Orginal article

Stomach Cancer: Epidemiological, Diagnostic and Therapeutic Aspects at the Kara Teaching Hospital (Togo)

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Abstract

Objective: to report our experience in the management of gastric cancers at the Kara University Hospital (Togo)

Materials and methods: This was a retrospective and prospective study which was conducted from January 1, 2018 to July 31, 2021, in the general surgery and hepato-gastroenterology department of the Kara University Hospital (Togo). This study involved all patients treated for gastric cancer during the study period at CHU Kara (Togo). **Results:** We recorded 32 gastric cancers out of the 218 cases of cancer diagnosed during the study period. We had 20 men and 12 women with a sex ratio (M/F=1.7). The average age was 58 years with the extremes ranging from 17 to 85 years. The pattern of consultation were dominated by epigastralgia (100%) and deterioration in general condition (100%). Upper digestive endoscopy with biopsies were performed in all our patients. The antral localization was the most found in 62.5% of cases. The most common macroscopic appearance was ulcero-budding (90.6%) and the dominant histological type was moderately differentiated adenocarcinoma (87.5%). The extension assessment found liver metastasis in 10 cases, multiple regional lymphadenopathy of the hepatic pedicle and celiac trunk in 26 cases, ascites related to peritoneal carcinomatosis in 26 cases. Therapeutically, a 4/5 gastrectomy with D1 dissection was performed in 6 cases; gastrojejunal bypass in one case and palliative treatment in 25 cases. Survival at 1 year is 50% (3 patients) among operated patients. All the other patients (78.1%) who received palliative treatment all died within 3 months. **Conclusion:** Improving the prognosis of stomach cancer like other cancers requires early diagnosis to perform a gastrectomy, the only guarantee of long survival.

Introduction

Digestive cancers, once rare in Africa, are increasingly occupying an important place in surgical activities [1]. Among these, stomach cancer is one of the most frequent. However, worldwide, the incidence of gastric cancer outside the esophago-gastric junction is steadily decreasing by approximately 1.5% per year. This decrease is linked to better control of risk factors, foremost among which is the eradication of Helicobacter Pylori, which halves the risk of gastric cancer [2,3].The stomach cancer

occupied the second place of digestive cancers in Kara [4] and is clearly increasing in our surgical practice. The management of digestive cancers in our rural context as in most African countries is confronted with the problems of lack of diagnostic and therapeutic means. The diagnosis is often made late at stage of complications therefore making the management palliative. The objective of this work is to report our experience of the management of stomach cancer at CHU Kara (Togo).

Materials and methods

This was a retrospective and prospective study, which was conducted from January 1, 2018 to June 31, 2021, in the general surgery and hepato-gastroenterology department of the Kara University Hospital (Togo). This study concerned all patients treated for gastric cancer during the study period. The pathological anatomy department is not available at the Kara University Hospital (Togo). All the samples were sent to the CHU Sylvanus Olympio or to private structures, all in Lomé. The parameters studied were epidemiological (frequency, sex, age, profession, history), clinical, paraclinical, therapeutic, postoperative and follow-up.

Results

During the study period, we recorded 218 cases of digestive cancers, including 32 gastric cancers. We had 20 men and 12 women with a sex ratio (M/F=1.7). The average age was 58 years with the extremes ranging from 17 to 85 years. The patient history was characterized by gastric ulcer in 22 cases and unlabeled epigastralgia in 10 cases. The pattern of consultation were dominated by epigastralgia (100%) and deterioration in general condition (100%) as illustrated in Table I.

Table I: Pattern of consultation

	n	%
Epigastragia	32	100
Deterioration of general condition	32	100
Dysphagia	7	21.9
Gastrointestinal bleeding	5	15.6

One patient was classified as OMS 1, one OMS 2 and thirty patients OMS 4. The physical examination revealed a gastric mass in only one case. Upper digestive endoscopy with biopsies were performed in all our patients. Antral localization was the most found in 62.5% of cases. The most common macroscopic appearance was ulcero-budding (90.6%) and the dominant histological type was moderately differentiated adenocarcinoma (87.5%) as shown in Table II.

