

# Case report on ulcerative colitis with chronic proctosigmoiditis and mucosal polyps

#### 1] Ms. Krimiya R. Jiwtode<sup>\*</sup>, 2] Ms. Switi Jawade, 3] Roshan Umate 4] Dr. S. P. Adhau

1 GNM 3<sup>rd</sup> Year, Florence Nightingale Training College of Nursing, Datta Meghe Institute of Medical Science (DU) Sawangi Meghe Wardha

Email: - krimiyajiwtode02@gmail.com

2 Nursing Tutor Florence Nightingale Training College of Nursing, Datta Meghe Institute of Medical Science (DU) Sawangi Meghe Wardha

Email: - vanshikalohave19@gmail.com

3 Research Consultant<sup>\*\*\*</sup>, Jawaharlal Nehru Medical College, Datta Meghe Institute of Medical sciences (DU) Sawangi (M) Wardha. Email: <u>roshanumate111@qmail.com</u>

4 Dept. of Electrical Engineering, Yeshwantrao Chavan College of Engineering, Nagpur. Email:

#### aniketmunshi@gmail.com

#### Abstract: -

**Introduction:** -. The cytomegalovirus (CMV)-associated colitis was discovered after histology of tissue collected from flexible sigmoidoscopy. Ulcerative colitis is a chronic, idiopathic inflammatory disease of the colon that most typically affects individuals between the ages of 30 and 40 and causes impairment. It's marked by recurrent and remitting mucosal inflammation that starts in the rectum and spreads to the colon's proximal regions. **Clinical findings:**- bloody diarrhoea since two weeks, increase bowel frequency 20 times per day, stomach pain and weight loss. **Diagnostic Evaluation:**- blood test done, flexible sigmoidoscopy. Histopathology test: colonoscopic biopsy done feature suggestive of chronic procto-sigmoiditis with mucosal polyps, suspicious of ulcerative colitis. USG upper abdomen: mild heptomegaly with liver parenchymal disease.diffuse mild long segment circumferential mural thickening of ascending and transverse colon with surrounding mesocolic hyperechogenecity, minimal ascites. Endoscopy: early PHG, Endematous mucosa. **Therapeutic Interventions:**- She was started on IV hydrocortisone 100 mg four times a day after admission, and her nutrition was improved. the surgical team strongly recommended operation. Intravenous Valganciclovir was started and her bowel frequency recovered to twice daily within 48 hours, and she felt much better. **Outcome: -** after providing treatment patient felt better.

**Conclusion:** - A member of the health team started treatment very away, and all available treatments were provided, and the patient's condition has improved.

Keywords: - Crohn's disease; Diagnostic criteria; Inflammatory bowel diseases; Ulcerative colitis.

#### Introduction: -

UC is a chronic inflammatory disease that causes inflammation of the mucosa flare-ups on a regular basis. For moderate-to-severe acute UC episodes, systemic steroids are now the first-line therapy.<sup>1</sup> However, 30–40% of those with severe flares may not benefit from intravenous steroid treatment, necessitating emergency medical attention or, in some cases, a colectomy.<sup>1</sup> Furthermore, between 45 and 50 percent majority of patients who are given oral or, intravenous steroids do not produce full remission within 30 days. 4,5 In the past, there hasn't been much agreement on how to define steroid resistance in active UC A number of criteria have been used to characterise this clinical condition,

