

A Retrospective study on carcinoma stomach

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Abstract: Stomach cancer is the third leading cause of cancer death in both sexes worldwide. This study is a retrospective case series study done on 181 patients who were diagnosed and treated surgically as a case of carcinoma stomach at our institute for a period of 2 years from January 2015 to December 2016. The objective of the study is to investigate the incidence, clinical presentation and site of occurrence, pathological information and management of carcinoma stomach.

Aim of the study:

- To evaluate the incidence of carcinoma stomach in relation to age/sex.
- To study the incidence of site of lesion in carcinoma stomach.
- To enlist the clinical presentation of patients of carcinoma stomach.
- To know the significance of investigative procedures in diagnosing carcinoma stomach
- To study the type of operative procedures done in treating carcinoma stomach

Keywords: Carcinoma stomach, Antrum, adenocarcinoma, anterior gastro-jejunostomy. Introduction Gastric cancer is the third most common cancer worldwide, shows marked geographical variation, with high-risk areas in Japan, China, Eastern Europe and certain countries in Latin America. Low-risk population is seen among whites in North America, India, Philippines, most countries in Africa, some Western European countries and Australia

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I. Risk factors

Diet: Research has clearly shown that differences in diet are an important factor in explaining variations in stomach cancer risk around the world. Recent research in countries with relatively low stomach cancer risk has provided some insight into risk factors. Diets high in preserved meats and low in fresh fruits and vegetables have been linked with higher risk.

Helicobacter pylori infection:

Recent studies have shown that certain types of *H pylori* (especially the cagA strains) are more strongly linked to stomach cancer. Some inherited traits related to blood groups may also affect whether someone infected with *H pylori* will develop cancer, Further research is needed to help doctors determine how to use this information to test which people might be at higher risk for developing stomach cancer.

Recent research has also studied the interaction of *H pylori* infection with other risk factors. For example, they have found that a healthy diet is especially important for reducing stomach cancer risk for people infected with *H pylori*.

Antioxidants:

Many carcinogenic (cancer-causing) factors cause cells to form a type of chemical called a *free radical*. Free radicals can damage important parts of cells such as genes. Depending on how severe the damage is, the cells may die or they may become cancerous.

Antioxidants are a group of nutrients and other chemicals that can destroy free radicals or prevent them from forming. These nutrients include vitamin C, beta-carotene, vitamin E, and the mineral selenium. Studies that have looked at using dietary supplements to lower stomach cancer risk have had mixed results so far. There is some evidence that combinations of antioxidant supplements may reduce the risk of stomach cancer in people with poor nutrition to begin with. Further research in this area is needed.

Antibiotics:

Studies are being done to see whether antibiotic treatment of people who are chronically infected by *H pylori* will help prevent stomach cancer. Some studies have found that treating this infection may prevent pre-cancerous stomach abnormalities, but more research is needed.

Although not truly chemoprevention, antibiotics may help prevent stomach cancer from recurring in some cases. Researchers have shown that antibiotics may lower the risk that the cancer will come back in another part of the stomach in people who have been treated with endoscopic mucosal resection for early stage stomach cancer.

Non-steroidal anti-inflammatory drugs (including aspirin):

Some (but not all) studies have found that people who take non-steroidal anti-inflammatory drugs (NSAIDs) such as aspirin or ibuprofen might have a lower risk of stomach cancer. More research is needed to better define this possible link. In the meantime, doctors generally don't recommend taking these medicines just to try to lower your risk of cancer, as they can cause serious side effects.

Gastric cancer can be classified according to the anatomic site as proximal (cardia, fundus, and gastroesophageal junction) and distal (pylorus).

II. Results

Among 181 patients, 147 patients presented with abdominal pain as their presenting complaint, 93 with vomiting, 43 with malena, 85 with dysphagia, and 45 with weight loss. They all have different types of presentation, one overlapping the other.

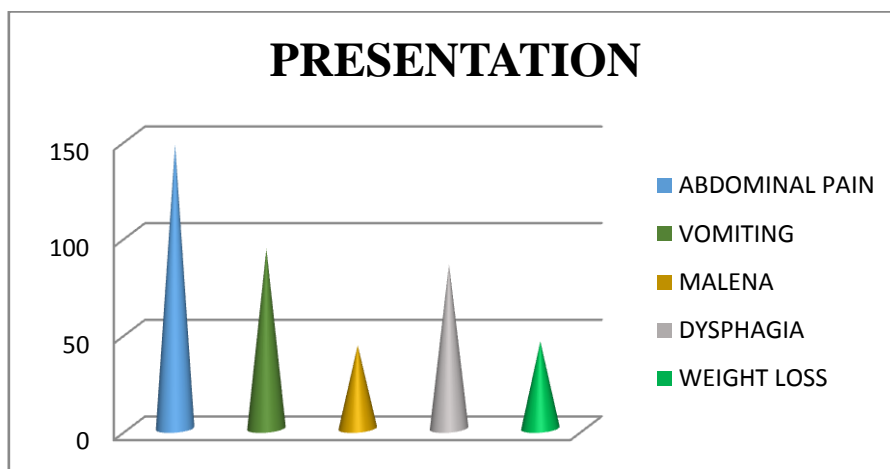


Fig.1 Presentation

115 patients were male and 66 patients were female.