Table II : Topography, macroscopic and microscopic appearance of gastric cancers

	n	%
Topographie		
Antre	20	62,5
Fundus	5	15,6
Fundus	3	9,4
Diffus	3	9,4
Cardia	1	3,1
Total	32	100
Macoscopic appearance		
Ulcéro-budding	29	90.6
Budding	2	6,3
Infiltrating	1	3,1
Histological type		
Adénocarcinoma		
Moderately differenciated	28	87.4
Poorly differenciated	2	6.3
Well differentiated	2	6.3

The extension assessment found liver metastasis in 10 cases, multiple regional lymphadenopathy of the hepatic pedicle and celiac trunk in 26 cases, ascites related to peritoneal carcinomatosis in 26 cases. Therapeutically, a 4/5 gastrectomy with D1 dissection was performed in 6 cases; gastrojejunal bypass in one case and palliative treatment in 25 cases. Adjuvant chemotherapy could not be performed for several reasons: the absence of an oncology service in the Kara region and the poverty of the patients. The postoperative course was marked by parietal suppuration in one case which regressed under local care. On the digestive level, the operated patients had resumed transit after an average of 3 days and had quickly resumed food, which improved their general condition. Survival at 1 year is 50% (3 patients) among operated patients. All the other patients (78.1%) who received palliative treatment all died within 3 months.

Discussion

Gastric cancer is unevenly distributed around the world. And for good reason, there is a certain genetic and environmental susceptibility to developing this cancer. It is in East Asia that it is highest, especially in Japan and China, followed by Central Eastern and Southern Europe, particularly Portugal and South America [4]. A study of gastric cancers in Africa showed a marked increase in the incidence of this cancer in Mali compared to other African countries such as Uganda and Senegal. Similarly, this incidence is higher in sub-Saharan Africa than in North Africa [5]. These

geographic variations may be related to differences in risk factors, such as the prevalence rate of Helicobacter pylori infection [6] and accessibility to diagnostic means. The stomach cancer occupies actually the second place in the digestive cancers in CHU Kara [4]. The absence of a cancer registry in Togo and the unavailability of global data (only hospital) mean that the real incidence of this pathology is underestimated. The average age in our series is 58 years old. Stomach cancer is rare before the age of 40, qualifying it as that of the elderly. However, this cancer is increasingly encountered in young subjects [7,8] as in our study. The male predominance of this cancer has been mentioned in several studies [7,8]. Several factors favoring the occurrence of this cancer have been incriminated, the first of which is Helicobacter Pylori, which is acquired since early childhood [9,10]. In our series, gastric ulcer was the most common contributing factor in 68.8% of cases. This would be due to an infection with Helicobacter Pylori which could not be sought for lack of diagnostic means. Apart from this bacterium having carcinogenic properties, other factors such as tobacco, alcohol and excessive consumption of salt, smoking, curing, canning which still occupy an important part in the diet. The artisanal activities of smoking and salting fish are widely established in the coastal regions of West Africa and their impact in the development of gastric cancers is still little known [10].

After upper endoscopy, the antral site (62.5%) was by far the most frequent. This remark has been the rule in the literature contrasting with the rarity of cardiac localization [9,10]. The circumstances of discovery of these cancers in our series were represented essentially by epigastralgia (100%) and deterioration of the general state (100%). The deterioration of the general state is a sign of poor prognosis testifying to the advanced stage of cancers diagnosed in our context like the majority of African countries [8-10]. This is explained by a delay in consultation due to ignorance, attachment to traditional therapy and the poverty of the African [10].The other digestive cancers as in the case of liver cancers which are sometimes transfer lesions of gastric origin (31.3%), representing the most frequent digestive cancers in our context, do not escape these diagnostic problems late [11]. Therapeutically, the recommended neo and adjuvant chemotherapy could not be performed in our series due to the high cost not accessible to patients and the unavailability of chemotherapy in our region. This would have improved the prognosis [12]. The tumor resection rate is very low in our series due to late-stage diagnosis like other digestive cancers. The one-year survival time in our series is very short due to the absence of complementary treatment. This survival was better in the series by Diop et al in Dakar where the majority of patients received adjuvant chemotherapy [10]. Postoperative follow-up was difficult in our work context where patients are struggling to meet appointments and honor additional examinations.

Conclusion

Stomach cancer is one of the most common cancers in the Kara region in Togo. Gastric ulcer is the most found contributing factor. The diagnosis was made mainly at the late stage, which made gastrectomy impossible, which is the only curative treatment to improve survival.

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