# Double Metallic Stents Insertion as Palliative Treatment for Patient with Gastric Outlet obstruction and obstructive Jaundice Due to Gastric Cancer

\* Rayadh A. Al-sharifi

#### Abstract

Palliative surgery such as total or subtotal gastrectomy is the usual option for carcinoma obstructing the antral or pyloric area. However, such a surgical approach is often not feasible because of the poor general condition of the patient<sup>(1)</sup>. In patients with carcinomas affecting the antrum or duodenum, obstruction is a serious development that may reduce the quality of the last few weeks or months of life by causing vomiting and dysphagia. Expandable metallic stents have been implanted endoscopically in patients with malignant stenosis of the the gastric antrum<sup>(2)</sup>. Expandable metallic stents also have been inserted endoscopically in patients with malignant obstructive jaundice due to lymph nodes metastasis to the hilur region<sup>(3)</sup>

### **Case Report**

62 years old female patient presented to the gastroenterology center with repeated vomiting, remarkable weight loss and cholestatic jaundice of 2 months duration. On examination patient was icteric and had firm hepatomegaly. Abdominal ultrasonography revealed multiple liver metastatic secondaries with dilation of intrahepatic biliary tree. Gastroscopy demonstrated an ulcerated mass at the gastric antrum obstructing the pylorus. Endoscopic biopsy has been taken which revealed adenocarcinoma. Endoscopic ultrasonography showed hypoechoic transmural thickening of gastric antral wall with a large lymph node at the hepatic hilum obstructed the common hepatic duct by pressure effect. After discussion with surgeons the decision was made to relieve the gastric outlet obstruction by inserting pyloric metallic stent and at the same time provides an access for doudenoscope for relieving the obstructive jaundice if possible. A metallic pyloric stent (8cmx10mm) was inserted into the stenotic pyloric canal and the duodenal bulb. The patients got improvement regarding the gastric

outlet obstruction symptoms. Three days later on the patient underwent ERCP using doudenoscope (Pentax) trying to relieve biliary obstruction. The doudenoscope pass with difficulty through the pyloric stent. Localization of the of the ampulla of Vater was done and metallic biliary stent (10cmx10mm) was inserted into the common bile duct through the stenotic part of common hepatic duct and relieving the obstruction .This is a unique case because it is the first time using double metallic stents in the same patient for double obstructions caused by malignant condition(gastric cancer and it is lymph nodes metastasis).

Case report

\*(CABM, FICM GE&H)Consultant of Gastrointestinal endoscopy and Endoscopic Ultrasonography Gastroenterology and Hepatology teaching Hospital

## Discussion

Malignant obstruction of the stomach and the duodenum is a distressing complication of gastric and pancreatic cancer that results in inexorable deterioration of patient quality of life. Laparoscopic gastrojejunostomy provides suboptimal palliation for many patients, <sup>(1, 2)</sup> requires conversion to open laparotomy in 20% of cases, and delays resumption of normal gut function by approximately 10 days.<sup>(4)</sup> Because of the limitations of surgery and that many patients are elderly and frail, various techniques for restoration of bowel function by nonsurgical means (e.g., balloon dilation and laser photoablation) have been proposed; all have met with limited success.<sup>(4,5)</sup>SEMS insertion has become popular for treatment of malignant stenoses of the colon, the biliary tree, and the esophagus because it opens the occluded lumen and provides prolonged patency. The use of the SEMS for malignant gastroduodenal obstruction was first reported in 1993; a metallic stent was inserted via a surgical gastroenterostomy into the duodenum of a patient with stomach cancer.<sup>66</sup>The SEMS is a simple, effective alternative to palliative surgical procedures for patients with malignant gastric or duodenal obstruction. A review of published data confirms that the technique is effective and reproducible, with a technical success rate of 94% and clinical improvements in 87% of patients. <sup>(5,6)</sup>Unilateral metallic stent insertion is safe, feasible, and achieves adequate drainage in the great majority of patients with nonresectable hilar malignant stenosis.<sup>(7,8)</sup>I n this case both metallic stents were inserted. The metallic pyloric stent was implanted to relieve the malignant stenosis at the gastric antrum and at the same time to provide an access for the duodenoscope to the ampulla of Vater for palliative treatment the hepatic hilur stenosis by inserting another biliary metallic stent. This is the first time in the gastroenterology and hepatology teaching center using double metallic stents as a palliative treatment for both malignant

stenosis of gastroduodinal junction and common hepatic duct.

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