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The Unusual Cases of Massivs Upper Gastrointestinal Haemorrhags : A Report of Two Cases

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ภาวะตกเลือดอย่างรุนแรงในระบบทางเดินอาหารส่วนต้นจากสาเหตุที่พบได้ไม่บ่อย : รายงานผู้ป่วย 2 ราย

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ได้รายงานผู้ป่วย 2 ราย ซึ่งมาโรงพยาบาลด้วยอาการอาเจียนเป็นเลือดอย่างมาก โดยมีประวัติสั้นและไม่ดีขึ้น เมื่อรักษาโดยวิธีคอนเซอร์เวทีฟ และต้องนำผู้ป่วยไปผ่าตัดฉุกเฉินทั้ง 2 ราย พบว่าผู้ป่วยทั้ง 2 รายเป็นเนื้องอกของกระเพาะอาหารชนิดที่ไม่ใช่เกิดจากเยื่อบุกระเพาะทั้ง 2 ราย

รายงานนี้ได้แสดงถึง พยาธิวิทยาสภาพที่พบระหว่างผ่าตัดและการตัดสินใจในการผ่าตัด.

Two cases of massive upper gastrointestinal haemorrhage that had short histories and were unresponsive to conservative treatment are presented. Both cases underwent emergency operations to stop bleeding and were found to be nonepithelial gastric tumours.

The surgical pathology and surgical decisions are discussed in this report.

Nonepithelial gastric tumours are encountered in only 1-2% of all gastric tumours. In the past four years we have had the opportunity of studying 2 cases. It is justified to report these rare cases as they may serve as a reminder of an uncommon disease that presents with massive gastric haemorrhage.

Case I. (N.R. AS5061) A male farmer aged 45 years old was hospitalized because of haemetemesis and melena for 3 days. He had episodes of dull aching pain over the epigastrium prior to meals over the past four years but he had never sought regular medical care. Previously, he had never experienced upper gastrointestinal bleeding.

At the time of admission his temperature was 38.5 c pulse rate 120 beats/minute, and respiratory rate 22/minute. The blood pressure was 110/70 mm. Hg. He was a muscular man with marked pale conjunctiva and he looked weak but is nevertheless in no distress.

The abdomen was soft, not tender. The liver and spleen as well as other abnormal abdominal mass, were impalpable. Other abnormal physical sign including chronic liver stigmata were not apperent.

The rectal examination revealed frank melena.

The routine investigation showed as follow haemoglobin 3.66 gm%, the haematocrit 11% the white cell count 17200/mm$^{(3)}$ with differ ential count of 94% neutrophils and 6% lymphocytes. The platelets were adequate on blood smear. Other laboratory results including coagulogram were within normal limits.

The provisional diagnosis was bleeding peptic ulcer. He was initially started on therapy with the upper gastrointestinal haemorrhage regime in a medical ward. Fourty eight hours later, after resusitation with nine units of fresh whole blood and three units of packed red cell, his haematocrit rose to 24% but he still had massive upper gastrointestinal bleeding; subsequently his vital signs deteriorated, and he was then transferred to our surgical ward for surgical intervention.

At the laporatormy through upper midline incision, a globubar pedunculate mass about the size of a fist with broad base located on the anterior wall of the stomach was found. The stomach and the whole bowel were dilated and full of clotted blood. The liver was pale and spleen was contracted. No lymphadenopathy was noted. The tumour did not invaded other viscerae.

The pedunculated mass was removed by elliptical excision and the gastric wound was closed in two layers. The patient tolerated operation very well and had an unevenful recovery and was discharged at the end of the first postoperative week.

A follow-up examination five years later revealed that he was in good health, free of symptoms, and had gained weight.

Pathology. A partial gastrectomy specimen revealed an 8 cm. diameter spherical exophytic mass with a short base, 2 cm in width. The mucosal surface was raised up, a 1.5 cm diameter ulcer with the end on artery plugged with clotted blood was noted on the summit. The cut surfaces diaplayed the underlying smooth grey matter with scattering foci of soft, tan, pearshaped soft tissue tumour. (flg. 1A) It was firm in consistency.

