

# Clinical and Anatomic-Pathological Study of Digestive Polyps at Point G Teaching Hospital

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## Abstract

**Introduction:** The aim of our study was to describe the aspects clinical and pathology of digestive polyps. **Methods:** This was a descriptive and analytical study with retrospective and prospective collection from January 2014 to September 2020, *i.e.* a duration of 72 months. Our study focused on all cases of non-cancerous digestive pathologies. The data were collected from registers, medical files and reports from the anatomy and pathological cytology department of the Point G University Hospital. All of this data was entered on an individual survey form. This sheet includes demographic data, qualitative and quantitative variables. **Results:** We conducted a study of 131 cases of digestive polyps. The frequency of digestive polyps was 3.65%. The mean age of our patients was  $44.6 \pm 21$  years with extremes of 2 years and 79 years, with a male predominance and a sex ratio of 1.01. The biopsy was the type of sample most represented in 77.1%. The digestive polyps were located in stomach in 37.4%; the colon in 27.5% then the rectum 21.4%. The polyp sessile accounted for 65.6%. Histological examination revealed that adenomatous polyps were predominant in 77% of cases, followed by juvenile polyps in 9.2%, then hyperplastic polyps in 6.2%. Low grade dysplasia was found in adenomatous polyps in 61.53% and high grade found in 38.4%. Gastritis due to *Helicobacter pylori* (Hp) was found in 16% of cases. **Conclusion:** Digestive polyps are common in the general population. The prognosis is linked to the risk of neoplastic degeneration of adenomas.

## Keywords

Digestive Polyps, Clinical, Anatomopathology

## 1. Introduction

The first cases of polyps of the digestive tract were described by Slotz in 1814 [1]. In Western countries, polyps are among the common conditions that arouse considerable enthusiasm among gastroenterologists and pathologists. The prevalence and relative frequency of different polyps vary across regions of the world and populations.

Thus, in a recent series of gastric endoscopy in the USA; 8000 polyps were biopsied or resected in 7500 patients; prevalence was 3.75% [2]. The prevalence of adenomatous polyps increases with age, it is lower in Third World countries than in the West.

In France it is estimated at 7% between the ages of 45% and 49% and 20% to 33% after the age of 65 [3].

In Africa, however, this pathology is rare, often even unknown [4]. Indeed, several studies have highlighted the low incidence In Burkinabe hospitals, rec-to-colic polyps accounted for 2.34% of the conditions encountered during colonoscopies performed [5].

In Mali, to our knowledge, there has been no study on digestive polyps. With this in mind, it seemed appropriate to us to devote a study to better situate the place of digestive polyps in digestive pathology in our country and to analyze them in their sociodemographic, topographical and pathological aspects.

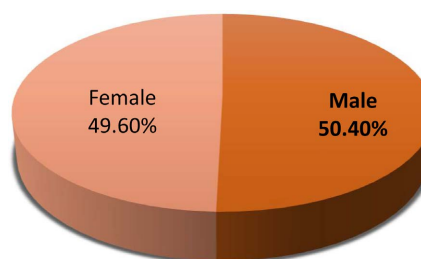
## 2. Methods

This was a descriptive and analytical study with a retro-prospective collection of data extending from January 1, 2014 to September 31, 2020, a duration of 72 months, our study focused on all cases of non-cancerous digestive pathologies. All cases of histologically confirmed digestive polyps during the study period were included. Polypectomy parts and biopsy fragments of the digestive tract were fixed with 10% formalin. The data were collected from registers, medical records and reports of the Pathological Anatomy and Cytology Department of the Point G University Hospital. Data were entered and analyzed using SPSS software version 21.0.

## 3. Results

During the study period, 131 cases of polyps/3588 parts of the digestive tract were recorded in the anatomy and pathological cytology department of the G-point hospital, a frequency of 3.65%. A male predominance was observed with 50.40% of cases or a sex ratio of 1.01 (Figure 1). The age group 60 years and older was in the majority with 32.1% of cases (Table 1). The mean age of our patients was  $44.6 \pm 21$  years with extremes of 2 and 79 years. Officials were the most represented with 22.1% (Table 2). Endoscopic biopsy was the most common type of specimen, accounting for 77.1% of cases (Table 3). The most common location was stomach, accounting for 37.4% of cases (Figure 2). Adenomatous polyps were the most represented (77%); Among these polyps were found 61.53%

of low-grade dysplasia and 38.47% of high-grade dysplasia (**Figure 3**).



**Figure 1.** Patients by sex.

**Table 1.** Patients by age group.

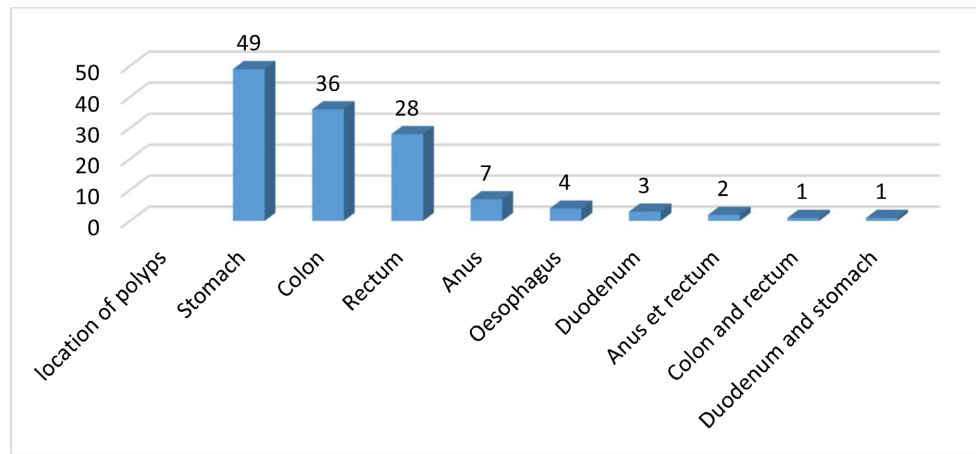
AGE GROUPS	FREQUENCY	PERCENTAGE
Less than 10 years	12	9.2
10 to 19 years	7	5.3
20 à 29 years	10	7.6
30 à 39 years	16	12.2
40 à 49 years	20	15.3
50 à 59 years	24	18.3
Over 60 years	42	32.1
<b>TOTAL</b>	<b>131</b>	<b>100</b>

