

Scientia Research Library

ISSN 2348-0416 USA CODEN: JASRHB

Journal of Applied Science And Research, 2017, 5 (3):106-114

(http://www.scientiaresearchlibrary.com/arhcive.php)

Malignant tumors of the stomach in the Marrakech region

R. Sidibé(1), I. Elhidaoui(1), S. Zabroug (3), S. Oubaha (2), Z. Samlani(1), K.Krati(1)

1 : Service de Gastro-entérologie

- 2: Service de Physiologie Faculté de Médecine et de Pharmacie de Marrakech Université Cadi Ayyad
- 3 : Service de Radiothérapie et d'OncologieCHU Mohammed VI, Avenue Ibn Sina Ammerchich, Marrakech (Maroc)

ABSTRACT

Introduction: Stomach cancer, is a cancer that develop from stomach tissues and seems possibly due to the multiplication and installation in the stomach of a bacterium (Helicobacter Pylori) which produces an oncogenic protein ("Cag" or CagA) and promoted by diets rich in salt. Stomach cancer is the second leading cause of death due to cancer in the world. Even though the annual incidence of stomach cancer has been decreasing steadily this last twenty years there remains a real public health problem. The vast majority of malignant tumors of the stomach (95%) are adenocarcinomas. Materials and methods: Retrospective descriptive study over 4 years (February 2011 - December 2015), including all cases of gastric cancers admitted in the departments of Gastroenterology, Radiotherapy and Oncology, excluding cardiac tumors; studied and analyzed the epidemiological, diagnostic and therapeutic characteristics of our series. 145 confirmed cases of malignant gastric tumors of which 56 cases were already hospitalized at the service dring the study period, that is 38.7%, 100 cases of adenocarcinoma, 36 cases of lymphoma, 7 cases of stromal tumor and 2 cases of neuroendocrine tumor. The average age was 55, 6 years with the extremes from 20 to 87 years one third were under 50 years of age. A slight male predominance was noted. Risk factors were mainly alcohol-tobacco use and Helicobacter pylori infection in 38.5% and 28% of cases respectively. The main revealing clinical signs were epigastralgia and weight loss found in 86% of patients. The location was often Antro-pyloric and the tumor was often ulcer-budding. Undifferentiated adenocarcinoma is the predominant histological type, the diagnosis was was often established at a late stage of the tumeur, which are normally locally advance or metastatic. Surgical treatment was performed only in 15% of patients **Conclusion:** The peculiarities of our series of study are the young age of our patients, the diagnosis at a late stage. These two conditions are real challenge for the clinician who remains the desire to be curative and the limits of therapeutic means.

Keywords: Stomach, malignant tumors, Marrakech region

INTRODUCTION

Stomach cancer is one of the most common cancers, it ranks 4th among all cancers, 5th in France and 2nd in the world after colorectal cancer. It is associated with several risk factors, including chronic gastritis mainly associated with infection by the bacterium Helicobacter pylori (1), smoking, a diet rich in salty products (2) and low in fresh vegetables and fruits, a history Stomach cancer in the family or a genetic predisposition increasing the risk of developing stomach cancer. Its annual incidence has been steadily decreasing for twenty years (3). The vast majority of malignant tumors of the stomach (95%) are adenocarcinomas (4). Lymphomas and stromal tumors are less frequent. The prognosis of gastric cancer is generally bleak despite major advances in the area of medical and surgical management. The aim of our work is to describe the epidemiological, pathological and clinical characteristics of malignant gastric tumors in the Marrakech region.

MATERIALS AND METHOD

We conducted a descriptive retrospective study over a period of 4 years (February 2011 - December 2015), including all cases of gastric malignancies hospitalized in the Gastroenterology, Radiotherapy and Oncology departments, excluding cardiac tumors; And we studied and analyzed the epidemiological, diagnostic and therapeutic characteristics of our series.

