



# Histological profil of gastrointestinal stromal tumors in Cotonou

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## Introduction

Gastrointestinal stromal tumors (GISTs) are rare. According to France's national digestive cancer thesaurus, their incidence is estimated at 15 cases per million inhabitants per year [1]. Today, GISTs are recognized as tumors derived from Cajal cells or from one of their precursors, and are often of the CD117 DOG1 positive phenotype [2]. Few studies are found on GIST in the Africa, especially in Benin, hence the interest of this study. Therefore, we endeavor to study the epidemiological and histological features of gastrointestinal stromal tumors in Cotonou.

## Methods

The study was descriptive, both retrospective and prospective. It was spread over a period of 10 years and took place in public and private pathological anatomy centers of Cotonou (Adéchina, cabinet médical Foi en Dieu, de la Faculté des sciences

et du centre confesional de Padre Pio). Included were patients with a histological diagnosis in favor of a GIST; immunohistochemistry with the KIT and DOG1 markers positive or negative. Data were collected using an inquiry form and patient records. Epi info and Epi data software were used to process the collected data. The confidentiality and anonymity of the information were strictly observed.

## Results

**Frequency:** We identified 15 patients with GIST over the study period. The diagnostic peak was observed in 2020. the median age was 52 years and the sex ratio was 2 with male predominance.



Figure 1: Distribution of GIST cases by year from 2010 to 2020

**Tumor site, size and histological type:** The stomach was the most affected site by GIST with 8 cases followed by colo-rectum (n = 3). The mean size of the tumor was  $15,4 \pm 3,9$  cm.

Histologically, the most common cell type was spindle-shaped (13/15) and most the tumors express KIT (n = 14).



Figure 2: Large omentum GIST (lenght: 35 cm).  
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## Conclusion

GISTs are rare in Cotonou. The time before the first consultation is long leading to a diagnostic delay which results in the large size of the tumors at the time of diagnosis.

## References

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