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CASE REPORT

A CASE OF ACUTE GASTRIC VOLVULUS

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INTRODUCTION: Gastric volvulus is a rare but potentially life-threatening cause of upper gastrointestinal obstruction. Emergency physicians must maintain a high index of suspicion in patients who present with signs and symptoms suggesting foregut occlusion. This paper reports a case of acute gastric volvulus, with complete necrosis of the stomach requiring massive resection of the stomach, treatment options, and offers some practical suggestions for emergency physicians.

DISCUSSION: A 30-year-old woman presented to the emergency department (ED) with a 2-day history of abdominal pain, nausea. Attempts to drink caused retching immediately. Her pain had started in the upper abdomen, but generalized prior to ED presentation. She was prescribed an H_2 blocker and an anti-emetic 24 hours prior to her arrival at the ED. She appeared unwell and dehydrated. Pulse was 124 beats/min and regular, BP 100/70, respiratory rate 24/min, temperature 37ºC. Bowel sounds were increased and her abdomen was distended, with diffuse tenderness to superficial and deep palpation. There was no guarding, rebound, masses or organomegaly. Rectal exam revealed no occult blood.she was taken for emergency surgery in view of acute gi obstruction. laparotomy findings include dilated and distended stomach which was rotated in organo-axial direction with complete necrosis of the stomach. Stomach was derotated and attempts to regain viability by giving 100%oxygen and placing hot mops over stomach failed. Distension relieved by placing a vertical incision over anterior stomach wall and fluid sucked out. Total gastrectomy was performed and roux-en-y oesophago jejunostomy was done

CASE DETAILS: A 28 year old female patient was brought to Emergency Department with Pain abdomen for 2 days Abdominal distention for 2 days, Not passing flatus & motion for 2 days, With history of vomiting for 2 days Nothing significant from past history.

On examination: Abdomen distended with fullness present in upper abdomen, no visible pulsations or peristalsis. Abdomen is tense, tender to palpate Guarding is present but no rigidity Tympanic note present on percussion with no shifting dullness.Bowel sounds were absent on auscultation

Investigations: X ray erect abdomen: Multiple air fluid level with large single stomach gas shadow.

USG abdomen: Constricted segment of stomach, with 2 dilated segments located above and below the constricted part. Gas and fluid filled stomach with mild peritoneal collection.

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Intra operative finding:

1. Organo axial volvulus of stomach noted.
2. Stomach filled with dark fluid which was aspirated.

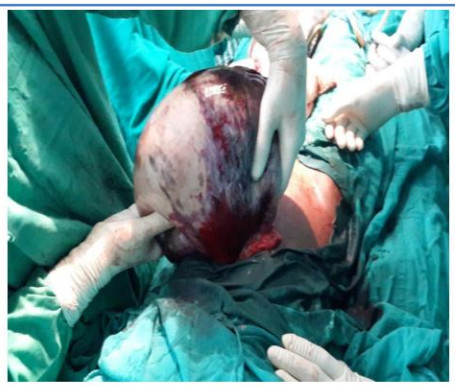

Fig 1: Organo axial volvulus of stomach with complete gangrene

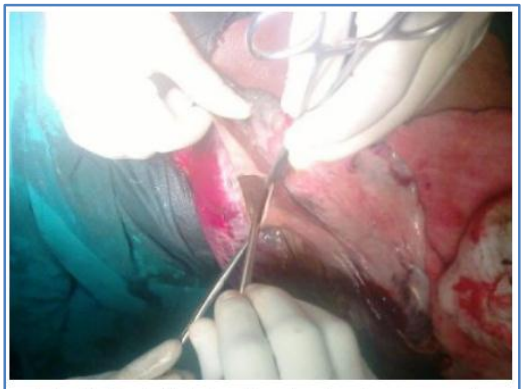

Fig 2: Dark fluid collection in the stomach

3. Gastrectomy with Oesophago jejunal anastamosis is performed.

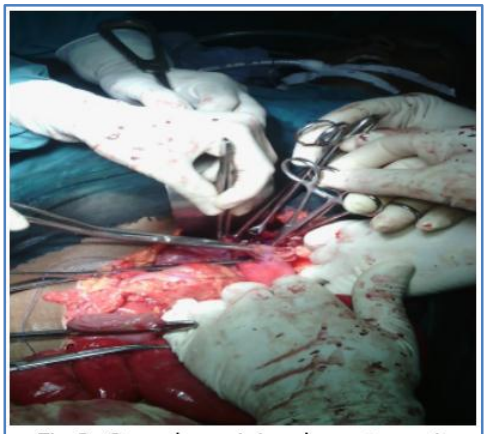

Fig 3: Oesophago jejunal anastomosis

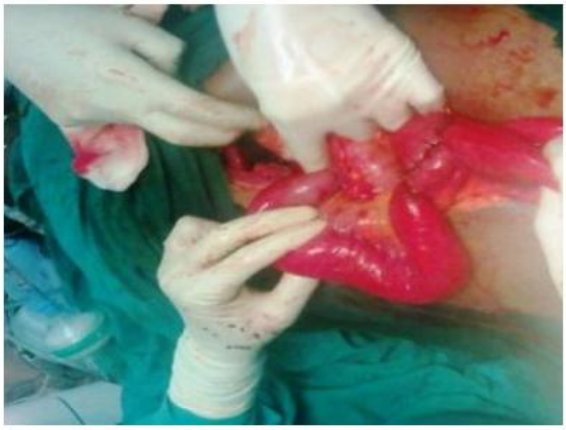

Fig 4: Roux-en-Y Oesophago jejunal anastamosis

Post-operative period:

Orals started on 5th post-operative day.

