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WIGHTMAN PRIZE IN CLINICAL MEDICINE
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Tait

UNUSUAL CLINICAL PRESENTATION OF ISCHAEMIC BOWEL DISEASE

Introduction

The late stage of massive intestinal infarction is usually easily recognised, although initially the clinical presentation may often be misleading.¹ It usually occurs in elderly patients with severe peripheral vascular~~ity~~ or cardiac disease.^{2,3} The atypical presentation of such an event in a woman of 54 years with no clinical evidence of cardiovascular disease illustrates the difficulty there may be in making the diagnosis.

Case History

A previously healthy 54-year-old woman had been suffering from tiredness, lassitude and epigastric pain for several weeks. The pain was intermittent, sharp, and was relieved by eating. During the three weeks prior to admission, the pain became colicky in charac~~t~~er and was located more towards the lower abdomen. She began to vomit 3-4 times each day, the vomitus consisting of clear, white fluid. One week prior to admission, her general condition deteriorated further; she developed copious diarrhoea with 3 or 4

fluid stools each day, and each bowel motion was accompanied by "stabbing" periumbilical pain.

There was no previous medical history or significant family history. She smoked ten cigarettes daily. Systemic enquiry was uninformative. On examination, she was pale, thin (but she denied weight loss), and looked very unwell. Her pulse was 90/min, and she was in sinus rhythm; BP 170/100. The cardiovascular system was normal, with no evidence of peripheral vascular disease. The respiratory system was normal. The liver was just palpable, but not abnormal in consistency. The spleen and kidneys were impalpable. Bowel sounds were present and high-pitched. The rectum felt empty and ballooned, but removing the finger released a stream of watery reddish-brown fluid.

WBC was $29 \times 10^9/l$, with 83% neutrophils. ECG showed no abnormality. Plain films of the abdomen showed gaseous distension of the colon and an increased volume of gas in the small bowel. There was some "thumb-printing" of the ascending colon but the bowel wall did not appear thickened. The following day

the abdomen was slightly distended and a plain X-ray showed gaseous distension and multiple fluid levels in the small bowel and colon. Bowel sounds were still present and increased. She remained afebrile.

Two days after admission, a barium enema was performed immediately prior to laparotomy. It demonstrated no abnormality other than some deformity in the region of the recto-sigmoid junction, presumed to be due to a pelvic mass causing obstruction of the bowel. At laparotomy, the bowel was gangrenous from the region of the duodeno-jejunal junction to the splenic flexure of the colon, with isolated patches of gangrene on the sigmoid colon. There was a good aortic pulsation, but no superior mesenteric pulsation. There was no cause for bowel obstruction or strangulation. No operative treatment was undertaken. The patient died the following day. Permission for a post-mortem examination was refused.

Comment

Degenerative vascular disease is unusual at any site in a

woman of this age, but is particularly uncommon in the mesenteric arteries. (See table).

Mesenteric artery occlusion is often preceded by a history of post-prandial abdominal pain, evidence of peripheral vascular disease of a source of arterial emboli.⁴ In one study, all but 3 of 25 patients with ischaemic bowel disease had one or more predisposing conditions.³

The onset is usually heralded by severe generalized abdominal pain and vomiting. Abdominal distension develops early and is progressive. Bloody diarrhoea is a late feature. Peristalsis may be hyperactive initially, but with the onset of peritonitis and peripheral circulatory failure, peristalsis is suppressed. Temperature rises dramatically.⁵

In this case the pathology, unexpected for the patient's age and sex was not suggested by the previous history or the findings at the time of admission.

Cause of death	No of deaths in 1978			
	All ages		50 - 55 yrs	
	M	F	M	F
Arteriosclerosis	334	621	1	0
Arterial embolism and thrombosis	92	148	6	1
Embolism and thrombosis of mesenteric artery	60	97	4	1

From: Annual Report of Registrar General for Scotland, 1978.

References

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