RESULT AND DISCUSSION

We collected 145 cases of confirmed malignant gastric tumors, 56 of which were hospitalized during the study period, 38.7%, 100 cases of adenocarcinoma, 36 cases of lymphoma, 7 cases of tumor Stromal tumor and 2 cases of neuroendocrine tumor (Fig 1). The average age was 55, 6 years with extremes of 20 to 87 years, one third of our patients were young with an age of less than 50 years. We noted a slight male predominance with a sex ratio of 1.3. Risk factors in our series were alcohol and smoking in 38.5% of cases, helicobacter pylori infection in 28%, chronic atrophic gastritis in 27.5% of cases, intestinal metaplasia in 17.6% of cases, on gastrectomy stump in 3.4% of cases and Menetrier's disease in 1.6% of cases (Table 1). The average time for consultation was 10, 8 months. Clinical signs revealed epigastralgia in 86% of patients, weight loss in 86% of patients, anorexia and asthenia in 61% and 46% of patients respectively, complications such as melena and hematemesis In 34% and 15% of patients respectively, dyspepsia in 15% of patients and finally gastroesophageal reflux in 5% of patients (Figure 2). In 52% of the cases, it was pyloric antro-pyloric, and in 38% of the cases, pangastric was found in 10% of the cases. On a macroscopic level, the ulcerous-budding aspect was predominant and found in 43, 80% of the patients, an ulcerated and infiltrated aspect in 27, 10% of the patients, infiltrated in 13,5% of the patients, infiltrated and budding in 10, 3% of cases, budding in 2.9% of cases, ulcerated in 1.50% of cases; It should be noted that the macroscopic aspect was not specified in 1% of the patients (Fig. The anatomo-pathological study carried out from per-endoscopic biopsies to specified histological types, thus, adenocarcinoma was the predominant histological type, found in 69% of cases and it was liberkuhnian type little differentiated in 41.9% (No. 2), followed by lymphomas found in 24.8% of cases (with large cells in 91.6% of cases and small cell malt in 8.3% of cases), stromal tumors 7 cases) were fusiform cell type in 6 cases and epithelium in 1 case, the 2 cases of neuroendocrine tumors found in our series were all 2 of the differentiated endocrine carcinomas. The diagnosis was often made at a late stage of a locally advanced or metastatic tumor, surgical treatment was performed only in 15% of patients (Table 3).

In terms of prognosis, ADK were diagnosed at a metastatic stage in 61% of cases; The LMNH were classified as stage IIE2 in 63% of the cases, the stromal tumors were classified as high risk of malignancy in 5/7 of the cases. An average decline of 4 years, PDV (27/145). The mean survival time after diagnosis was 6 months.

Figs. N ° 4, n ° 5 and n ° 6 represent some images of gastric malignant tumors found in our series.

Discussion

Malignant tumors of the stomach represent the 2nd leading cause of mortality after lung cancer, with clinical symptoms not very specific. The endoscopy with multiple biopsies (more than 10) allows the diagnosis in 95% of the cases. They are statistically linked to a low socio-economic level, specific dietary patterns (smoking, salting) by increased virulence of helicobacter pylori and alcohol-tobacco poisoning; These data are in line with those of our study in which the risk factors were predominantly alcohol-tobacco use and helicobacter pylori infection. 5-year survival is 10-15%; 80% are diagnosed after the age of 65 years. Two thirds are advanced (4). About 9,000 new cases per year, stomach cancer is the fifth most common cancer in France. Its average age of onset is 70 years with a strong male predominance; This male predominance was confirmed by our study. In our study, approximately 70% of the cases were adenocarcinomas compared to 90% found in the literature. Treatments for stomach cancer vary depending on the stage and degree of malignancy (grade) of the cancer. Often, several therapies are combined: surgery, radiotherapy or chemotherapy. The choice of treatment is the subject of a multidisciplinary consultation (at least 3 different specialists must be present: gastroenterologist, oncologist, surgeon.) A personalized treatment plan is developed for each person with stomach cancer, Depending on the grade and extent of the disease. Surgery is the only treatment that can eliminate the tumor and lead to a real healing (in our study, curative surgery was performed in 17 patients, 11.7%). Sometimes it is not possible to completely remove the tumor because of its size or because the cancer has spread to other organs. In these cases treatments are available to slow the progression of the disease And relieve symptoms.9 Surgery involves removing the affected stomach and nearby lymph nodes, depending on the location of the tumor in the stomach, the surgeon Removes a part of the esophagus (proximal cancer), or the small intestine (distal cancer). There are two techniques: partial gastrectomy, for cancers in the distal part of the stomach, or total gastrectomy. As for chemotherapy; In the case of localized cancer, the medical team can propose pre-operative chemotherapy (preoperative chemotherapy) that reduces the size of the tumor, allowing the tumor to be removed more easily. Chemotherapy can also be performed after surgery (postoperative chemotherapy) 6 to 8 weeks after surgery, with the aim of reducing the risk of recurrence. Radiation therapy is rarely used in cases of stomach cancer. It may be before, but most often after surgery, in association with or without chemotherapy. The latter aims to be a potentiator of radiotherapy. This is called "sensitizing radio chemotherapy". It can also be used to relieve the pain associated with a tumor that can not be removed. Postoperative chemoradiotherapy has a place in the treatment of adenocarcinomas of the stomach and oesogastric junction for patients who have not received perioperative chemotherapy if the tumor is stage II or III and the general and Nutrition permitting. It should be discussed in the case of lymph node invasion of stage N1 after clearing D1. The place of postoperative chemoradiotherapy after D2 dissection remains controversial. Postoperative chemo-radiotherapy should be offered to patients who have undergone perioperative chemotherapy and who are undergoing surgery (10). Importantly, the risk of venous thrombosis and its major complication of pulmonary embolism in patients undergoing treatment for stomach cancer often justify the use of compression stockings. Prognosis seems to be much better in Japan than in other countries, probably in relation to an early detection policy in a high-impact country. (11) In the other countries, mortality reaches 75% (10). With net survival representing the likelihood of surviving cancer in the absence of other causes of death, it estimates the percentage of people who will survive their cancer. In Canada, the net survival after 5 years for stomach cancer is 25%, which means that on average, about 25% of people diagnosed with stomach cancer will survive at least 5 years.