including a failure to respond clinically after 7–10 days of 1 mg/kg/day intravenous (IV) prednisolone6 or the continuation even prednisolone doses as high as 0.75 mg/kg/day during a 4-week period.<sup>1</sup> In situations of moderate-to-severe active UC, a quick clinical response is preferred to minimise worsening of the patient's clinical condition and nutrition. Steroid usage, on the other hand, is linked to a big prevalence of adverse reaction, and recent discuss regarding steroid-similar infection hazard has been highlighted.<sup>2</sup> Long-term steroid treatment must be regarded inappropriate in this day, when the benefits of immunomodulators and biologics are well acknowledged. Nonetheless, because to their established efficacy and inexpensive cost, steroids can still have a role to play in treating acute UC if administered properly. Proctocolectomy was the sole treatment option for individuals who were not responding to steroids until the mid-1990s. In this therapeutic scenario, cytosporine and infliximab have become pharmaceutical alternatives to proctocolectomy. In randomised controlled trials (RCTs), both medications were found to be effective in preventing In 60-80% of individuals with steroid-refractory UC, immediate colectomy is required.<sup>3</sup> The severity of the flare is the sole predictive factor for failure to respond to and infliximab cyclosporine. The availability of predictors of steroid treatment response should enable for earlier diagnosis of rescue medicines. This might increase their efficacy while lowering the risk of problems linked to long-term steroid usage and severe pain (For example, diseases or starvation.) The research shows that a basic and early assessment utilizing clinical and biochemical data is beneficial, and/or radiological indicators might accurately predict the fate of steroid-treated severe UC episodes, although the majority of the evidence comes from retrospective research.<sup>1</sup>Ulcerative colitis (UC) is an inflammatory bowel illness that occurs on a regular basis. that is persistent and nonspecific. The colorectum, along with the upper gastrointestinal tract, is the major target organ of UC (UGI) tract symptoms being uncommon. Emerging data suggests that UC can cause problems in the mucosa of the oesophagus, stomach, and duodenum. UC-related UGI tract symptoms, on the other hand, are common varied and frequently silenced or concealed. Furthermore, the endoscopic and microscopic features of a UGI tract affected by UC are generic.

The Ulcerative Colitis Endoscopic Index of Severity (UCEIS) is a modern endoscopic grading system that considers vascular pattern, haemorrhage, and ulcers but does not consider mucosal friability. The vascular pattern is scored 1–3 in this method, with 1 indicating normal, 2 showing patchy vascular pattern loss, and 3 indicating complete vascular pattern loss.<sup>4</sup> Bleeding is graded on a scale of 1–4, with 1 indicating no bleeding, 2 indicating mucosal haemorrhage, 3 indicating mild luminal bleeding in the colon, and 4 indicating moderate or severe luminal bleeding in the colon. Ulcers and erosions are graded on a scale of 1–4, with 1 indicating no erosions, 2 indicating erosions, 3 indicating superficial ulcerations, and 4 indicating profound ulcerations.<sup>4</sup>

#### Patient information:-

A 30 year-old woman was hospitalized to the Acharya Vinoba Bhave Rural Hospital. Following a twoweek period of bloody diarrhoea. She had ulcerative colitis but was in remission until recently bloody diarrhoea started to emerge gradually. Her bowel movements were 20 times a day, and she had substantial stomach pain and weight loss.

Primary concern and symptoms :-

Abdominal pain, diarrhoea, weight loss, and exhaustion are the most Before 2 weeks, the patient had a medical history of ulcerative colitis. She had treatment for it, but it did not cure .Sores in the mouth Inflammation in the eyes Tears, ulcers, fistulas, infection, and narrowing are all anus problems.

#### Medical family and psychosocial history:-

Before two weeks, the patient had a medical history of ulcerative colitis. She had treatment for it, but it did not cure her. She is a member of a joint family. Except for the patient, everyone in the family is in good health. Patient appears apprehensive, despondent, and perplexed, as well as nervous.

#### Relevant past intervention and outcomes :-

Before two weeks, the patient had a medical history of ulcerative colitis. She had treatment for it, but it did not cure On day five, the surgical team strongly recommended surgery since Her bowels continued to open eight times a day. Topical steroids, intravenous steroids, and anti-tumour necrosis factor therapy were initiated, however symptom control was not achieved. Following her hospitalisation, she was put on IV hydrocortisone 100 mg four times a day, and her nutrition was improved. and she felt much better.

## Physical examination and clinical findings :-

On physical examination, patients complaints rectal bleeding with frequent stool, and mucous discharge from rectum.

