INTRODUCTION

Gastric adenocarcinoma usually presents in males in between 50-70 years of age. It usually metastasises to liver, lymph nodes, kidneys and adrenals. However mucinous adenocarcinoma is a rare type found in 2.9% of resected gastric specimens. It occurs in younger age group with a poorer prognosis and certain inherent peculiarities.

CASE HISTORY

A 30 year old young female presented with melena for last 7 days along with appearance of purpurae in the last 3 days. There was no history of abdominal pain, fever, weight loss, drug intake, bony pain or joint pains etc. On examination, nonpalpable purpurae over face and extremities were noted along with mild pallor. No lymphadenopathy, sternal tenderness, organomegaly, lump or ascites were found. Ophthalmoscopy was normal. No neurological, cardiovascular or respiratory abnormality were noticed. Preliminary investigations revealed Hb%- 10 gm/dl, WBC-7000/cu mm, N –65%, L-30%, E –2%, M – 2%, b –1 %, platelet count – 10,000/cu mm, no abnormal cell morphology. Chest X-ray - Normal, sugar – 90 mg/dl, urea – 37 mg/dl, creatinine - 0.8 mg/dl. Urine routine and microscopic examination-Normal, ANF - negative, HIV negative, Liver function test- normal, prothrombin time- 17 secs (control –12 secs). We could not venture for bone marrow as patient was having active bleeding. In the light of thrombocytopenia and prolonged prothrombin time, we sent for apTT and D dimer assay. apTT was 46 secs (normal 22 –35 secs) and D-dimer was 100mg /ml (<0.5mg/ml). The patient was having disseminated intravascular coagulation but the cause was not clear. In the absence of sepsis, gynecological causes, embolism etc a search for occult malignancy was warranted. Ultrasonography of abdomen was non contributory. A CT scan of abdomen and upper GI endoscopy in view of continuing melena were planned. CT scan of abdomen revealed – diffuse wall thickening seen in the region of antrum of stomach, solitary hypoechoic splenic deposit. There was no ascites, lymphadenopathy or liver secondary. CT Guided FNAC was avoided as repeat platelet count came out to be 8000/cu mm. Upper GI endoscopy revealed a large ulcer at the pyloric antrum, rapid urease test from surrounding mucosa was positive. Biopsy came out to be a moderately differentiated mucin secreting adenocarcinoma.

The patient received platelet and fresh frozen plasma and has now completed her first cycle of chemotherapy. Bleeding has stopped, she is awaiting palliative surgery.

DISCUSSION

A 30 year old female with purpurae and melena and a preliminary report of isolated thrombocytopenia often leads to tunnel vision on the part of the physician. Before other investigation reports were available, the presentation was masquerading as an Idiopathic thrombocytopenic purpura, However the finding of increase in PT, ApTT and D-dimer in absence of sepsis, gynaecological causes, embolism etc, a search for occult malignancy was warranted.

Mucinous adenocarcinoma of stomach is diagnosed when greater than 50% of tumor is composed of mucin. It is a unique entity because it has certain characteristics different from other adenocarcinoma of stomach. Tumor cells are discohesive and secrete mucus in the interstitium. When mucus is trapped inside tumor cells they are called signet ring cells. They occur in younger age group, are more aggressive and have a worse prognosis. They are more prone to peritoneal dissemination and lymph node metastasis. However, splenic metastasis is an enigma in oncology literature. The incidence is 0.6% at splenectomy and 1.1% at autopsy specimens. It usually occurs in the elderly and often associated with ascites.
most common primary followed by stomach. It has been associated with mucinous tumors of stomach, colon and appendix. At times splenic metastases may be even calcified which are visible in radiological investigations. An interesting view point is that these splenic lesions are due to tumor cells trapped in splenic trabeculae that expand into the parenchyma. Therefore some have referred to them as pseudometastases.4

As for the disseminated intravascular coagulation, it is a well known though uncommon entity associated with mucinous tumors. It is often accompanied by microangiopathic hemolytic anemia. The tumor cells are said to release tissue thromboplastin that set in motion widespread microthrombi and coagulopathy.5 High TNF a levels have been also incriminated in the process.

Our patient differed from other cases of conventional gastric adenocarcinomas as she was very young (30 years), female, presented with disseminated intravascular clotting, diagnosed to have the mucinous variety, and last but not the least, had a splenic metastasis, itself a rarity. Considering that she hails from a low socioeconomic background in the Indian subcontinent, Helicobacter pylori infection could be a possible inducing factor, however definite causality can only be a conjecture in this case unless immunohistochemistry from tumor cells could be done to detect repair gene expressions.6

REFERENCES