

Non-Traumatic Abdominal Surgical Emergencies are Acute Non-Traumatic Pathologies: About 258 Cases

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Abstract

Original Research Article

Non-traumatic abdominal surgical emergencies are acute non-traumatic pathologies whose initial clinical expression is centred on the abdominal wall and which require surgical management within a short period of time. The aim of our study was to contribute to improving the management of non-traumatic abdominal surgical emergencies in the Visceral Surgery Department of the Conakry Military Hospital. This was a retrospective descriptive study of 258 cases hospitalised and operated on for non-traumatic abdominal surgical emergencies at Conakry Military Hospital. In the course of this study, 542 patients underwent surgery, 258 of whom (47.60%) were non-traumatic abdominal surgical emergencies. The age group most affected was 21 to 40 years, i.e. 46.13%. The mean age was 26.04 years, with extremes of 11 and 76 years. The sex ratio was 0.53 M/F. Pupils/students were most affected (43.02%). 87.21% of our patients were from Conakry. Abdominal pain was the main reason for consultation (100%). Acute appendicitis was the most frequent, accounting for 81.01% of cases. All patients received intraoperative and postoperative medical treatment. Post-operative management was generally straightforward (96.51%). Post-operative morbidity was dominated by serious infectious pathologies (1.55%). We also recorded 5 cases of death, giving a case-fatality rate of 1.94%. Early consultation of patients and prompt treatment could favourably improve prognosis.

Keywords: Non-traumatic abdominal surgical emergencies, epidemiology, clinic, treatment.

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INTRODUCTION

Non-traumatic abdominal surgical emergencies (UCANT) are acute non-traumatic pathologies whose initial clinical expression is centred on the abdominal wall and which require surgical management within a short timeframe.

An emergency is the sudden transition from a state of health to a pathological state; it is also the occurrence of a situation requiring immediate diagnostic and therapeutic measures; it is the sudden appearance of a risk factor for aggravation and significant sequelae.

Acute surgical abdomen has a number of aetiologies and is always a problem to manage, especially in Third World hospitals.

Acute appendicitis, acute generalised peritonitis, acute intestinal obstruction and strangulated hernia are the most frequent non-traumatic abdominal surgical emergencies.

Abdominal pain remains the main reason for consultation. Diagnosis is based on a systematic emergency examination, biology and imaging.

UCANT is the most common form of visceral surgery in the world, and the outcome of its treatment depends on the early diagnosis of the pathology in question, the skill of the nursing staff and the condition of the patient.

They affect all sections of the population, regardless of sex, age or socio-professional category:

- In France, an epidemiological study carried out at the Bordeaux University Hospital in 2009 revealed that non-traumatic abdominal surgical emergencies accounted for 22% of all surgical activities.
- In Kathmandu, Nepal, Khan S *et al.*, in a study of 177 cases of abdominal emergencies in 2004, found that 77, or 43.50%, were non-traumatic abdominal surgical emergencies.
- In Mali, in 2005, Dembélé B. reported in his study that non-traumatic abdominal surgical emergencies accounted for 19.55% of overall

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activity in the general surgery department of Kayes hospital in 112 cases.

- In Guinea, a number of studies have shown that non-traumatic abdominal surgical emergencies rank first among surgical procedures:
 - ❖ Dicollo M. in 2013 at CHU Donka reported in his study 35% of non-traumatic abdominal surgical emergencies out of all abdominal surgical pathologies.
 - ❖ Plégneou M. in 2014 in his study carried out at Kankan Regional Hospital reported that non-traumatic abdominal surgical emergencies made up 87.92% of all abdominal surgical emergencies.

Thus, the high frequency, the absence of a previous study on non-traumatic abdominal surgical emergencies and the therapeutic difficulties motivated the decision to carry out a study of 258 cases at the Hôpital Militaire de Conakry (HMC).

METHODOLOGY

This was a retrospective descriptive study of 258 cases hospitalised and operated on for non-traumatic abdominal surgical emergencies at Conakry Military Hospital.