## **Clinical findings: General examination:** State of health: unhealthy State of consciousness: conscious Body built: thin Breath order: Absent Hygiene: Good **General Parameter:** Height: 150 cm Weight: 48 kg Vital parameter: Blood pressure: 142/65 mmhg Temperature: Afebrile 98° F Pulse: 92 beats/min. Respiration: 20 breath/ min. Systemic examination: Respiratory system: Left sided decrease breath sounds Cardiovascular system: S1 and S2 heard, No murmur Central nervous system: conscious, no focal neurological deficit Abdominal examination: soft and non tender, mild heptomegaly, Lower abdominal pain present

#### **Diagnostic Assesment :-**

Her heart rate was 92 beats per minute, and she had a blood pressure of 142/65 mm Hg, with cushingoid appearances on clinical examination. Haemoglobin was 6.2 g/dl, C-reactive protein (CRP) was 175 mg/l, white cell count (WCC) was 6.1109/l, and albumin was 21 g/l, according to laboratory tests. Her thiopurine methyl transferase (TPMT) levels, like the rest of her blood, were ordinary. The patient underwent a flexible sigmoidoscopy. **Histopathology test:** colonoscopic biopsy done feature suggestive of chronic procto-sigmoiditis with mucosal polyps, suspicious of ulcerative colitis. **USG upper abdomen:** mild heptomegaly with liver parenchymal disease.diffuse mild long segment circumferential mural thickening of ascending and transverse colon with surrounding mesocolic hyperechogenecity, minimal ascites. **Endoscopy:** early PHG, Edematous mucosa.

#### Therapeutic Interventions :-

She was started on IV hydrocortisone 100 mg four times a day after admission, and her nutrition was improved. the surgical team strongly recommended operation. Intravenous Valganciclovir was started and her bowel frequency recovered to twice daily within 48 hours, and she felt much better.

#### **Discussion :-**

Travis et al<sup>5</sup> looked examined 51 instances of flare-ups of severe UC and discovered that the most straightforward criteria for predicting After three days of steroid therapy, therapeutic failure was defined as the persistence of >8 daily stools or 3–8 stools per day, as well as a CRP concentration of >45 mg/L. In another prospective research, Benazzato et. al studied 67 instances of severe UC and found that baseline ESR and body temperature were related to severity, as well as the frequency of bowel movements between baseline and day 5, were the only indicators of steroid failure that were independent.

Finally, the majority of published research focused on individuals with UC that is severe who were hospitalized for IV treatment. Both seriously sick inpatients and outpatients with mild illness who were treated with oral steroids were included on purpose. A minority of patients who have a Within a year, a partial response to a first round of steroids may develop steroid dependence or necessitate colectomy, according to two separate epidemiological studies.<sup>5</sup> In addition, admission to the hospital for intravenous therapy following a failed A course of oral steroids has been prescribed. related to an increased incidence of steroid resistance. 15 As a result, even in individuals with modest disease activity who are treated orally, Predicting clinical reaction to steroids might be crucial in clinical practice. The choice of IV route in clinical practice is not only dependent on the severity of the condition.

Colectomy rates, malignancy, disease activity, and illness extension have been the primary outcomes of natural history research of UC until recently. The negative effects of chronic inflammation on colonic function have not been well investigated. Because UC is a mucosal sickness, it is not usually accompanied by the structuring and fistulizing consequences observed in CD; as a result, clinicians tend to think of it as a less progressing disease. This strategy leads to a reluctance to start more effective therapies earlier in the disease's course, despite the fact that this method has been demonstrated to improve outcomes.<sup>6,7</sup>

In the current era of endoscopy, UC severity and activity are determined by medical symptoms and endoscopic inflammatory categorization. UC treatment aims have shifted to establishing mucosal repair in numerous research studies and in clinical practise.<sup>8</sup> A number of related studies were reviewed<sup>9-14</sup>.

