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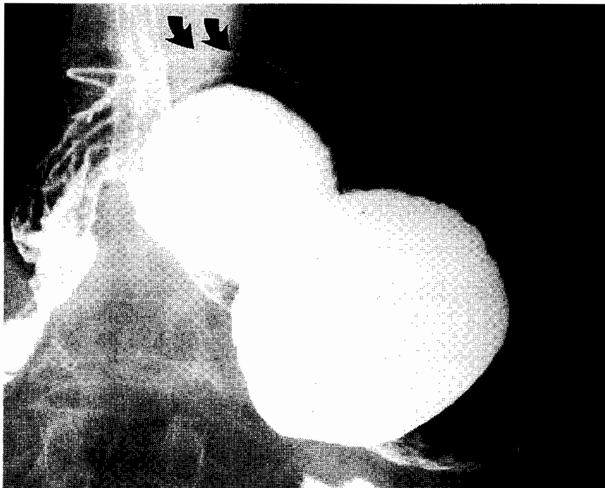
A 73-year-old man was admitted to hospital with dyspepsia and bloating shortly after eating and intermittent attacks of cramplike epigastric pain accompanied by retching and inability to vomit. He had lost 12 kg in weight over the 18 months since triple coronary bypass surgery (internal mammary arteries on the first diagonal and anterior interventricular coronary arteries, right gastroepiploic artery on the posterior interventricular artery). He had no history of peptic ulcer or of hiatus hernia. His symptoms appeared 1 month after cardiac surgery. An upper gastrointestinal contrast radiograph showed organoaxial gastric volvulus: the whole stomach was rotated forward and upward so that the greater curvature was superior, between the liver and diaphragm, and the posterior wall anterior (figure). Coronary arteriography showed patent bypasses. An arteriogram of the coeliac and superior mesenteric arteries revealed no abnormality. Left ventricular ejection fraction was 50%. Electrocardiogram showed sinus rhythm and right bundle-branch block. Repeated electrocardiograms did not show transient myocardial ischaemia when epigastric symptoms were severe.[1,2] In view of the disabling symptoms and weight loss, an operation was advised. The greater curvature of the stomach adhered to the anterior portion of the left lobe of the liver, and also to the fatty tissue surrounding the ascending right gastroepiploic artery bypass. The greater curvature was freed from the bypass. After reduction of the volvulus a gastropexy was done by suturing the greater curvature to the parietes and diaphragm.[3] He has been free from symptoms since the operation.



Contrast radiograph showing a organoaxial gastric volvulus
Stomach is rotated forward and upward so that the greater curvature (arrows) lies superiorly and the posterior wall anteriorly.

Movement of the stomach is limited by its two fixed points: at its oesophageal end by the gastrophrenic ligaments and at its distal end by the peritoneal coverings of the pylorus and duodenum. The most likely explanation for such a gastric volvulus, occurring in an elderly patient who had no previous gastric history, is that the distal end of the stomach had been partly mobilised when the right gastroepiploic artery was skeletonised to be used as a bypass. For the same purpose, the distal portion of the greater curvature was freed from attachments to the omentum and transverse colon, allowing the stomach to twist. Postoperative adhesions may further displace and fasten the greater curvature in a permanent volvulus position.

1 Farr C, Graver K, Curry RW, Silverstein B, Cooper G. Electrocardiographic changes with gastric volvulus. *N Engl J Med* 1984; 310: 1747.

2 Eagle K, Yorchak PM. Transient myocardial ischemia resulting from gastric volvulus. *N Engl J Med* 1985; **312:** 121.

3 Tanner NC. Chronic and recurrent volvulus of the stomach. *Am J Surg* 1968; **115:** 505–15.

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