

# An Assessment of Distribution Sex, Age and Environment of Origin Patients with Gastric Cancer

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**ABSTRACT** The stomach is one of the most common sites of malignant neoplastic disease in the digestive tract. Malignancy affecting the stomach, ranked in frequency II, is an important cause of morbidity and mortality worldwide. Gastric cancer is unknown, but we know a number of local risk factors, environmental or general. Heredity as a risk factor is substantiated by the high incidence of disease in people with blood group A II and aggregation in families. Environmental factors involved mainly via food. Anatomical seat of predilection is antro-pyloric region (70%), followed by lesser curvature (20%) cardial location, the stomach walls and background are much more rare region (10%). Typically, gastric cancer tumor appears as a primitive single location multiple metastases are characteristic.

**KEY WORDS** *gastric cancer, age, environment, cardial, antro-pyloric*

## Introduction

The stomach is one of the most common sites of malignant neoplastic disease in the digestive tract. Malignancy affecting the stomach, ranked in frequency II, is an important cause of morbidity and mortality worldwide.

Gastric cancer is unknown, but we know a number of local risk factors, environmental or general. Heredity as a risk factor is substantiated by the high incidence of disease in people with blood group A II and aggregation in families. Environmental factors involved mainly via food. Anatomical seat of predilection is antro-pyloric region (70%), followed by lesser curvature (20%) cardial location, the stomach walls and background are much more rare region (10%).

Typically, gastric cancer tumor appears as a primitive single location multiple metastases are characteristic.

The initial lesion may be external inaparent exploration of the stomach during surgery, careful palpation of the gastric wall, according to the radiological will sometimes find a discrete parietal infiltration. If there is any doubt, is indicated by gastrotomi endogastric exploration, where it can find a localized only in mucous superficial ulceration. Cancer in early stages is characteristic muscle compliance mucosa. At this stage, sometimes erosive or atrophic mucosal changes present, and sometimes there is a superficial ulceration, which extended even if the surface than the depth of interest (as serpiginoasis) malignised ulcer exception is when macroscopic ulcer is diagnosed, then denied by histopathology.

Microscopic characters malignant cell divisions consist of numerous, disoriented,

multipolar with multiple nucleoli and monstrous, glandular tubules no longer have parallel and regularly, clogged basement membrane and submucosa infiltration corion respects. In a period of more advanced process is broken mucosal muscle disease, muscular and serous invasive. Can be distinguished, schematically, two groups of typical epithelioma, in which cylindrical cells, forming numerous tubes pseudoglandularii and atypical epithelioma with invasion by gastric cancer cells polymorphous tunics.

Approximately 90% of gastric cancers are adenocarcinomas, and 10% are lymphomas and leiomyosarcoamas nonhodgkinien. Gastric adenocarcinomas can be divided into two categories: a diffuse type, in which cell cohesion is absent, resulting in isolated cells that infiltrate the gastric wall thickens without forming a discrete mass and intestinal type cancer cells characterized by tight, forming tubular structures with aspect gland. Diffuse carcinomas occur more frequently in younger patients, develops the whole stomach, including cardial, causing loss distensibility stomach wall (so-called issue linitis plastica or leather canteen) and associate a more severe prognosis. Lesions are usually ulcerative intestinal type, develops more frequently in the antral and small curvature and are often preceded by precancerous lesions with long evolution. While the incidence of diffuse carcinomas is about the same in most populations, intestinal type tends to predominate in high-risk areas mentioned above and showed less frequency in regions where gastric cancer is declining .. Thus, the pathogenesis of these two types of gastric cancer

may be involved in different etiological factors. In U.S. distal stomach is located approximately 1/2 of gastric cancers. Approximately 20% of these tumors grow in the small curvature, 25% at cardial and only 3-5% at sea level curve. Over 10% of gastric cancers affecting the whole stomach.

