked in water. The amount of water taken is sixteen times of Daruhaldi roots. It is cooked till water is reduced to one fourth. Then it is filtered and solution thus obtained is again cooked till it becomes semi-solid. This thickened preparation is dried, given a shape and stored for future use. It is used to cure Stomach infection, Piles, Ulcers, Fever, Constipation, Jaundice and Eyes related problems. The findings show that Berberis aristata possess an Anti-granuloma and Anti-inflammatory properties which helps to prevent pro-inflammatory receptor as well as mediators in an activated macrophage. Activated macrophages and chronic inflammation play a vital role in RA pathogenesis and inflammation ailments. The findings show that Berberis aristata helps to treat the inflammatory diseases.

9. Shatapushpa (Anethum sowa): It helps to stimulate digestive fire (Agni Deepaka) and pacify Pitta dosha in body. It is used for treating Fever (Jwara), pacify both Vata and Kapha dosha, Wounds (Varn), Pain (Shoolaa) and all eye related disorders. Deepana-It is very beneficial for herb stimulating low digestive fire and it gives strength to digestive system. Pachana-It is very beneficial herb that helps to stimulate enzymes that helps to promote proper digestion. It is also very effective for treating digestive system related disorders. Vatanulomaka- It helps to pacify vitiated Vata dosha in body and it helps to maintain proper balance of Vata dosha in body and protect body from the risk of Vata related disorders. It is also good for treating both diarrhea and dysentery and it also is good for reducing pain related with diarrheal episodes. It helps to secrete bile and other digestive enzymes that are responsible for healthy digestion.

10. Kutaja parpati (Holarrhena antidysenterica + Parpati): It contains Kutaja twaka Choorna, Parpati, Shankha Bhasma & Musta choorna. It acts as Aitsara & Pravahika nashaka (Anti-diarrhoeal & Anti-dysenteric action) due to Stambhana guna thus, helps in reducing the bowel frequency as well as bleeding tendency.

11. Kutaja-bilwa Syrup ((Holarrhena antidysenterica+ Aegel marmelos): Its Grahi action relieves the Ama in the body and also reduces the bowel frequency.

12. Dadimashtaka choorna: It relieves excessive Pitta dosha and Ushna guna in body. It also acts as Aitsara & Pravahika nashaka (Anti-diarrhoeal & Anti-dysenteric action) due to Stambhana guna thus, helps in reducing the bowel frequency as well as bleeding tendency.

13. Akika pista: It pacifies vitiated Pitta dosha & mental stress which is a contributing factor to the
Amadoshantaka vati\(^{42}\): It is effective in Anorexia, Sprue, Dysentery, Diarrhoea, Blood induced diarrhoea, Acidity.

Gandhaka vati\(^{43}\): Mainly used in the diseases of digestive system like Loss of appetite, Indigestion or dyspepsia. It is also useful in Abdominal gas, Bloating and Flatulence. Rogadhikara (drug of choice) is Aeglinamadya.

Panchamrit parpati\(^{44}\): It is drug of choice and classical medicine in ayurveda for Diarrhoea, Dysentery, Mucous stool defeation, IBS, IBD, Gastric irritation, Indigestion. In ayurveda, it acts as Kaphaatahara which pacify vitiated Kapha as well as Vata dosha due to Deepana and Panchana properties.

Bhrishta haritaki (Terminalia chebulla)\(^{45}\): It is Astringent, Purgative, Rejuvenative, Tonic, Laxative, Expectorant, Anthelmintic. It is also useful in healing of wounds and scalds. It is used as gargle against inflammation of mucous membrane of mouth. It helps in smooth evacuation. It is an effective purgative and helps in removing toxins and fats from the body, resulting in their reduced absorption.

Bilwa churna (Aegel marmelos)\(^{46}\): It balances Vata and Kapha dosha in the body. This herb helps to support a healthy digestive and respiratory system. It also maintains healthy cholesterol and blood glucose levels in the body. It is very effective in Ulcerative colitis, IBS, IBD, Diarrhea, Indigestion, Dysentery and Bowel infections.

Ajamodadi churna\(^{47}\): It is used for the treatment of Rheumatoid arthritis, Sciatica, Backache and Kapha disorders. It has a potent Anti-inflammatory action. It reduces inflammation of joints and alleviates pain associated with joint disorders. It also induces digestion and expulsion ofAMA. Therefore, it is also known as one of the best Amapachaka. It increases Appetite, improves digestion and reduces gas formation in the abdomen.

Jatiphaladi churna (Myristica fragrans etc.)\(^{48}\): It is a powerful Anti-spasmodic, Astringent, Internal cleaner, Anti-Diarrheal, Anti-blooding. It is used in Distaste, Indigestion, Loss of appetite, Malabsorption syndrome. In ayurveda, it acts as Kaphavatahara, Deepana, Pachana, Vataamolomana, Srotoshodana, Kledahara, Shoolahara and Krimighna.

