Mucinous Gastric Adenocarcinoma with Abnormal Presentation of Virchow's Node

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Abstract

A 56-year-old Caucasian male presented to the ER with severe epigastric pain and vomiting. The patient had lost 30 pounds over 3 months and for the last two days has been unable to tolerate anything by mouth. The patient reported early satiety over the last few weeks. Over the last nine months the patient developed a left lateral neck mass that progressively increased in size. The mass was nontender. On physical exam the patient had a supraclavicular soft tissue mass on the left side approximately 6cm in diameter without submandibular lymphadenopathy. The abdomen had a soft tissue mass palpable on the anterior wall in the epigastric region. Open lymph biopsy of the neck mass was performed and showed metastatic adenocarcinoma with mucinous features. The patient was found to have mucinous gastric adenocarcinoma with an obstructing mass in the transverse colon. The patient was diagnosed with gastric carcinoma, which in advanced stages metastasizes to various organs in the body. It is rare to see supraclavicular lymph node metastases but gastric cancer can metastasize to Virchow's Node, which was observed in this patient.

INTRODUCTION:

Gastric carcinoma presents in advanced stages when there has already been metastasis, which can include regional lymph nodes, the peritoneum, lungs, liver, and mesentery. The liver is the most common organ to be involved when metastasis has occurred. Occasionally there can be metastasis to the supraclavicular lymph node, known as Virchow's node. To diagnose the suspicion of gastric carcinoma a fine needle biopsy is performed. An open biopsy can be performed for histologic examination of tissue, presence of abnormal cells and abnormal node architecture can be seen and examined. Worldwide stomach cancer is the 5th most common cancer and it is more common in men and in developing nations.

CASE REPORT:

A 56-year-old male presented to the emergency department with severe epigastric pain and vomiting. He complained of weakness, early satiety, and a weight loss of 30 pounds in 3 months. He has been unable to tolerate anything by mouth for two days. Over the last nine months the patient developed a nontender left lateral neck mass that has progressively increased in size. On physical exam the patient is uncomfortable. He had a left supraclavicular soft tissue

mass on the left side, approximately 6cm in diameter without submandibular lymphadenopathy. The abdomen had a soft tissue mass on the anterior wall in the epigastric region. The patient had a history of Hepatitis C and a previous papillary thyroid cancer with a total thyroidectomy. His hemoglobin was 11.5 gm/dL, hematocrit was 34.7 gm/dL, and white cell count 8,000/cu with normal differential and platelets. ALT was 60 U/L, AST 80 U/L, alkaline phosphatase 150 U/L, and increased PT/PTT. Total serum bilirubin 1.6mg/dL. Open lymph biopsy was performed and showed metastatic adenocarcinoma with mucinous features. The patient underwent colonoscopy and an obstructing mass was found in the transverse colon and was subsequently diagnosed with mucinous gastric adenocarcinoma with a mass in the transverse colon.

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Figure 1
Colonoscopy of transverse colon

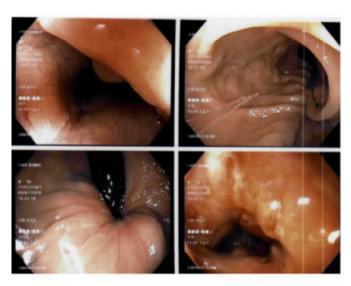


Figure 2
Colonoscopy of transverse colon

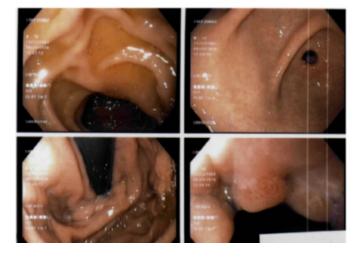
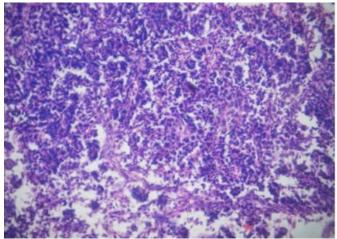


Figure 3
Excisional biopsy of neck mass



Figure 4
FNA of Virchow's node



DISCUSSION:

The presentation of gastric adenocarcinoma is often late with advanced stage metastasis due to early stages being asymptomatic. Surgical intervention and chemotherapy prolongs the survival of patients, however long term survival prognosis is dismal. The median survival is 24 months with a 20-30% 5-year survival rate. Without operation survival has a median of 5.4 months for advanced disease. In another case study it was reported that successful survival in a 46-year-old male happened after chemotherapy and resection of stomach carcinoma, lymph node dissection and liver metastases removal. However, it has been reported that only 10% of patients with hepatic metastases survive for one year. Another case report showed a patient with Virchow's node and lung metastases from a primary gastric carcinoma.

Gastric carcinoma is found in developing countries more than developed countries and has a poor mortality rate. Incidence is highest in Japan, Eastern Asia, South America and Eastern Europe. Koreans, Vietnamese, Japanese, and Native Americans have the highest risk factors ethnicity wise. Canada, Northern Europe, Africa and the United States have the lowest incidence of gastric carcinoma. Filipino and whites have the lowest risk factors ethnicity wise. In the United States the incidence of gastric cancer is 1.5%.

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