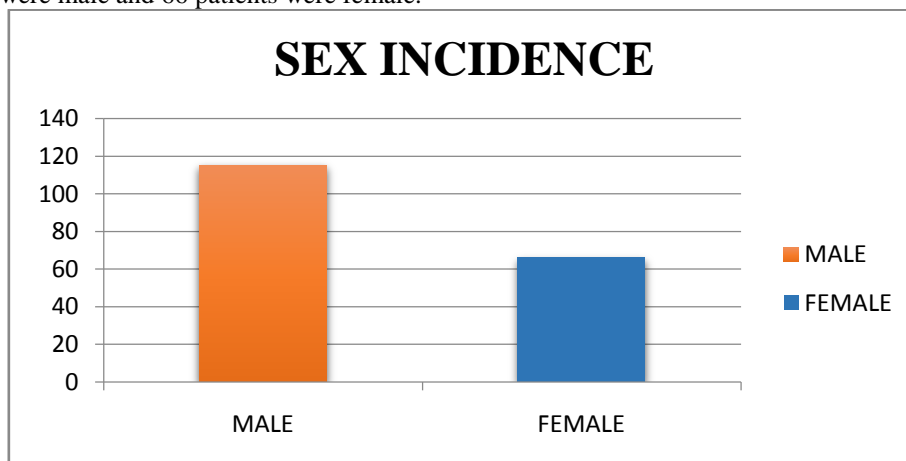


Fig .2

UGI scopy revealed the diagnosis in all the patients and biopsy was taken. In 181 patients, 125 were resectable and 56 were non- resectable.

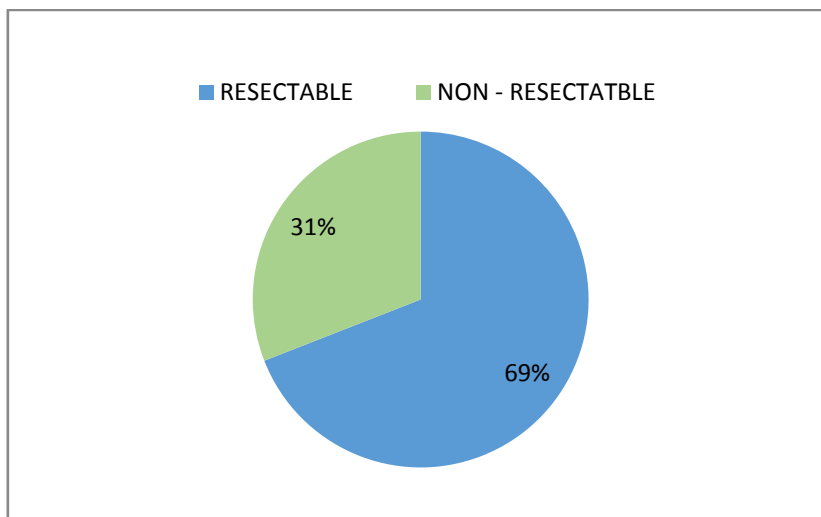


Fig.3

In 56 non- resectable patients, 25 undergone palliative anterior gastric jejunostomy, rest of the 31 had feeding jejunostomy.

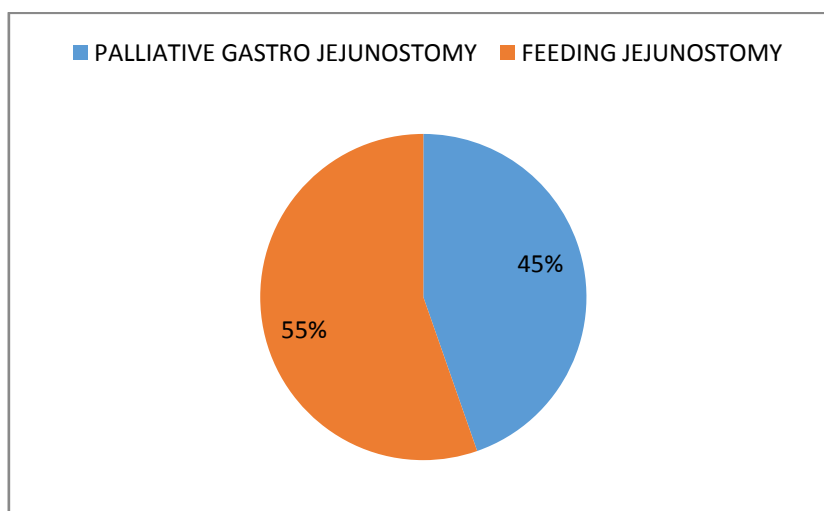


Fig.4

In operable 125 patients, 80 patients were done with subtotal gastrectomy with anterior gastrojejunostomy, remaining 45 patients undergone total gastrectomy with and roux en y oesophego jejunostomy. 98 patients attended with chemotherapy and 27 patients did not come for follow up chemotherapy. In 181 patient 90 patient have growth in the pylorus of stomach, 60 patient have growth in the Fundus of stomach and 31 patients have growth in the body of stomach(Fig.5).

