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Problematics in Medical Management of Digestive Cancers in Ziguinchor

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Abstract **Original Research Article**

Background: In Senegal, digestive cancers often cause an issue in their management, especially in semi-urban areas. The aim of our study was to evaluate the medical management of digestive cancers at Peace hospital in Ziguinchor. ***Patients and methodology****:* It was a retrospective study during 20 months, including all patients of medicine, general surgery and digestive endoscopy departments, with a diagnosis of primary digestive cancer. Data's were collected and analyzed with Microsoft Excel. ***Results:*** Seventy and fourteen patients were included. There were 49 men and 25 women (sex-ratio 1,96). The average age was 45,2 years. Thirty and five patients (47,3%) presented a hepatocellular carcinoma. They all had a symptomatic treatment. Twelve patients died. An oesophageal cancer was diagnosed for 10 patients (13,5%). The tumor was located at upper third for 4 patients, middle third for 1 patient and lower third for 5 patients. The treatment was a feeding gastrostomy. A gastric cancer was diagnosed in 12 patients (16,2%). The tumor was in antrum for 8 patients (66,7%). A jejunostomy and a gastro-entero-anastomosis were realized for 2 patients. Ten patients (13,5%) had a colorectal cancer. The tumor was in lower rectum for 3 patients, middle rectum for 4 patients, upper rectum for 1 patient, rectosigmoid junction for 1 patient and right colon for 1 patient. A monobloc resection was realized for 1 patient. Four (4) patients had a colostomy. A pancreatic cancer was diagnosed for 7 patients (9,5%). Five patients (5) had a head cancer, one (1) had a tail cancer and another one (1) had a body-tail cancer. They all had a symptomatic treatment. ***Conclusion:*** In Senegal, primary digestive cancers are frequent in semi-urban areas especially hepatocellular carcinoma. The diagnosis is often delayed and the treatment is symptomatic. The primary prevention and a better local technical equipment would improve their management.

Keywords: Problematic - Digestive cancers - Ziguinchor – Senegal.

BACKGROUND

Digestive cancers represent all the malignant tumors located in digestive tract and accessory glands. They constitute a public health problem because of their frequency and gravity. On epidemiological aspect, they are characterized by big geographic and demographic variations [1]. In Africa, data's are often incomplete. In Senegal, digestive cancers represent a problematic in their management especially outside the capital. The aim of our study was to evaluate the medical management of these primary digestive cancers in the semi-urban area of Ziguinchor.

PATIENTS AND METHODS

The study was conducted at Peace hospital, a public health institution level 2, which started since 2014. The hospital is in south of Senegal, in Ziguinchor, 455 km from Dakar, the capital. It was a retrospective, descriptive study from January 1, 2018, to August 31, 2019. All patients admitted in medicine, general surgery and digestive endoscopy departments, with a possible diagnosis of digestive cancer were included. Data's were collected in a survey form with age, sex, clinical and paraclinical exam results. Data's were analyzed with Excel software.

RESULTS

During the period of study, 74 cases of digestive cancers were included. The average age was 45,2 years (21-75 years) with a sex ratio of 1,96 (49 men and 25 women).

The repartition of these cancers cases is represented on figure 1 and in Table I.

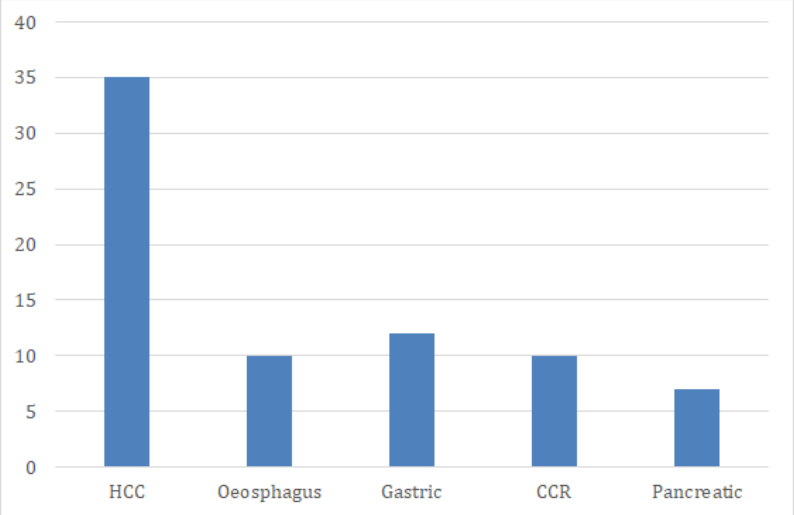

Figure 1: Number of cancers according to their localization
HCC: Hepatocellular carcinoma, CCR: Colorectal cancer

Table I: Repartition of cancers according to their frequency, sex-ratio and age

CANCERS	Percentage (%)	SEX-RATIO (M/W)	AVERAGE AGE
LIVER	47	6 (30/5)	44,4ans [26-67 ans]
OESOPHAGUS	14	1 (5/5)	50,7ans [22-64 ans]
GASTRIC	16	1,4 (7/5)	56,9ans [44-72 ans]
COLORECTAL	14	0,7 (4/6)	46 ans [21-75 ans]
PANCREAS	9	0,75 (3/4)	56,7ans [38-71 ans]

Hepatocellular Carcinoma

The main clinical signs were a tumoral hepatomegaly (77,14%) and right upper quadrant pain (65,7%). The alpha-foetoprotein rate was higher than 250 UI/ml for 18 patients [1,28–968648 UI/ml]. CT-scan found a typical aspect with enhancement in arterial phase and a wash-out in portal and late phase for 13 patients (37,1%). The etiology was dominated by viral hepatitis B in 25 patients (71,4%). For all patients, the treatment was predominantly symptomatic. Evolution was marked by 12 deaths (32,3%)

Oesophageal Cancers

Nine patients presented a mechanical dysphagia. One patient had an aphagia. The clinical signs were epigastric pain associated to vomiting for another patient. The tumor was in upper third for 4 patients, middle third for 1 patient and lower third for 5 patients. Histology was available for 2 cases of upper third and concluded to epidermoid carcinoma. Two patients had a feeding gastrostomy. No patient had oesophageal prothesis or percutaneous endoscopic gastrostomy.