Relationship between food habits and the development of gastric cancer has been investigated extensively. Long-term ingestion of high concentrations of nitrite in food dried, smoked and salted seems to involve an increased risk. It is assumed that nitrates are converted to carcinogenic nitrites by bacteria. Such bacteria may be introduced by exogenous partially altered by ingestion of food consumed in abundance throughout the world in classes with low socioeconomic standard. Bacteria such as *Helicobacter pylori* may also be an endogenous origin, possibly secondary to a deficiency or absence of gastric acid secretion. This can happen when cells of antral gastric acid secretion were surgically removed at 15-20 years before a partial gastrectomy performed for benign ulcer disease treatment, or when, at a later age, have: achlorhydria, atrophic gastritis or pernicious anemia. Serial endoscopic examinations in patients with atrophic gastritis showed replacement of normal gastric mucosa with intestinal type cells, this process can lead to intestinal metaplasia of the atypical cells and possibly some cancers. Since reducing the incidence of gastric cancer in U.S. actually reflects a reduction in primary distal lesions, ulcers, intestinal type, it is reasonable to assume that: a better food storage and public access to better refrigeration of food resulted in reduced dietary intake of exogenous bacteria. It remains to determine if induced iatrogenic achlorhydria using large extended the parietal cell histamine antagonists will result in future increased incidence of intestinal gastric cancer.

Supplemental factors were associated gastric carcinoma. Thus, in this direction were related stomach ulcers and adenomatous polyps, but data showing the relation cause - effect is unconvincing. For this presumptive association may be responsible, in part, inadequate clinical distinction between benign gastric ulcers and small ulcerated carcinoma. Presence of extreme hypertrophy rough gastric folds (Menetrier's disease), giving the impression of polypoid lesions was associated with an increased frequency of malignant transformation, this hypertrophy is not true but the presence of adenomatous polyps. Idivizii blood group IIA were reported with a higher incidence of gastric cancer compared with

those of O1 group, this observation may be related to differences in the mucus secretions of the different ABO antigens, resulting in greater protection or lower than the carcinogenic agents. There was demonstrated no association between duodenal ulcer and gastric cancer.

Gastric cancer when superficial and surgically curable, usually do not cause symptoms. As the tumor expands, patients may accuse upper abdominal discomfort, with variations in intensity: from a vague feeling of postprandial fullness to a severe, persistent. Anorexia, often involving a slight nausea, is very common, but symptoms are not usually that patient's physician. Can be seen perhaps a weight loss and nausea and vomiting are predominant especially pyloric tumor, dysphagia may be the primary symptom in lesions cardiei. There are no physical signs of early disease and evidence of a palpable abdominal mass generally indicates an old tumor invasion and frequent regional.

Gastric carcinoma disseminated by direct invasion through the gastric wall tissue perigastrice adhering to adjacent organs occasionally as pancreas, colon or liver.

Disseminated tumor also by lymphatic or peritoneal seeding. Metastases may occur frequently in the abdominal lymph nodes and supraclavicularii as metastatic nodules in ovarian level, the region periombilical or bottom of peritoneal bag, can also develop a malignant ascites. The liver is the most common head marrow tumor dissemination.

## Materials and methods

This paper is an analytical retrospective study of patients diagnosed with gastric cancer in the Surgical Clinic of the Emergency County Hospital Craiova. The study was the gastric cancer patients hospitalized during 2001-2008.

## Results

In the 159 cases studied with gastric carcinoma, 51 (32%) were female and 108 (68%) were male, is observing a 2125 report for male patients.

As regards distribution by age: between 30-40 years we had 6 cases, 41-50 years we avut29 cases 51-60 years we had 38 cases, 61-70 years we had 48 cases, 71-80 years and year had 27 cases over 81 years - 11 cases.

The distribution is observed that the incidence is highest in decades 5, 6 and 7 with a peak in the decade 6.

In terms of environment of origin, 105 patients from rural and 54 urban. Also, rural patients were

presented in advanced stages of disease in an overwhelming majority.

## Discussions

Regarding gender distribution, there is a 1 to 2.125 ratio (female: male). Also note the peak incidence of cases studied in 6 decade of life and a very small number in the range 30 - 40 years and over 80 years. Analyzing these data it appears that there is consistent with data from literature. Regarding extension of cancer invasion, I noticed a few tumors with invasion limited to submucosa and muscle. Also, serous invasion was present in many tumors. An important observation is that the environment of origin, so diet and socioeconomic status increases the incidence of gastric cancer patients from rural area about twice and diagnose gastric cancer in advanced stages, this paper found in patients from rural Rural means a combination of unfavorable prognosis.

## Conclusions

Public health problem, requiring prompt gastric cancer early detection and improved management purposes the disease.

Incidence and prevalence of gastric cancer morbidity in this study is constant, and could take into account a slight decrease.

Although the increased rate of discovery in stages less advanced gastric cancer mortality is high.

For most cases, the diagnosis of advanced stage disease occurred mainly in patients from rural areas.

Distribution of gastric cancers studied by age, gender and provenance showed a similar report with data from literature.

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