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Case report on ulcerative colitis in 16 year girl

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ABSTRACT

Ulcerative colitis (UC) is a chronic idiopathic inflammatory disorder that involves any part of the colon starting in the rectum in a continuous fashion presenting typically with symptoms such as bloody diarrhea, abdominal pain, and rectal urgency.The clinical presentation of the disease usually dictates the choice of pharmacologic therapy, where the goal is to first induce remission and then maintain a corticosteroid-free remission. UC is diagnosed based on clinical presentation and endoscopic evidence of inflammation in the colon starting in the rectum and extending proximally in the colon. The choice of treatment depends on severity, localization and the course of the disease. For proctitis, topical therapy with 5-aminosalicylic acid (5-ASA) compounds is used. More extensive or severe disease should be treated with oral and local 5-ASA compounds and corticosteroids to induce remission. Patients who do not respond to this treatment require hospitalization. Intravenous steroids or, when refractory, calcineurin inhibitors (cyclosporine, tacrolimus), tumor necrosis factor-α antibodies (infliximab) or immunomodulators (azathioprine, 6-mercaptopurine) are then called for. Indications for emergency surgery include refractory toxic megacolon, perforation, and continuous severe colorectal bleeding.

Key words:
Inflammatory bowel disease, Colitis, Endoscopy, corticosteroids, immune modulators.

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INTRODUCTION

Ulcerative colitis(UC) is a form of inflammatory bowel disease characterised by diffuse inflammation of the colonic mucosa.Ulcerative colitis (UC) is a chronic disease with recurrent uncontrolled inflammation of the colon. The rectum is always affected with inflammation spreading from the distal to the proximal colonic segments. The terminal ileum is typically not involved but some patients with extensive disease may show endoscopic signs of "backwash ileitis" [1]. Symptoms of new onset UC or recurrent flare-ups usually consist of abdominal pain, bloody and/or mucous diarrhea. Severe cases present with weight loss, tachycardia, fever, anemia and bowel distension.Although there is no gold standard, minimal diagnostic workup for UC includes medical history(Stool frequency, consistency, blood and mucous,Nocturnal diarrhoea,Weight loss,Family history,Extraintestinal manifestations (joints, rashes, eyes),Travel abroad) clinical examination: Pulse, Temperature, Abdominal tenderness., focusing on extraintestinal investigation:full blood count, erythrocyte sedimentation rate (ESR),C-reactive protein (CRP), stool microbiology, ultrasound and endoscopy with mucosal biopsies. If there is any doubt about the diagnosis,endoscopic and histological confirmation should be repeated after a period of time [2]. The treatment includes:Aminosalicylates Sulfasalazine was the main treatment for this disease for many years. When the active moiety was identified as 5-aminosalicylic acid, newer drugs were developed that did not contain sulfapyridine ,-Mesalazine (5-aminosalicylic acid).,Antidiarrhoeal agents, probiotics, antibiotics, NSAIDs and laxatives [3].

CASE REPORT

A 16 years old female patient was admitted in the emergency department of government general hospital with complaints of Haematochezia (2to3 episode per a day).Her present medical history includes: Fever, abdominal pain,vomiting, epigastric pain becomes severe after the meal.The patient hasn't had any similar complaints in the past and all her medical history was Normal (including menustral period). On general examination the patient was Concious, Icterus was not persent but she is Pallor. Her pulse was 76beats/minute, Bp was 110/80mmHg, Laboratory investigation includes:

PARAMETERS	OBSERVED VALUES
Haemoglobin	7.0g/ dL
Platelet count	4,89,000/mm3
Red blood cells	4.2×106/mm3
White blood cells	20,000/mm3
Erythrocyte sedimentation rate	58mm/hr

The Diffencial count was normal., And the other laboratory investigation include: sigmoidoscopy: impression: diffuse erythema, erosions with superficial ulceration involving rectum to descending colon is noted.so the Doctor conformed the case as"Ulcerative colitis". The Medications includes: inj.Metronidazole 500mg IV Tid, inj.ciprofloxacin 200mg IV Bd, inj.Diclofenac 1g IV SOS, tab.Bifilac 1.2g PO Od, inj.Ranitidine

50mg IV Bd,Tab.mesalamine 1.2g PO Od, tab.Iron Folic acid 150mg PO Od, inj. Buscopan IV SOS.The medication was continued for four days. On fourth day evening she was complained of headache with fever and bloody stools. Tab.Paracetamol 500mg PO SOS was given. After four days inj.Metronidazole 500mg IV Tid, inj.ciprofloxacin 200mg IV Bd, inj.Diclofenac 1g IV SOS, inj.Ranitidine 50mg IV Bd, was stopped. And continued with remaining medication.after five days.,The patient started relief from the symptoms. The patient was discarged on the 15th day with discarge medication and suggested precautions.

DISCUSSION

Ulcerative colitis (UC) is an inflammatory bowel disease (IBD). IBD comprises a group of diseases that affect the gastrointestinal tract.Ulcerative colitis occurs when the lining of your large intestine (also called the colon), rectum, or both becomes inflamed [5]. This inflammation produces tiny sores called ulcers on the lining of your colon. It usually begins in the rectum and spreads upward. It can involve your entire colon [5].