According to Ayurveda, Ulcerative colitis is a disease of Purishavahara srotas. It is primarily a disease of Pitta dosha with varying degrees of Vata involvement. The latter determines how extensively the inflammatory process will spread proximally and the development of extra intestinal manifestations. The excessive consumption of Pittajya Ahara and Vihara initially damages both Rakta Dhata (blood tissue) and Mansa Dhata (muscle tissue), leading to formation ofAMA that gets deposited between the villi in the intestines, forming a smooth coating that impairs the normal function and immunity of the intestines. Vata Dosha in the lower colon is also aggravated and in the early stages blocks the Pitta and Kapha channels, causing inflammation, mucous accumulation and edema. The site of Ulcerative colitis is colon. The Sthana of Vata Dosha is Pakwasthaya (colon). Dosha involved in ulcerative colitis is Pitta dosha, so we can infer that pitta resides in Vata Sthana Pakwasthaya. Hence, tackle the Sthanaa Koshtha first and followed by treating Pitta dosha. There is no treatment that is equal to Basti in treating Vata dosha. Through Basti one can treat Eka dosha, Samsarga and Samnipata condition. In Ayurveda, Rakatissara is mentioned as an advanced stage of Pakwasthara. Piccha Basti is mentioned as a management of Rakatissara in Charaka Samhita. Piccha Basti reduces inflammation due to its Ghrihi, Deepana dravyas and Picchila guna. Also, it improves the function of Apana vata. Samshamana yogas, along with the dietary modifications, gives the maximum benefit.

Ulcerative colitis is a chronic disease with recurrent symptoms and significant morbidity. The precise etiology of ulcerative colitis is not well understood but as told above the current hypothesis suggests its causes as Genetic Susceptibility, Defective Immune regulation, Exogenous factors (Infections by Salmonella, Shigella, Campylobacter etc.) and Environmental factors (Smoking, indiscriment use of antibiotics etc.). These factors cause T-cell activation in mucosa of rectum and colon followed by release of inflammatory cytokines such as IL-1, IL-6 & TNF. With mild inflammation, mucosa is erythematous and has a fine granular surface that resembles sandpaper. In more severe disease, the mucosa is hemorrhagic, edematous and ulcerated. According to Ayurveda vitiated Pitta and Rakta are responsible for inflammation and ulceration.

Based on the probable mode of action of Piccha Basti described above the role of Piccha Basti can be summarized as below:

1. Rakastambhaka theory
   - Ingredients of Piccha Basti owing to their Kashay Rasa and Sheeta Vevarya act as Rakastambhaka (Haemostatic agent).
   - Pitta is the dominating Dosha responsible for bleeding per anum. Because of Madhura, Tikta and Kashaya Rasa of the ingredients of Piccha Basti it act as Pittashamaka. So, it pacifies vitiated Pitta Dosha as well as Rakta.
II. Vranaropaka/shothahara action
- In ulcerative colitis, intestine gets inflamed and sensitized, when food passes through intestine and makes contact with its mucosa.
- *Basti* drugs reach up to the Rectum and Colon and form protective film over it, avoid friction over mucosa, inflammation subsides and mucosa becomes normal.
- Due to its different contents it has *Shothahara* and *Vranaropaka* property.

III. Agnideepaka action: From Ayurvedic point of view *Agnimandya* is the root cause of Ulcerative Colitis so *Agni Deepaka* property of *Pichha Basti* helps in breaking the pathogenesis of the disease.

IV. Sangrahi action: Simultaneously *Pichha Basti* also has *Sangrahi* property which reduces the bowel frequency and there will also be no loss of electrolytes and protein losing enteropathy.

CONCLUSION
Ulcerative colitis is a challenging medical problem. Its incidence is increasing due to unhealthy dietary habits. In modern medical science, though many remedies are available, like the use of Sulfasalazine and the other 5-ASA agents, Glucocorticoids, Anti-TNF Therapy, but they have many side-effects. Due to the nature of disease it results in degradation of health and disturbs the daily routine life of the patient thus, making him emotionally stressed. Based on the discussion, it can be said *Pichha Basti* is quite effective in treating Ulcerative colitis.

Based on the clinical signs and symptoms, the disease *Pravahika* can be correlated to IBD with ulcerative colitis. *Pravahika* is a disease with the involvement of *Kapha, Pitta* and *Vata* associated with *Agnimandya*. Hence, the line of treatment mainly includes *Pachana* and *Sangrahi dravya*. *Piccha Basti* reduces inflammation due to its *Grahi, Deepana dravyas* and *Picchila guna*. Also, it improves the function of *Apana Vata*. *Samshamana Yogas* and along with the dietary modifications, gives maximum relief.

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