## **References :-**

- Bernal I, Mañosa M, Domènech E, Garcia-Planella E, Navarro M, Lorenzo-Zúñiga V, Cabré E, Gassull MÀ. Predictors of clinical response to systemic steroids in active ulcerative colitis. Digestive diseases and sciences. 2006 Aug;51(8):1434-8.
- Lichtenstein GR, Feagan BG, Cohen RD, Salzberg BA, Diamond RH, Chen DM, Pritchard ML, Sandborn WJ. Serious infections and mortality in association with therapies for Crohn's disease: TREAT registry. Clinical Gastroenterology and Hepatology. 2006 May 1;4(5):621-30.
- Lichtiger S, Present DH, Kornbluth A, Gelernt I, Bauer J, Galler G, Michelassi F, Hanauer S. Cyclosporine in severe ulcerative colitis refractory to steroid therapy. New England Journal of Medicine. 1994 Jun 30;330(26):1841-5.
- Travis SP, Schnell D, Krzeski P, et al. Developing an instrument to assess the endoscopic severity of ulcerative colitis: the Ulcerative Colitis Endoscopic Index of Severity (UCEIS) *Gut.* 2012;61:535–42. [PMC free article] [PubMed] [Google Scholar]
- 5. Faubion Jr WA, Loftus Jr EV, Harmsen WS, Zinsmeister AR, Sandborn WJ. The natural history of corticosteroid therapy for inflammatory bowel disease: a population-based study. Gastroenterology. 2001 Aug 1;121(2):255-60.
- 6. Ochsenkühn T, D'Haens G: Current misunderstandings in the management of ulcerative colitis. Gut 2011;60:1294-1299.
- 7. Torres J, et al: Ulcerative colitis as a progressive disease: the forgotten evidence. Inflamm Bowel Dis 2012;18:1356-1363.
- Silverberg MS, Satsangi J, Ahmad T, et al: Toward an integrated clinical, molecular and serological classification of inflammatory bowel disease: report of a working Party of the 2005 Montreal World Congress of Gastroentetology. Can J Gastroenterol 2005:19(suppl A): 5-36.
- Abbafati, Cristiana, Kaja M. Abbas, Mohammad Abbasi, Mitra Abbasifard, Mohsen Abbasi-Kangevari, Hedayat Abbastabar, Foad Abd-Allah, et al. "Five Insights from the Global Burden of Disease Study 2019." LANCET 396, no. 10258 (October 17, 2020): 1135–59.
- Khatib, Mahalaqua Nazli, Anuraj H. Shankar, Richard Kirubakaran, Abhay Gaidhane, Shilpa Gaidhane, Padam Simkhada, and Zahiruddin Quazi Syed. "Ghrelin for the Management of Cachexia Associated with Cancer." COCHRANE DATABASE OF SYSTEMATIC REVIEWS, no. 2 (2018). https://doi.org/10.1002/14651858.CD012229.pub2.
- Sahu, P., Hiwale, K., Vagha, S., Gode, C.S., 2019. Study of various gastrointestinal tract lesions by endoscopic biopsies. International Journal of Pharmaceutical Research 11, 1459–1464. <u>https://doi.org/10.31838/ijpr/2019.11.03.162</u>
- 12. Adhit, K.K., Anjankar Ashish, P., Siddhaarth, K., 2020. COVID-19: A review of its clinical features, effects on gastrointestinal system and possibility of faecal transmission. International Journal of Research in Pharmaceutical Sciences 11, 623–627. <u>https://doi.org/10.26452/ijrps.v11iSPL1.2881</u>

- Pate, M.Y., Tayade, H., Singh, A.K., 2020. Minimally access surgery and endoscopic procedures in COVID19 pandemic. Journal of Datta Meghe Institute of Medical Sciences University 15, 153– 155. <u>https://doi.org/10.4103/jdmimsu.jdmimsu\_139\_20</u>
- James, S.L., Castle, C.D., Dingels, Z.V., 2020b. Global injury morbidity and mortality from 1990 to 2017: Results from the global burden of disease study 2017. Injury Prevention 26, I96–I114. <u>https://doi.org/10.1136/injuryprev-2019-043494</u>