The inflammation causes your bowel to move its contents rapidly and empty frequently. As cells on the surface of the lining of your bowel die, ulcers form. The ulcers may cause bleeding and discharge of mucus and pus [6].Ulcerative colitis symptoms can vary, depending on the severity of inflammation and where it occurs. Signs and symptoms may include:Diarrhea,often with blood or pus,Abdominal pain and cramping,Rectal pain,Rectal bleeding — passing small amount of blood with stool,Urgency to defecate,Inability to defecate despite urgency,Weight loss,Fatigue,Fever [7].

Most people with ulcerative colitis have mild to moderate symptoms. The course of ulcerative colitis may vary, with some people having long periods of remission.The exact cause of UC remains unknown [8]. Previously, diet and stress were suspected, but now doctors know that these factors may aggravate but don't cause ulcerative colitis.One possible cause is an immune system malfunction. When your immune system tries to fight off an invading virus or bacterium, an abnormal immune response causes the immune system to attack the cells in the digestive tract, too [9].Heredity also seems to play a role in that ulcerative colitis is more common in people who have family members with the disease. However, most people with ulcerative colitis don't have this family history [10].Complications likes:thickening of the intestinal wall,sepsis(blood infection),severe dehydration,toxic megacolon, or a rapidly swelling colon,liver disease (rare),intestinal bleeding([11]. Risk factors: Age:It's most likely if you're between 15 and 30 years old or older than 60,Ethnicity: The risk is highest in people of Ashkenazi Jewish descent.Family history:Your risk could be up to 30% higher if you have a close relative with the condition.Food and stress don't cause it, but they can trigger a flare of symptoms.Then coming to diagnosis [12]. How is ulcerative colitis diagnosed?A health care provider diagnoses UC with the following:medical and family history,physical exam,lab tests,endoscopies of the large intestineThe health care provider may perform a series of medical tests to rule out other bowel disorders, such as irritable bowel syndrome, Crohn's disease, or celiac disease, that may cause symptoms similar to those of UC [13].Treatment includes the Medications. While no medication cures ulcerative colitis, many can reduce symptoms. The goals of medication therapy are

- inducing and maintaining remission
- improving the person's quality of life.

Many people with ulcerative colitis require medication therapy indefinitely, unless they have their colon and rectum surgically removed [14,15].Health care providers will prescribe the medications that best treat a person's symptoms:aminosalicylates,corticosteroids,immunomodulators,biologics, also called anti-TNF therapies,other medications [16]. Depending on the location of the symptoms in the colon, health care providers may recommend a person take medications by:enema, which involves flushing liquid medication into the rectum using a special wash bottle. The medication directly treats inflammation of the large intestine.rectal foam—a foamy substance the person puts into the rectum like an enema [17]-The medication directly treats inflammation of the large intestine.,suppository—a solid medication the person inserts into the rectum to dissolve. The intestinal lining absorbs the medication [18].Some people will need surgery to treat their ulcerative colitis when they have:colon cancer,dysplasia, or precancerous cells in the colon,complications that are life threatening, such as megacolon or bleeding,no improvement in symptoms or condition despite treatment,continued dependency on steroids.side effects from medications that threaten their health [19].Removal of the entire colon, including the rectum, "cures" ulcerative colitis. A surgeon performs the procedure at a hospital [20] A surgeon can perform two different types of surgery to remove a patient's colon and treat ulcerative colitis:proctocolectomy and ileostomy,proctocolectomy and ileoanal reservoir,Full recovery from both operations may take 4 to 6 weeks.,Eating, Diet, and Nutrition.Researchers have not found that eating, diet, and nutrition play a role in causing ulcerative colitis symptoms. Good nutrition is important in the management of ulcerative colitis, however. Dietary changes can help reduce symptoms [21,22]. A health care provider may recommend dietary changes such as:avoiding carbonated drinks,avoiding popcorn, vegetable skins, nuts, and other high-fiber foods while a person has symptoms,drinking more liquids,eating smaller meals more often, keeping a food diary to help identify troublesome foods [23].Health care providers may recommend nutritional supplements and vitamins for people who do not absorb enough nutrients.To help ensure coordinated and safe care, people should discuss their use of complementary and alternative medical practices, including their use of dietary supplements and probiotics, with their health care [24, 25].

CONCLUSION

In this case a 16 years old female was admitted to hospital with haematochezia and fever, epigastric pain, vomiting become severe after meal. Due lack of proper nutrition ,stress,protein supplements and improper diet . And all this triggering factors lead to UC. Pharmacist interventions for this case study are the patient is not taking adequate protein, other nutrient supplements, vitamin B and C rich foods, Egg, green leafy vegitables, fish, meat etc. Counsel the patient take fiber rich and lactose rich foods. These conditions have particular features and patterns in children compared to adults. Early considerations of the diagnosis is important to avoid additional adverse impact on growth, nutrient balance. Nutritional aspects are critical in the overall management of IBD. Whilst EEE therapy of choice to induce remission of CD, overall monitoring of growth and nutrition are key elements of

ongoing management. Futher work on the utility of drugs such as antibiotics, will likely proceed in Conjunction recognition of the importance of the intestinal microflora in the pathogenesis of IBD.

ETHICAL APPROVAL

We prior taken permission from the superintendent and HOD of General surgery Dr. Sriramulu MD, Government general Hospital, Ongole.

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