Microscopically, the tumour was composed of compactly arranged spindle shape cells with long oval nuclei arranged in palisade fashion (Antony type A).[6] In the softening foci, they were less cellular (Fig. 1B).The mattrix widely separated the cells (Antony type B). A chronic ulcer with end on arterial erosion was evident at the mucosal surface.

Histopathological diagnosis was ulcerated neurilemmoma.

Case II. (Y.S. AX9379) 41 year old male merchant was admitted with provisional diagnosis of bleeding peptic ulcer. He had a history of epigastric pain which was diagnosed and treated at private clinic without radiological confirmation as a chronic peptic ulcer case for the past 5 years. The last attack was two months ago. On the morning of the admission day he suddenly had haemetemesis for 4 times and then collapsed for a short period with melena

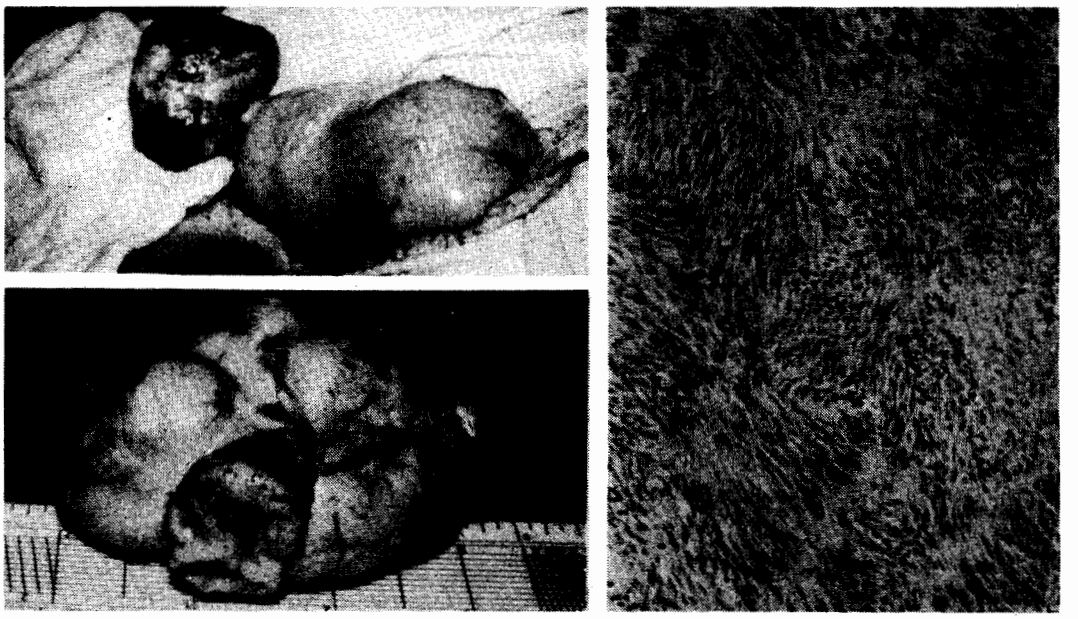

FIG. 1 (A) Intraoperative view of a globular short pedunculate mass at the anterior wall of the stomach.
(B) Section of the tumor, showing compactly arranged spindle cells in palisade fashion (Antony type A), Neurilemmoma (H & E, x 200).

following. he was rushed to a provincial hospital where he was given two units of fresh whole blood; then he was referred to our hospital.

At the time of admission, his temperature was 38.7 c, pulse rate 110 beats/minute, and the respiratory rate 20/minute. The blood pressure was 100/60 mnHg. He was sthenic built man in clear consciousness but had moderately pale conjunctiva. The Other physical sign was essentially negative, except for the presenting of frank melena on rectal examination.

The haemoglobin was 8.98 gm%, haematocric 28% and total and differential leukocyte counts including platelet count were normal.

Twenty four hours later under medical regime for upper gastrointestinal haemorrhage management including 7 units of fresh whole blood he still had haemetemesis. His haemotocrit dropped to 20% and was in impending shock stage. He then underwent emergency exploratory laporatomy which revealed a tennis ball-sized exogastric mass with perforation at the anterior wall of body of the stomach. The perforation was concealed by greater omentum and also adhered to the inferior surface of left lobe of the liver. There were nearby enlarged omental lymph nodes that their size were about 1-2 cms in diameter.

