

Extremely large gastric GIST: A case report.

Bunchalew C⁽¹⁾, Chanwat R⁽¹⁾, Panchan V⁽¹⁾, Mounghard H⁽¹⁾,
Thesawadwong T.⁽²⁾ and Khuhaprema T.⁽¹⁾

⁽¹⁾Department of surgical oncology, National Cancer Institute, Thailand.

⁽²⁾Department of pathology, National Cancer Institute, Thailand.



Figure 1: MRI revealed large tumor which displaced all internal organ.

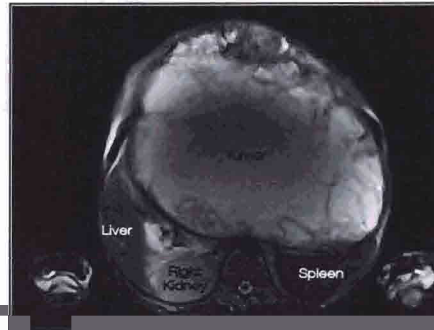


Figure 2: MRI revealed large tumor which displaced all internal organ.



Figure 3: Patient status at operating theater.

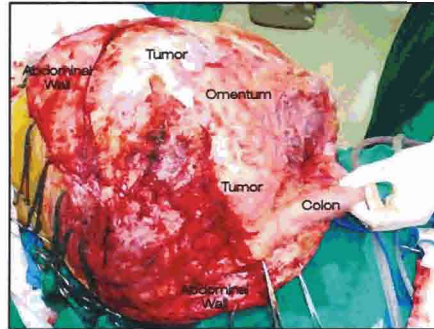


Figure 4: Tumor protruded from stomach and displaced small and large bowel to lower part of abdomen.



Figure 5: Surgical specimen.



Figure 6: GIST originated from muscular layer of stomach.



Figure 7: Immunohistochemical stain showed CD 117 (c-Kit) positive.



Figure 8: Patient status before discharged

Introduction

Gastrointestinal stromal tumors (GISTs) are mesenchymal tumor which most common arising from stomach. Tumor size can be varies from a few millimeters to > 30 cm. Usually, tumor size larger than 10 cm harbored malignant potential and associated with distant metastasis. We here reported an unusual case of extremely large, non-metastatic gastric GIST which successfully managed by En- bloc resection.

Methods

A 55 year-old man suffered from progressive enlarge abdominal mass for 20 years. He was evaluated by physicians from many hospitals which were concluded the same result, an unresectable disease. He came to NCI with his last hope which all investigations were start over again. MRI of the chest and abdomen revealed a 40X34X28 cm cystic mass in abdomen which suspected originate from stomach without lymph node enlargement or distant metastasis (Figure 1-2). His laboratories reported anemia, hyponatremia, hypoalbuminemia and other laboratories including tumor makers were normal.

En bloc resection was planned thus total parenteral nutrition and oral supplement diet was given for 2 weeks for improve nutritional status before operation.

Results

Operation started by inverted-T incision then abdominal wall was dissected from tumor and other internal organs. This tumor displaced liver superiorly causing right lung atelectasis, compressed stomach, pancreas to posterior part, omentum, small and large bowel to antero-inferior part of abdomen which prolonged compression effect like this causing adhesion with all organs in abdomen. Bleeding was occurred on every raw surface of tumor made a difficult operation (Figure 3-4). After tumor was mobilized, origin of tumor was identified from greater curvature of stomach but severe adhered with distal part of pancreas thus en bloc tumor removal, partial gastric resection with distal pancreatectomy was performed in this patient (Figure 5).

Operative time was 630 minutes and blood loss was 3000 ml. Post-operative course complicated by pneumonia, respiratory distress from right lung atelectasis which causing prolonged intubation. Tracheostomy was done on 14th postoperative day. Length of ICU stay was 30 days and hospital stay was 60 days. Pathological report revealed high grade GIST (positive CD 117) which originated from muscular layer of stomach (Figure 6-7), free resection margin, section of tumor containing large amount of necrotic tissue and blood clot. Now, He is receiving imatinib as adjuvant treatment and doing well at 3 month after operation (Figure 8).

Conclusions

Surgical resection is the mainstay treatment for localized GISTs especially in case of extremely large tumor.

References

1. Stamatikos M, et al. Gastrointestinal stromal tumor. *World J Surg Oncol* 2009;7:61.(Online)
2. Learn PA, et al. Randomized clinical trials in Gastrointestinal Stromal Tumors(GIST). *Surg Oncol Clin N Am* 2010;19(1):101-13.
3. Beham AW, et al. Gastrointestinal stromal tumors. *Int J Colorectal Dis* 2012;27:689-700.
4. Yeh CN, et al. Clinical practice guidelines for patients with gastrointestinal stromal tumor in Taiwan. *World J Surg Oncol* 2012;10:246.(Online)