CONCLUSION

Gastric cancer is a frequent cancer in our context, the peculiarities of our series are the young age of our patients and the diagnosis at a late stage. These two conditions are a real challenge for the clinician who remains divided between the desire to be curative and the limits of therapeutic means.

Conflicts of interest: none

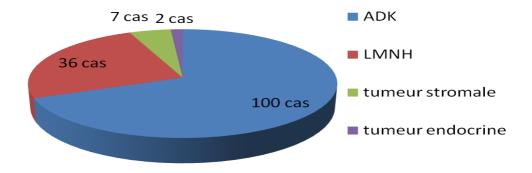


Fig. 1: Distribution of patients according to the histological type

Table 1: the different FDRs found in our series

FDR	Percentage
HP Infection	28%
Atrophic chronic gastritis	27,5%
Intestinal metaplasia	17,6%
Gastrectomy stump	3,4%
Miner's disease	1,6%
Alcohol-tobacco poisoning	38,5%

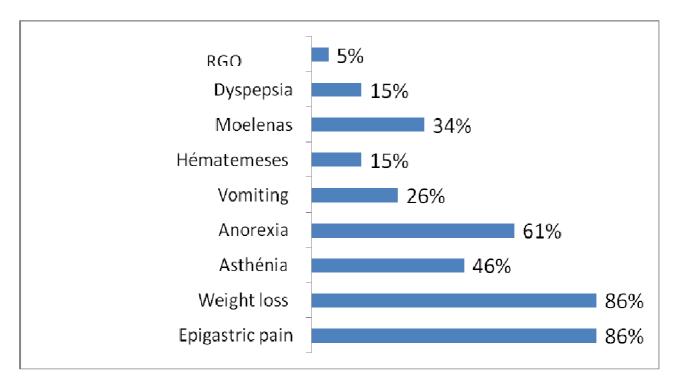


Fig. 2: Clinical signs revealing

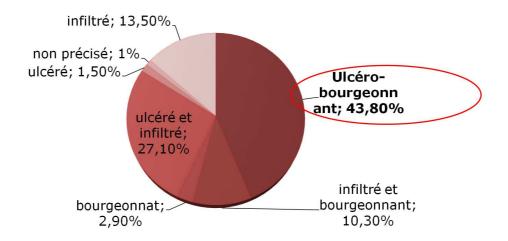


Fig. 3: Macroscopic aspects of the gastric Tm found in our series

Table 2: Degree of differentiation of gastric tumors

Degree of differentiation of ADK	Percentage
Well differentiated	8,5 % %

Moderately differentiated	20,6%
Little Differentiated	41,9%
Undifferentiated with cells in kitten rings	13%

