TABLE 1. Biochemical changes after admission

Day after admission	Plasma			Urine	
	Na (mmol/l)	K (mmol/l)	Urea (mmol/l)	Osmolality (mosm/kg)	Osmolality (mosm/kg)
0	133	4.1	3.3	—	—
1	127	4.9	2.2	—	—
2	122	4.9	1.7	—	—
3	119	4.3	2.8	262	507
4	124	4.7	5.0	267	642
6	130	5.2	5.3	281	869
39	131	4.2	4.0	—	—

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Thrombophlebitis migrans in ulcerative colitis

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Summary

A case of thrombophlebitis migrans in ulcerative colitis in a Maltese housewife is reported. The association of thrombo-embolic disease and ulcerative colitis is reviewed.

Introduction

Although thrombo-embolic disease is a well recognized complication of ulcerative colitis, there has, however, so far been no recorded case in the literature of thrombophlebitis migrans in a patient with ulcerative colitis. The purpose of this paper is to record such a case in a Maltese housewife.

Case history

A 48-year-old married housewife was admitted to

hospital in November 1975 with a relapse of the ulcerative colitis, from which she had been suffering for the previous thirteen years. In the week before admission, she was passing a watery stool about once every hour, accompanied by fresh blood and mucus. She had tenesmus and abdominal pain. There was a fever of 38.8°C (102°F) and she was completely anorexic. She also had bronchial asthma for which she was taking sodium cromoglycate three times daily.

On examination, she was clinically not anaemic or jaundiced. There was no finger clubbing or eye involvement. The abdomen was soft and distended. There was tenderness in the right iliac fossa. There was, also, a brawny, warm, tender swelling on the medial aspect of the left arm.

The following investigations were carried out: ESR 35 mm in the first hour (Westergren); haemoglobin 12.4 g/dl; white cell count $8 \times 10^9/l$ of which

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64% were neutrophils, 9% eosinophils, 2% basophils, 18% lymphocytes and 7% monocytes; blood urea/2 mmol/l. Liver function tests were normal; faeces culture was negative and microscopy showed only mucus and RBCs with a few WBCs. Sigmoidoscopy was consistent with a diagnosis of active ulcerative colitis.

She was started on sulphasalazine 4 g daily as well as dexamethasone enemas (5 g in 1 dl) twice daily. Sulphasalazine was stopped within 3 days because of the severe anorexia. Three days after admission, she developed thrombophlebitis of the left fore-arm whilst the swelling in the left upper arm started to subside. This pattern of localized thrombophlebitis continued and involved successively the right leg, right thigh, left leg and left thigh. At each site, it lasted for 3 or 4 days, and no sooner had it started subsiding at one site than the next site became involved.

The frequency of the diarrhoea as well as the amount of fresh blood in the stools was remarkably reduced. A barium enema showed total colonic involvement. A panproctocolectomy and ileostomy was carried out. Macroscopic examination of the colon revealed total involvement by ulcerative colitis. No malignant areas were found.

Discussion

In 1936, Barga and Barker showed that thromboembolic complications occur chiefly in young adults with severe ulcerative colitis. Thromboembolic disease usually involving calf veins was found in 4.7% of Goligher's series (1975) of 465 patients. However, deep venous thrombosis including cerebral venous thrombosis has been described by Harrison and Truelove (1967) as well as by Borda, Southern and Bonn (1968). Graef *et al.* (1966) in a post-mortem study found an incidence of 32–39%, suggesting that the complication of thromboembolic disease is often missed clinically in ulcerative colitis.

It is interesting that a state of hypercoagulability has been shown to occur in ulcerative colitis. Lee *et al.* (1968) demonstrated increased factor VIII activity, acceleration of thromboplastin generation, as well as increase in fibrinogen level; and Morowitz *et al.* (1968) described the presence of thrombocytosis.

The association between thrombophlebitis migrans and an internal disorder was first described by Trousseau in 1877, in association with carcinoma of the pancreas. It has since been described as an early manifestation of carcinoma of the bronchus, stomach, pancreas and colon as well as other carcinomas, sarcoma and leukaemias (Lieberman *et al.*, 1961). It has also been found in association with Buerger's (thrombo-angiitis obliterans) disease and can rarely present in an idiopathic form. The occurrence of thrombophlebitis migrans in ulcerative colitis has so far not been described. In view of the known association of both thrombophlebitis migrans and ulcerative colitis with malignancy, the possibility of thrombophlebitis migrans being an early marker of malignant or pre-malignant change in colon and rectum was considered. Although thorough histological examination in this case failed to find any indication of pre-malignant or malignant changes in the colon and rectum, the authors believe that the occurrence of thrombophlebitis migrans in ulcerative colitis warrants a thorough investigation for carcinoma.

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