An 80% proximal gastrectomy with pyloroplasty, splencetomy and partial excision of left lobe of liver was performed. He had a full recovery except the minor surgical wound infection which delayed his hospitalization until the third postoperative week.

He was in good health and had gained weight and had no sign of recurrent up to the present time after more than four years

that followed.

Pathology. The tumor confined in the anterior wall of proximal gastrectomy specimen and had a circumscribed submucosal ovoid mass about 6 cm. on the maximal diameter with central perforation. The mucosal surface revealed a 2 cm deep ulcer (fig 2A). The cut surface displayed a pale freshy tumour with 2.5 cms. diameter. In the cystic degenerative area and haematoma; It placed below the ulcerated mucosa and connected with a perforation tract on the serosa.

Microscopically, the tumour composed of large pleomorphic cells with centrally located nuclsoli. The cytoplasm was eosino philic and contained clear area. Mitosis was obscure. The special stain displayed reticulin fibre encycling small groups of tumour cells (fig 2B).

Ulcerated leiomyoblastoma with cystic degeneration and perforation was diagnosed.

Discussion

The massive upper gastrointestinalis is one of the common surgical emergency that most of the surgeons faced during their practice in abdominal surgery. The usual causes of this condition are peptic ulcer haemorrhage, acute erosive gastritis, and ruptured oesophageal varices. One of the unusual causes is haemorrhage from non epithelial gastric tumour.

The non-epithelial gastric tumour incidence is around 1-2% of all gastric tumour.[1] Neurogenic and smooth muscie tumour of the stomach are the common of them, even so these tumours are rarely encountered in practice.

Gastric neurilemmoma is the neurogenic tumour of[1] intramural nervous plexus of the stomach;[4] this tumour is the most common neurogenic tumour of the stomach which comprised between 5 to 10% of the

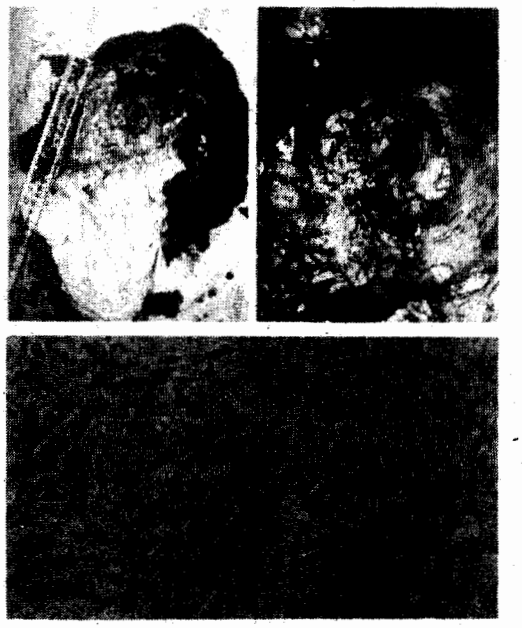

FIG. 2 A surgical specimen, including proximal gastrectomy, partial omentectomy and splenectomy. Note the oval tumor mass at the anterior wall of stomach (arrow). (B) A close up view. (C) Section of the tumor showing scattered randomly arranged large pleomophic cells with centrally located nuclei, some containing vacuolated cytoplasm. Note the absence of mitosis (H & E, x 400).

clinical benign non-epithelial gastric tumour. The usual clinical presentation of gastric neurilemmoma[1] are haematemesis, abdominal pain or self-detected abdominal mass.[4] It often found in female of the fourth and fifth decade. Our case (first case) is a man aged 45 years presents as a case of massive upper gastrointestinal haemorrhaga which is its most common presentation.