Table 3: The different treatments carried out in our series

Type of gastric tumor	Treatment carried out	percentage
ADK (n = 100)	Healing Surgery Palliative surgery CTH neoadjuvant CTH adjuvant CTH palliative RTH + CTH	15% 6,5% 37% 48,1% 61% 6,4%
LMNH (n = 36)	CTH (CHOP protocol) Gastrectomy of hemostasis	97,2% 8,3%
GIST (n = 7)	Surgery imatinib	4/7 (57%) 1/7 (14,3%)
TED (n = 2)	Healing Surgery	100%



Fig 4. Tumor process g) astric ulcer-budding (ADK

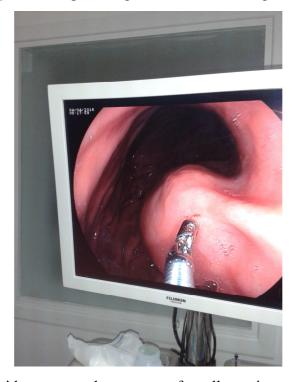


Fig. 5: Polypoid process at the expense of small gastric curvature (GIST)



Fig. 6: Antral ulcerative-budding process (ADK)

REFERENCES

- [1] Wroblewski L, R Peek, Jr. et K Wilson (**2010**), Helicobacter pylori and gastric cancer: factors that modulate disease risk. *Clin Microbiol Rev*23:713-739.
- [2] a. b. c. d et e (en) Jennifer A. Gaddy et al. (2013), « High dietary salt intake exacerbates Helicobacter pylori induced gastric carcinogenesis » [archive] Infection and Immunity
- [3] (en) Tsugane S, Sasazuki S, <u>«</u>Diet and the risk of gastric cancer: review of epidemiological evidence <u>»</u> [archive], Gastric Cancer, **2007**;10:75-83
- [4] Société savant des maladies et cancers de 'appareil digestif (Révue publier: 1999)
- [5] Henning GT, Schild SE, Stafford SL et al. Results of irradiation or chemoirradiation for primary unresectable, locally recurrent, or grossly incomplete resection of gastric adenocarcinoma [archive], *Int J Radiat Oncol Biol Phys*, **2000**;46:109-118
- [6] <u>†</u>Fiorica F, Cartei F, Enea M et al. The impact of radiotherapy on survival in resectable gastric carcinoma: a meta-analysis of literature data [archive], Cancer Treat Rev, **2007**;33:729-740
- [7] ↑ Macdonald JS, Smalley SR, Benedetti J et al. Chemoradiotherapy after surgery compared with surgery alone for adenocarcinoma of the stomach or gastroesophageal junction [archive], *N Engl J Med*, **2001**;345:725-730
- [8] ↑ Mari E, Floriani I, Tinazzi A et al. Efficacy of adjuvant chemotherapy after curative resection for gastric cancer: a meta-analysis of published randomised trials. A study of the GISCAD (Gruppo Italiano per lo Studio dei Carcinomi de l'Apparato Digerente) [archive], *Ann Oncol*, **2000**;11:837-843
- [9] PASSEPORTSANTE.net (Les traitements médicaux et approches complémentaires)
- [10] H. Ben Salah et al. Quelle place pour la chimioradiothérapie postopératoiredans la prise en charge thérapeutique des adénocarcinomes de l'estomac et de la jonction oesogastrique? Role of postoperative chemoradiotherapy in the therapeutic managementof adenocarcinomas of the stomach and oesogastric junction 1278-3218/© **2016** Société française de radiothérapie oncologique (SFRO). Publie par Elsevier Masson SAS. Tous droits réserves.

- [11] Hartgrink HH, Jansen EP, van Grieken NC, van de Velde CJ, Gastric cancer [archive], Lancet, **2009**;374:477-490
- [12] \uparrow (en) Shinmura K, Goto M, Tao H et al. A novel STK11 germline mutation in two siblings with Peutz-Jeghers syndrome complicated by primary gastric cancer [archive], Clin Genet, 2005;67:81-86
- [13] \(\phi\) (en) Hanley AJ, Choi BC, Holowaty EJ, «Cancer mortality among Chinese migrants: a review » [archive] Int J Epidemiol, 1995; 24:255-265.
- [14] † Japanese Gastric Cancer Association, Japanese classification of gastric carcinoma—2nd [archive] English Edn. Gastric Cancer, 1998;1:10-24