Patient recovered well and was discharged on 14th day

DISCUSSION: Gastric volvulus is twisting of all or part of the Stomach by more than 180 degrees with obstruction of the flow of material through the stomach, variable loss of blood supply and possible tissue death.

On the basis of

a) Onset: i) Acute. ii) Chronic.
b) Axis of rotation: i) Organoaxial. ii) Mesentroaxial. iii) Combined.

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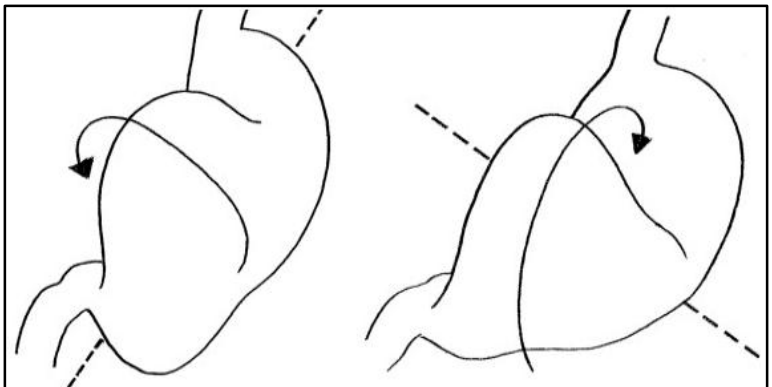

Fig. 5: Organoaxial volvulus and mesentroaxial volvulus

ETIOLOGY: Type 1 or Idiopathic gastric volvulus comprises of two thirds of cases and is presumably due to abnormal laxity of the gastrosplenic, gastrocolic, gastrophrenic and gastrohepatic ligaments.

Type 2 or secondary gastric volvulus is found in one third of patients and is usually associated with congenital or acquired abnormalities that result in abnormal mobility of the stomach like Diaphragmatic defects, eventration paraoesophagial hiatal defects, trauma, paralysis; Congenital bands and adhesions; Intestinal malrotation; Pyloric stenosis and gastric distension; Colon distention;

Clinical features:

- Borchardts Triad.
- Pain abdomen (acute in onset).
- Recurrent retching with little vomitus.
- Inability to pass a Ryles tube.

Surgical management:

- Diaphragmatic hernia repair.
- Division of bands.
- Gastropexy.
- Partial gastrectomy (In case of necrosis).
- Total Gastrojejunostomy.
- Repair of eventration of diaphragm.

CONCLUSION: Acute gastric volvulus with complete gangrene of stomach requiring total gastrectomy with Roux en y Oesophago jejunostomy is rare.

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REFERENCES:

1. Rashid F, Thangarajah T, Mulvey D, et al. A review article on gastric volvulus: a challenge to diagnosis and management. Int J Surg 2010; 8: 18.
2. Chau B, Dufel S. Gastric volvulus. Emerg Med J 2007; 24: 446.
3. Godshall D, Mossallam U, Rosenbaum R. Gastric volvulus: case report and review of the literature. J Emerg Med 1999; 17: 837.
4. Teague WJ, Ackroyd R, Watson DI, Devitt PG. Changing patterns in the management of gastric volvulus over 14 years. Br J Surg 2000; 87: 358.
5. Wu MH, Chang YC, Wu CH, et al. Acute gastric volvulus: a rare but real surgical emergency. Am J Emerg Med 2010; 28: 118.e5.
6. Shivanand G, Seema S, Srivastava DN, et al. Gastric volvulus: acute and chronic presentation. Clin Imaging 2003; 27: 265.
7. Wasselle JA, Norman J. Acute gastric volvulus: pathogenesis, diagnosis, and treatment. Am J Gastroenterol 1993; 88: 1780.
8. Flanagan NM, McAloon J. Gastric volvulus complicating cerebral palsy with kyphoscoliosis. Ulster Med J 2003; 72: 118.
9. Ayala JA, Naik-Mathuria B, Olutoye OO. Delayed presentation of congenital diaphragmatic hernia manifesting as combined-type acute gastric volvulus: a case report and review of the literature. J Pediatr Surg 2008; 43: E35.
10. McElreath DP, Olden KW, Aduli F. Hiccups: a subtle sign in the clinical diagnosis of gastric volvulus and a review of the literature. Dig Dis Sci 2008; 53: 3033.
11. Darani A, Mendoza-Sagaon M, Reinberg O. Gastric volvulus in children. J Pediatr Surg 2005; 40: 855.
12. Gerstle JT, Chiu P, Emil S. Gastric volvulus in children: lessons learned from delayed diagnoses. Semin Pediatr Surg 2009; 18: 98.
13. Cribbs RK, Gow KW, Wulkan ML. Gastric volvulus in infants and children. Pediatrics 2008; 122: e752.
14. Al-Salem AH. Acute and chronic gastric volvulus in infants and children: who should be treated surgically? Pediatr Surg Int 2007; 23: 1095.
15. Kotobi H, Auber F, Otta E, et al. Acute mesenteroaxial gastric volvulus and congenital diaphragmatic hernia. Pediatr Surg Int 2005; 21: 674.
16. Borchardt M. Kur Pathologie and Therapie des magen volvulus. Arch Kin Chir 1904; 74: 243.

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