The tumour is most often found on the lesser curve of the body of the stomach[4] which is richest in nerve usually arising from submucosal layer of the stomach. The single most striking feature of this tumour is its tendency to have round-shape central necrosis[4] and to give the appearance of the uterine cervix when looks from inside of the stomach.[1] The feathur is common known as the col uterin sign. The bleeding vessel is usually found on the base of these ulceration as in our cases that is clearly seen in gross specimen. The size of tumour is previously seen as large as 32 cms. In diameter and weighted more than 6 kilograms. The pedunculated exogastric lesion as in our case is uncommon. Most of them present as a deep, single, and central ulcerative lesion[4]. Preoperative diagnosis of this tumour is difficult because of its rarity and its usual presentation as massive upper gastrointestinal bleeding which preclude special investigations. The suggested investigations that may be of value are upper gastrointestinal study using gastroscope and X-ray contrast study. The apperance of uterine cervix liked submucusal lesion visualized via gastroscope is highly suggestive and the central ulcer is regular in outline and has no mucosal involvement and the surrounding gastric wall is not rigid. The upper gastrointestinal contrast study may shows Bull's eye sign that is commonly seen also in leiomyoma of the stomach. Because this tumour is benign and usual single, the wedge excision of the involved wall of the stomach is the needed surgical treatment as in ours case that the patient had unevenful course and in good health with no recurrent on the follow up. The prognosis of this condition is good if the tumour is completely removed[4].

The leiomyoblastoma of the stomach is a subtype of the gastric smooth muscle sarcoma.[2] This tumour is rare and represent about 1% of malignant tumour of the stomach[5] and was firstly described by Martin in 1960. It arises from smooth muscle layer of the stomach and commonly present in 4th to 6th decade of life and more common in female than in male[2]. Its common presenting symptomps is upper gastrointestinal haemorrhage in about 50% of cases but in one-fifth of case is asymptomatic. Other symptoms are feeling of epigastrial fullness, presence of abnormal abdominal mass, persistent anemia, and dyspepsia are also common[2].

Cardia and fundus of the stomach is the common site of gastric leiomyoblastoma and intramural location is the common finding. But the exogastric as in our case is not rare.[1,2] This tumour is rarely diagnosed preoperatively without gastroscope. Its usual radiographic features such as the Bull's eye sign is similar to those of leiomy oma[5]. About 30-50% of cases[2], the tumour is ulcerated because of central necrosis and cystic degeneration and this is the common site of bleeding.

Its gross pathology have many characteristics in common with benign gastric leiomyoma and malignant gastric leiomyosarcoma and could not be differentiated from leiomyosarcoma and leiomyoma.

Leiomyoblastoma can directly invade the adjacent organ and structure; this behavior suggests poorly differentiated tumour, and the natural history of this tumour is not clearly described but most of cases (about 70-80%)[5] has benign course. The prognois of gastric leiomyoblastoma is like that of sarcoma of soft tissue[2] which depends on these characters.

1) Tumour size : tumour larger than 5 cms. In diameter has has less survival chance than the smaller one.

2) Evidence of invasion of the adjacent organ.

3) Histopathological grading; poorly differentiated tumour has tendency to invade and poor prognosis.

In our case the tumour was large and adhered to the liver and omentum but did not invade these structure and has well differentiated and had very few mitotic figures. According to Shiu's staging[2]. The second patient was in stage 1 that has a good prognosis.

Advocated surgical treatment[2] of gastric leiomyoblastoma are as follow :

1) Wedge excision in small tumour with normal looking surrounding gastric wall;

2) partial gastrectomy for the large tumour especially those situates adjacent to cardia or pylorus[5]; and

3) total gastrectomy is not recommended, and is reserved for the massive tumour that involved almost the entire stomach.

If the tumour invades the adjacent structures, the en-bloc resection is needed. There is no different in prognosis in the case that tumour did not invade surrounding structure, whether simple of extensive resection was undertaken[2,5]. The proximal gastrectomy en-bloc was recommended in our case because of its large size and uncertainity about the invasion of the liver and lymph node metastasis. Histopathologically, the surgical section of the lymph node and omentum were not metastatic and the tumour demonstrated a well differentiated status.

The patient had been doing well up to present time, gained weight and without evidence of recurrence and metastasis.

In conclusion; simple and conservative surgical treatment is the recommended for the management of the aforementioned tumours.

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