Gastric cancers

Clinical signs were dominated by epigastric pain in 5 cases (41,7%), pyloric-duodenal stenosis in 3 cases. The tumor was in antrum for 9 patients (75%). At diagnosis time, the cancer was already metastatic in 2 cases with respectively liver metastasis and peritoneal carcinomatosis. Histology was available for only one case and concluded to a tubulo-papillary adenocarcinoma. Patients with stenosis had a gastro-entero-anastomosis or a jejunostomy.

Colorectal cancers

Circumstances of discovery of colorectal cancers were rectal bleeding for 4 patients (40%) and intestinal occlusive syndrome for the 5 others (50%). The tumor was in lower rectum for 3 patients, middle rectum for 4 patients, upper rectum for 1 patient, rectosigmoid junction for 1 patient and right colon for 1 patient. Staging showed liver metastases and peritoneal carcinomatosis for one patient. Pelvic MRI (magnetic resonance imaging) could not be realized for patients with rectum cancer. Four patients had colostomy and one patient had a monobloc resection. Histology available for one case concluded to a well-differentiated adenocarcinoma. No patient had chemotherapy and/or radiotherapy.

Pancreatic cancers

Clinical signs were obstructive jaundice in 5 cases (71,4%) and pancreatic pain in 2 cases (28,6%). The tumor was located at the head of pancreas for five patients (5), at the tail for one patient (1) and at the body-tail for one patient (1). For all the patients, the treatment was essentially symptomatic with antalgics and/or bile acid sequestrants. Echoendoscopy and endoscopic retrograde cholangiopancreatography could not be realized.

DISCUSSION

In Africa, cancers have been underestimated for a long time, because of the lack of investigative resources. Primary digestive cancers often occur in young people like in our study where the average age was 45,2 years (21-75 years). So, the average age was 47,01 years in Niger, 44,3 years in Burkina Faso, 49 years in Togo and 48,9 years in South Africa [2-5]. In Maghreb, the average age was 55, 7 years in Morocco [6]. In Europe, average age at the time of diagnosis, was between 60 and 80 years [7]. These variations may be related to genetic, racial and environmental factors.

The most frequent cancer in our study was primary liver cancer. According to Globocan 2018, it is the sixth (6^{th}) cancer in the world and the fourth (4^{th}) cancer in Africa after, breast, uterine cervix and prostate cancer. The main etiology in our area is viral hepatitis B [8, 9]. In areas where viral hepatitis B has a high prevalence, the contamination often occurs during newborn period. This explains the occurrence of this cancer at a young age [10-13].

In our study, the most frequent digestive cancer is the gastric cancer. These data's are similar to Peghini's results at Principal Hospital of Dakar, Kadende in Burundi and Ayite in Togo [3, 14, 15]. But in some studies, in Morocco and Niger, colorectal cancer was the most frequent [2, 6]. The incidence of gastric cancer is declining in the world, especially in developed countries. But, in some areas of Africa, the high prevalence of Helicobacter pylori, the low socio-economic level, the salty food could explain this high prevalence of gastric cancer [16].

Colorectal cancer is one of the most frequent cancers with high mortality. In fact, according to Globocan 2018, it is the third (3^{rd}) cancer and the 2^{nd} cause of death by cancer in the world.

In our study, it only represents 13,5% of digestive cancers. Indeed, the colorectal cancer is related to the western lifestyle with a diet rich in red meat, processed meet and alcohol [17]. As the lifestyle is changing in Africa, the prevalence of colorectal cancers should increase.

Eight patients (80%) presented a rectal cancer. No patient had a rectal MRI. MRI is only available in Dakar, the capital. It allows a good staging of tumor, the research of a vascular invasion and a mesorectum invasion [18]. Regardless of the localization of the cancer, in our framework conditions, the diagnosis is frequently made at a late stage [14]. This could be explained by the long consultation period because of the lack of specialists. Sometimes, the cost of paraclinical exams is prohibitive for patients without health-care coverage.

The pathological examination of biopsy or surgical specimen is also often unavailable because of the lack of pathology laboratories in southern area. The samples are analyzed in Dakar or private laboratories. Digestive cancers have a poor prognosis with a high mortality [19]. The treatment is mainly symptomatic. Chemotherapy is not available in southern area. The lack of enteral or parenteral feeding does not allow an optimal nutritional support. Pain management is often problematic with recurrent oral morphine ruptures.

CONCLUSION

In our study, primary digestive cancers often occur in young people and are dominated by hepatocellular carcinoma. Diagnosis is often delayed at a late stage with a poor prognosis. The treatment is essentially symptomatic. A better medical management of these cancers requires a greater availability of specialists and an improvement of technical equipment.

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