**Table 2.** Patients by profession.

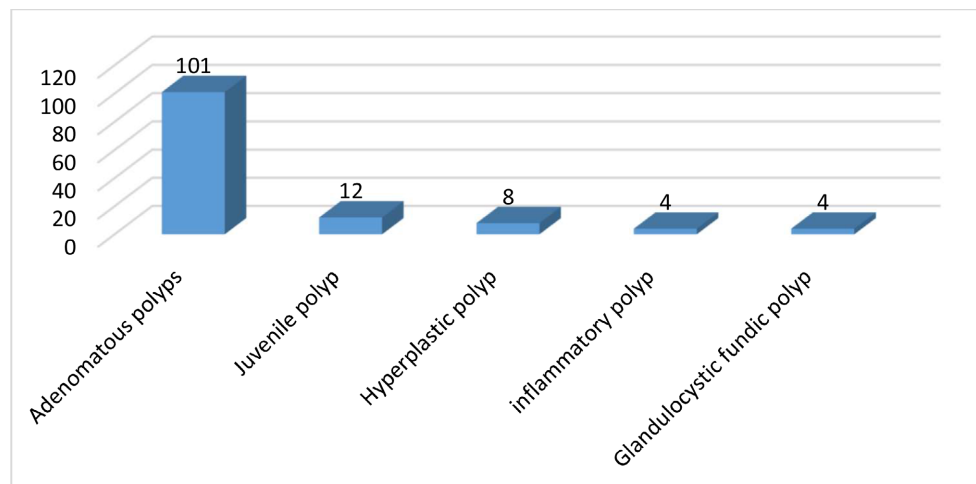
PATIENTS BY PROFESSION	FREQUENCY	PERCENTAGE
Officials	29	22.1
Housewife	27	20.6
Student	22	16.8
Unemployed	19	14.5
Other	15	13.1
Merchant	10	7.6
Farmer	7	5.3
<b>TOTAL</b>	<b>131</b>	<b>100</b>

**Table 3.** Type of withdrawal.

TYPES OF WITHDRAWALS	FREQUENCY	PERCENTAGE (%)
<b>Endoscopic biopsies</b>	<b>101</b>	<b>77.1</b>
Surgical samples	22	16.8
Excision biopsies	4	3.1
Not specified	4	3.1
<b>TOTAL</b>	<b>131</b>	<b>100</b>



**Figure 2.** Location of polyps.



**Figure 3.** Distribution by histological type.

## 4. Discussion

In our study, the age group over 60 years was the most common, at 32.1% of cases. The mean age was 44.6 years  $\pm$  21 years with extremes of 2 years and 79 years. This result is close to that of Draoui I [6] who found in his study 12.5% of 60 to 64 years with an average age of 40 years with extremes of 2 and 80 years. In our context the diagnosis of digestive polyps is late because systematic screening is not yet applied in our health structures.

We found a slight male predominance at 50.4% of cases. This result is close to that of Draoui I [6] which found 53.3% of men and Cherrafi F [7] which also found a slight male predominance with 57.1% of cases and women 42.9%.

The most common location of polyps was the stomach (37.4%). This result is different from that of Draoui I who found the rectum (41.7%) and Cherrafi F in Morocco who that the colon was the most frequent location (51.4%). This could be explained by the fact that the majority of samples were gastric biopsies in our study. The most performed endoscopies in our context are upper GI endoscopy.

Endoscopic biopsy was the most frequent type of sample or 77.1% of cases this

result is similar to that of Cherrafi F who found 83.50% endoscopic biopsy; also similar to that of Bassene *et al.* in Dakar [8]. This could be explained by the fact that digestive polyps are most often accidentally discovered during an upper GI endoscopy.

Adenomatous polyp was the most represented histological type in 77% of cases, followed by juvenile polyp with 9.2% and hyperplastic polyp with 6.1%.

This result is different from that of Draoui I who found hyperplastic polyps (35%), adenomas (2.7%), and juvenile polyps (20%); It is higher than that found by Cherrafi F in 2020 or 59.30% of adenomatous polyps followed by hyperplastic polyps (17.9%).

This could be explained by the fact that this study was done in a single clinical department unlike our study site which receives samples from several health facilities in Mali.

Given the retrospective nature of our study, the major difficulty encountered was the absence of certain sociodemographic information in the logs of consultation and pathological examinations. Patients having been retrospectively recruited in the pathological anatomy department their evolution could not be reported in our study.

## 5. Conclusion

Digestive polyps are common in the general population. This is a real public health problem. Digestive endoscopy and pathology make the diagnosis. The prognosis is related to the risk of neoplastic degeneration of adenomas. The histopathological study of polyps is very important to determine the type of polyp which conditions therapeutic management and monitoring. There are different types of polyps dominated by adenomas, common in the elderly.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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