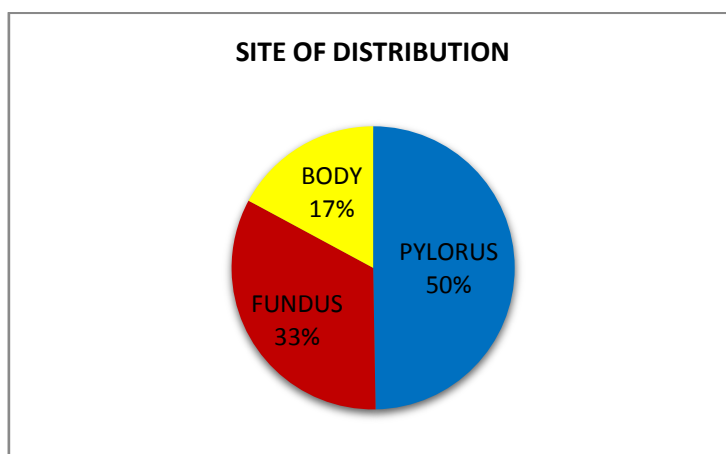


Fig.5 – Site of Distribution of Carcinoma in Stomach

III. Discussion

Gastric carcinoma often produces no specific symptoms when it is superficial. Anorexia and weight loss (95%) abdominal pain that is vague and insidious in nature. Nausea, vomiting, and early satiety hematemesis, melena, or massive upper gastrointestinal hemorrhage. Patients with advanced tumors may present with a palpable abdominal mass, cachexia, bowel obstruction, ascites, hepatomegaly, and lower extremity edema. Peritoneal seeding may cause involvement of the ovaries (Krukenberg tumor) or pelvic cul-de-sac (Blumer's shelf) detectable on rectal examination. Metastasis may manifest as an enlarged supraclavicular lymph node (Virchow's node), left axillary lymph node (Irish's node), or a periumbilical lymph node (Sister Mary-Joseph's node). (Gore R. Gastrointestinal cancer. Endoscopy is the most sensitive and specific diagnostic method in patients suspected gastric cancer. Endoscopy allows direct visualization of tumor location, the extent of mucosal involvement, and biopsy (or cytologic brushings) for tissue diagnosis. Computed tomography (CT) is used for staging gastric cancer. CT can detect liver metastases, regional and distant lymphadenopathy, and can predict direct invasion of adjacent structures. CT has a sensitivity of 88% for tumor detection. The ability of CT to accurately determine either tumor infiltration (T stage 58%) or perigastric lymph node status (25–86%) varied widely and was not considered a reliable predictor of disease extent in several studies. Magnetic resonance imaging (MRI) has had limited use in the staging of gastric cancer primarily as a result of difficulties with motion artifact, cost, time required for examination, and lack of an appropriate oral contrast agent. Treatment dictated by size, location, and ability to achieve surgical margins free of gross and microscopic disease. Several European studies have shown that to achieve adequate margins clear of disease, there must be a 5-cm distance from the tumor to the closest resection line in intestinal-type and 10-cm margins in diffuse-type tumors. Greater than 50% of patients present with unresectable locally advanced or metastatic gastric adenocarcinoma. Subtotal gastrectomy is the preferred modality in distal cancers and total or proximal gastrectomy is preferred in proximal cancers. Palliation in this group of patients is paramount and can be thought of in terms of either local and/or systemic therapy. Treatment of local symptoms includes palliative surgery, radiation, and/or endoscopic procedures. In patients with metastatic disease, systemic chemotherapy is the only treatment modality that has demonstrated a significant improvement in survival. The commonly used chemotherapy drugs are cisplatin, 5-fluorouracil, capecitabine, paclitaxel, epirubicin, docetaxel, paclitaxel, oxaliplatin, and irinotecan. Chemotherapy combinations are preferred to single agents for a faster response, although toxicity increases with the use of combination chemotherapy. Chemotherapy in metastatic gastric cancer improves the overall survival when compared to best supportive care. They include epirubicin, cisplatin and continuous infusion 5FU (ECF), cisplatin and 5-day infusion 5FU (CF), and etoposide, leucovorin, and bolus 5FU (ELF). Prognosis depends up on the stage, size of the tumour, grade, location and lymphovascular invasion of the tumour

IV. Conclusion

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