RESULTS

All age groups were involved. However, the 21 to 40 age group was the most affected with 119 cases, i.e. 46.13%, followed by the under-21 age group with 111 cases, i.e. 43.02%. The average age was 26.04, with extremes of 11 and 76. The high frequency in these age groups can be explained in our context by the fact that the main pathology of non-traumatic abdominal surgical emergencies was dominant in young people.

Table I: Breakdown of cases by age group

Age groups (years)	Workforce	Percentages (%)
<21	111	43,02
21-40	119	46,13
41-60	20	7,75
>60	08	3,10
Total	258	100,00

We counted 34.88% men against 65.12% women, giving a ratio of 0.53 in favour of women. This is in contrast to the sex ratio of 2 in favour of men found by P. SAMASSEKOU in 2009 in Bamako, Mali.

In our series, the socio-professional strata most affected were pupils/students with 43.02%, followed by military personnel with 21.32% of cases. The predominance of pupils/students in our study can be explained by the fact that these groups are the most well-

informed and therefore seek help as soon as the first symptoms appear.

100% of our patients consulted for abdominal pain, followed by 87.21% for nausea/vomiting. These results are higher than those reported by J L Condamine *et al.*, in 2003 at Caen University Hospital in France, who obtained 22.40% for abdominal pain and 19.61% for nausea/vomiting. These results could confirm that abdominal pain is the main symptom of non-traumatic abdominal surgical emergencies in our patients.

The majority of our patients (44.27%) were seen within 0-24 hours. The average consultation time was 7.32 hours, with extremes of 1 and 96 hours.

Table II: Distribution of cases according to clinical diagnosis

Diagnosis	Workforce	Percentages (%)
Acute appendicitis	209	81,01
Acute peritonitis	26	10,08
Acute intestinal obstruction	15	5,81
Strangulated hernias	08	3,10
Total	258	100,00

81.01% of our patients had acute appendicitis, followed by acute peritonitis (10.08% of cases). Our figures are comparable to those reported by K. Attipou *et al.*, in 2005 in Lomé, Togo, who found 36.26% acute appendicitis followed by 33.04% acute peritonitis. All patients underwent an emergency preoperative laboratory work-up.

During our study period, 41 patients out of 258 (15.90%) were able to undergo PSA, compared with 89 patients out of 258 (34.50%) who underwent ultrasound. All patients received intra- and postoperative medical treatment. 97.67% of our patients underwent general anaesthesia.

96.51% of our patients underwent a simple operation. This can be explained by the fact that in our series, the majority of our patients consulted us in a relatively good general state, but also by the fact that this majority benefited from timely management. Post-operative morbidity was dominated by serious infectious pathologies (1.55%).

In our series, we recorded 5 cases of death, giving a case-fatality rate of 1.94%. In our context, this rate is attributable to peritonitis and acute intestinal obstruction, most often due to delays in consultation. But it is also linked to the terrain and advanced age of these patients.

82.56% of our patients stayed in the department for less than 8 days, i.e. an average hospital stay of 4.56

days. The extremes were 1 and 36 days. Our results are lower than those reported by A. D. Pelavski *et al.*, in 2010 in Spain, who recorded an average hospital stay of 10.6 days. This difference can be explained by the fact that appendicitis was the most common form of appendicitis, and the postoperative course was often straightforward.

CONCLUSION

Non-traumatic abdominal surgical emergencies represent a major part of the activity of the Visceral Surgery Department of the Conakry Military Hospital. They are important not only because of their urgent nature but also because of the diversity of their aetiologies, which are dominated by acute appendicitis.

A well-conducted clinical examination is essential for diagnosis. Complementary examinations, in particular imaging, carried out in our study were PSA and ultrasound.

The management of non-traumatic abdominal surgical emergencies is varied and usually requires multidisciplinary collaboration. Early consultation of patients and prompt management could improve prognosis.

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