

## Acute Appendicitis at the Bougouni Reference Health Center

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DOI: <https://doi.org/10.36347/sasjs.2024.v10i09.017>

| Received: 14.08.2024 | Accepted: 18.09.2024 | Published: 26.09.2024

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### Abstract

### Original Research Article

**Introduction:** Acute appendicitis is an acute inflammation of the vermicular appendix. The objective was to describe the epidemiological, clinical, anatomic-pathological, and therapeutic aspects of appendicitis. **Methodology:** We carried out a prospective study from January 2020 to December 2020. **Results:** We listed 60 cases of acute appendicitis which represented 34.4% of surgical emergencies. The average age was 30.9 years. There is a predominance of men with a sex ratio of 1.61. The average consultation time was 2 days. The clinical manifestation was pain in the right iliac fossa. Abdominal ultrasound revealed thickening of the appendicular wall in 55 (91.67%) of cases. The blood count showed hyperleukocytosis in 59 (98.3%). The Alvarado score was between 08 -10 in 57 (95%) of cases. The appendix was latero-cecal in 36 (60%) of cases. Appendectomy with burial of the stump was performed in 40 (66.7%), appendectomy without burial in 20 (33.3%). The postoperative complication was parietal abscess 1 (1.66%). Mortality was 0%. **Conclusion:** Acute appendicitis is the most common abdominal surgical emergency in our department. Early treatment would help reduce complications.

**Keyword:** Acute appendicitis, Bougouni (Mali).

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## INTRODUCTION

Acute appendicitis is an acute inflammation of the vermicular appendix [1]. It constitutes the most common abdominal surgical emergency [2].

The appendix presents a favorable predisposition to infection due to its proximity to the septic contents of the soecum. Inflammation of the appendix occurs by 3 mechanisms: Obstruction of the appendicular lumen, microbial diffusion by the hematogenous route, and contiguity with an infectious focus. The diagnosis is essentially clinical, namely pain generally localized in the right iliac fossa, vomiting and fever. The objective was to describe the epidemiological, clinical, anatomic-pathological and therapeutic aspects.

## METHODOLOGY

The study was prospective and descriptive over a period of 12 months, from January 2020 to December 2020, carried out in the general surgery department of the Bougouni Reference Health Center. The parameters studied were the signs of appendicitis, the macroscopic aspects of the appendix, the operating technique,

morbidity and mortality. An abdominal ultrasound was requested in atypical forms.

## RESULTS

We collected 60 clinical files. Acute appendicitis represented 34.43% of abdominal surgical emergencies. The average age of the patients was 30.9 years and 93 years with extremes of 9 years and 86 years. Male patients were the majority with a sex ratio of 1.61. The average consultation time was 2 days with extremes of 1 to 3 days. Clinical manifestations were pain in the right iliac fossa (100%), nausea (18%), vomiting (80%), guarding of the right iliac fossa (100%), pain on the right in the Douglas vfir (98.33%), fever (68.3). Abdominal ultrasound was performed in 91.67% of our patients, and revealed a thickening of the appendicular wall. Blood counts were performed in all our patients and revealed leukocytosis in 98.3%. The Alvarado score was between 08- and 10 in 95% of our patients.

The abdominal approach was the Mac Burney in all patients (100%). The appendix was lateral-coecal in 36 (60%) of the patients. Appendectomy with burial of the stump was performed in 4 (66.7%) of our patients.

**Citation:** Coulibaly O, Sylla M, Traore S.A, Goita D, Koné M, Bagayoko O, Camara B, Sodio P, Samaké D, Doumbia A, Konaté M, Traoré A, Cissé M, Samaké A.M. Acute Appendicitis at the Bougouni Reference Health Center. SAS J Surg, 2024 Sep 10(9): 1092-1093.

The average length of hospitalization was 2 days. The immediate postoperative course was simple in 59 (98.34%) of the patients. Parietal abscess was noted in 1 (1.66%) of cases. Flange occlusion was diagnosed late in 2 (3.33%) of the patients, post-operative hernia in 2 (3.33%). Postoperatively, all of our patients received painkillers.

The microscopic appearance of the appendix was catarrhal in 40 (66.7%), phlegmonous in 19 (31.6%) and gangrenous in 1 (1.7%) of the patients.

## DISCUSSION

Appendicitis is the most common abdominal surgical emergency. In our study it represented 34.43% of surgical emergencies. This high rate is found by PERRI in ITALY [3], and Mariko L in Mali [4]. In our country the population is predominantly young, the most represented age group was 20 to 40 years old. The male sex is the most affected. This observation was made by other authors OHENE Ghana [5], and Mariko [4]. Abdominal pain was the main reason for consultation as in the studies by MARIKO L and LAU WY [4-6]. Fever was found in the majority of our patients (68.33%). This rate does not differ statistically from that of CHAVDA KENYA [7], and Mariko L in Mali [4]. The Blumberg sign was found in the majority of our patients as in other study series [6-8]. Abdominal ultrasound was performed in 91.67% of our patients.

We found hyperleukocytosis in 98.3% of our patients. The Mac Burney approach was used as an approach in the majority of our patients (86.66%) as in other series [4-9]. The gold standard is laparoscopy but our reference health center does not have a laparoscopy column. The microscopic appearance was catarrhal in 66.7% of our patients. This rate is different from that of Mariko Lamine [4].

The immediate postoperative course was simple in 98.34% of our patients. Late complications were flange occlusion (3.33%) and post-operative incisional hernia (3.33%). The average length of hospitalization was 2 days in 90% of our patients.

## CONCLUSION

Appendicitis is the most common abdominal surgical emergency in the visceral surgery department of the Bougouni Reference Health Center. The diagnosis is essentially clinical. Early diagnosis helps reduce mortality and morbidity.

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