**Gastric Carcinoma in Pregnancy: Is It Really a Diagnostic Dilemma?**

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**Abstract**

A 31-year-old woman (G:0, P:0), with ten years of primary infertility, conceived following the exogenous gonadotropin stimulated cycles and had had a twin pregnancy, and admitted to the clinic, during her first trimester, with complaints of persistent nausea and vomiting and initially diagnosed as hyperemesis gravidarum. She had been scheduled for intravenous fluid and electrolytes replacement with antiemetics and intravenous B and C vitamins complexes. On following occasions, she had been discharged and readmitted to the clinic. Persistence of symptoms beyond first trimester and progressive rise of liver function tests necessitated the hospitalisation, intravenous fluid support for nutrition and gastroenterology department consultation. A gastroscopic evaluation and gastroscopy directed biopsy was subsequently performed and a gastric carcinoma was found based on the pathologic result. She had developed ascites and had been operated. On the operation, a ‘linitis plastica’, a late stage, unresectable gastric carcinoma was observed. Five days following the surgery, she had a spontaneous miscarriage of two female fetuses of 270 grams each. She was finally discharged from the intensive care unit with intravenous nutritional support together with pain killers for palliative purpose upon her request. She died one month following the operation.

**Key words:** gastric carcinoma, pregnancy, late diagnosis

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**Introduction**

The coincidence of gastric carcinoma and pregnancy is a rare event (1,2). Frequent upper gastrointestinal problems in the first trimester of pregnancy may render the early diagnosis of gastric carcinoma difficult to assess. Pregnancy can lead to diagnostic dilemma and delay, as many symptoms of the malignancy are attributed to the pregnant state.

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In this article, we report a case at first trimester of pregnancy that was initially diagnosed as hyperemesis gravidarum. Intractable symptomatology beyond first trimester led to gastroendoscopic evaluation that showed a late stage gastric carcinoma.

**Case Report**

A 31-year-old woman (G:0, P:0), with ten years of primary infertility, conceived following the exogenous gonadotropin stimulated cycles and had had a twin pregnancy. She was initially hospitalised with the complaints of difficulty in eating associated with nausea and vomiting, 4 weeks following her last menstrual period. On her laboratory findings, she had a keto-nuria with elevated liver enzymes (ALT: 156 U/L and AST: 220 U/L). No hematemesis or abdominal bloating or back pa-
in were observed. Following appropriate intravenous hydration and antiemetic therapy, she was discharged two weeks after her first admission, free of symptoms. Five weeks following her discharge, she was rehospitalised with intractable retching at 9th week of gestation. Ultrasonographic examination revealed two fetuses developed in accordance with gestational age. Liver function tests progressively rose, reaching values exceeding 300 U/L. Other biochemical work-ups and complete blood count revealed nothing except a hemoglobin level of 10.6 mg/dl. No signs of ascites, hematemesis were observed. Hepatitis A, B and C serum markers were negative as to indicate an acute infection. No specific therapy beyond intravenous fluid replacement with balanced electrolyte solutions and antiemetics was added. Ten days following her second admission, her oral nutrition improved with a remarkable fall in liver enzymes up to < 100 U/L each, without any ketonuria. She was then discharged from our unit. However, had to come back 4 weeks later, at 14th week of gestation, with significant difficulty in eating and presence of back pains. On her third admission, liver function tests were over 200 U/L with loss of skin turgor and tonus. During follow-up, she was fed with intravenous electrolytes, vitamins, minerals with antiemetics. Nevertheless, her status failed to improve with progressive rise in liver function tests. Intractable upper gastrointestinal symptoms necessitated a gastroenterologic evaluation. Following the consult, an abdominal ultrasonography and endoscopy were scheduled. On her abdominal ultrasonography, a minimal perihepatic, perisplenic fluid collection with normal liver parenchyma and a gall bladder sludge were depicted. Endoscopic investigation of the stomach showed a suspicious lesion on the upper curvature near esophagogastric junction, that subsequently leaded to the biopsy. Biopsy result revealed a poorly differentiated, signet ring cell carcinoma. Her tumor markers were as follows; Ca-125:379 U/L, CEA:4.5 ng/ml and AFP:115 ng/ml. At her 17th week of gestation, she developed ascites. She was operated by general surgeons in order to detect the extent of the disease and if any, the possibility for early surgical intervention. An unresectable and diffusely infiltrated gastric mass with 4 liters of ascitic fluid in the abdominal cavity was observed and the operation was stopped at this point without any further intervention. Five days following the surgery, she had a spontaneous miscarriage of two female fetuses of 270 grams each. She was finally discharged from the intensive care unit with intravenous nutritional support together with pain killers for palliative purpose. Patient asked to be discharged from the hospital with the knowledge of her status. She was died one month following the operation.

Discussion

Gastric cancer during pregnancy harbours a dismal prognosis due to late recognition of the disease. Mild gastrointestinal symptoms are common during pregnancy but can also be the only symptoms in stomach cancer until the late stage (3). Reluctance to pursue diagnostic studies appears to be a major contributing factor to delayed diagnosis and poor outcome. In this article, we report a case of maternal death to alert clinicians to this rare possibility (4,5). From 1996 to the end of 2001, out of 136 hyperemesis gravidum cases reported in our department, the reported case constituted hitherto the one with final diagnosis as advanced gastric cancer.

During early weeks of pregnancy, due to common epigastric symptoms, early diagnosis of this disease is often difficult and a poor prognosis eventually ensues, unless the clinicians keep a high level of awareness. One should prompt an early endoscopic evaluation in cases of gastrointestinal symptoms persisting beyond the first trimester.

As a conclusion, the clinicians must be vigilant to remember the differential diagnosis and include the malignancy, once again, in the evaluation of hyperemesis gravidarum that persists beyond the first trimester of pregnancy.

References