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Haribhakti Seba Das*
Ashok Kumar Mallick**

Chitta Ranjan Panda†
Bijay Misra††

Shivaram Prasad Singh‡
Debasis Misra‡‡

*S.C.B Medical College Cuttack Odisha, India., hbsrho@yahoo.co.in

†S.C.B Medical College Cuttack Odisha, India., panda.cr@hotmail.com

‡S.C.B Medical College Cuttack Odisha, India., scb_gastro_dept@hotmail.com

**S.C.B Medical College Cuttack Odisha, India., drbijaymisra@gmail.com

††S.C.B Medical College Cuttack Odisha, India., dr_bijaymisra@yahoo.com

‡‡S.C.B Medical College Cuttack Odisha, India., dmisra.75@gmail.com

THALAMIC INFARCT IN A CASE OF SEVERE ULCERATIVE COLITIS

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Abstract

Although thrombotic events are well recognised in patients with ulcerative colitis (UC), cerebral venous thrombosis is rare. We report a case of thalamic infarction presenting with neurological deficit in a young male with severe ulcerative colitis.

KEYWORDS: IBD, venous thrombosis

INTRODUCTION:

Extraintestinal manifestations of idiopathic inflammatory bowel disease (IBD) have been reported in 25% to 36% of patients¹. More than 60% of the vascular complications are due to peripheral venous thrombosis and pulmonary embolism². Cerebral vein thrombosis (CVT) is a rare complication of ulcerative colitis.

CASE REPORT:

A 21 year old male presented with bleeding per rectum and loose motions for one month. He had history of recurrent attacks of loose motion and bleeding per rectum for the last 15 years and was treated intermittently with repeated courses of antibiotics without any definitive diagnosis. He was referred for Gastroenterology consultation during this current episode because of non-response to antibiotics. On examination, the patient was of normal built and had moderate pallor. His hemoglobin was 7 gm%, total leucocyte count was 8,200/cmm, total platelet count 2.8 lac/cmm, INR 1.29 and ESR was 45mm in 1st hour. Colonoscopy revealed severe mucosal ulcerations with spontaneous bleeding, mucosal friability, and pseudopolyps throughout the colon. Biopsy was suggestive of ulcerative colitis. Patient was treated with 5-aminosalicylic acid and oral corticosteroids. He initially responded well to treatment with decrease in stool frequency as well as bleeding per rectum. He had aggravation of symptoms on 5th day of treatment when steroid tapering was started, and was put on I.V. steroids. After 5 days of treatment, he developed severe headache and high fever for which he was administered antimalarials. But the clinical picture worsened with development of aphasia and right hemiplegia on the next day. Patient underwent CT scan of brain which revealed left thalamic infarction with surrounding edema, confirming the diagnosis of thalamic infarction in a case of severe ulcerative colitis. (Fig-1). Patient was treated with aspirin, intravenous fluids and steroids with gradual improvement in neurological signs and his speech improved after 3rd day. He had complete remission of neurological symptoms in two weeks. The treatment with aspirin continued for a month. Evaluation for different pro-thrombotic states could not be done due to financial constraint. On follow-up, the patient had developed steroid dependence, and his ulcerative colitis was poorly responding to drug therapy including azathioprine. Finally, surgery was done one year after the episode of thalamic infarction. The patient is on follow-up for the last 4 years and he is asymptomatic and doing well. There is no further occurrence of any cerebrovascular event or thromboembolic phenomenon.

DISCUSSION:

Thromboembolic phenomena complicating IBD was first reported by Bargen and Barter in 1936.¹ Cerebral vein thrombosis (CVT) is a rare complication of ulcerative colitis. In an analysis of 8182 patients of UC, stroke was found in only 0.27% of those undergoing surgery for UC and in 0.31% in the nonsurgical group.³ Literature search revealed only a few case reports of ulcerative colitis with thalamic infarcts. In

1996, Silburn reported a case of 26-year-old woman with exacerbation of ulcerative colitis who on MRI had asymmetrical thalamic changes.⁴ Barclay in 2010 published a report of 4 paediatric patients of inflammatory bowel disease with stroke in which 2 had thalamic involvement.⁵ One of the four cases of cerebral thrombosis reported from Tunisia in 2011, had on contrast CT lenticular and thalamic infarct.⁶ Most recently in 2012, there is a case report of a 30 yr old male with a flare of UC associated with bilateral thalamic infarcts.⁷

Ulcerative colitis involves a complex cascade of proinflammatory mediators that results in systemic hypercoagulability. Active disease,⁹ disease at an earlier age,¹⁰ prolonged disease and dehydration,¹¹ use of drugs such as corticosteroid¹² are all risk factors for coagulation abnormality. Our patient was fortunate enough to survive without any neurological sequel.

CONCLUSION:

Thromboembolic phenomena are rare complications of IBD. Amongst them cerebrovascular events are still rarer. In a patient with IBD, headache and appearance of focal neurological sign should lead the clinician to strongly suspect the occurrence of a cerebrovascular event. As the prognosis is poor the patient needs prompt diagnosis and management of such problem.

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Figure Legend:

- A. Infarct in left thalamic region.

