ISSN: 2755-015X

Journal of Surgery & Anesthesia Research

SCIENTIFIC Research and Community

Research Article

Open Access

Prognostic Factors of Acute Intestinal Obstruction in the General Surgery Department of the Ignace Deen National Hospital

Kaba Mohamed[1*], Camara Keoulen[2], Diallo Mamadou Habib[1], Diawara Mohamed Albert[2], Keita Doubany Mariame[1], Fofana Naby[1], Fofana Housseine[1] and Touré Aboubacar[1]

[1]General Surgery Department, Ignace Deen University Hospital, Faculty of Health Sciences and Technology, Gamal Abdel Nasser University of Conakry, Guinea

[2]Visceral Surgery Department, CMC Ratoma, Guinea

ABSTRACT

Introduction: The aim of this work was to highlight the prognostic factors of acute intestinal obstruction in the general surgery department of the Ignace Deen National Hospital, Conakry University Hospital.

Methods: This was a prospective descriptive study of six months from January to June 2021 on patients admitted and operated on in the general surgery department of the Ignace Deen National Hospital for acute intestinal obstruction.

Results: Acute intestinal obstructions represented 10.1% (n = 102) of abdominal surgical emergencies (n = 1005). The mean age was 47.64 ± 19.16 years with extremes of 1 and 86 years. The sex ratio was 1.37 in favor of men. The location of the obstacle was high (58.8%), low (33.3%) and mixed in 7.8%. The strangulation mechanism was the most frequent 92.3%. Necrosis 27.5%. An intestinal resection was performed in 37.3%. Septic complications were 14.1% including parietal suppuration 7.6%. The average hospital stay was 13.25 days. Overall mortality was 15.6% (n = 16). This was statistically correlated with strangulation (p = 0.015), intestinal necrosis (p = 0.004), delay in consultation (p = 0.000), age (p = 0.008) and delay in treatment (p = 0.021).

Conclusion: Acute intestinal occlusions are a common medical and surgical emergency. Morbidity and mortality remain high and often linked to age, delay in consultation, mechanism, and the occurrence of necrosis, which are prognostic factors that are mostly modifiable.
Management requires multidisciplinary collaboration or resuscitation plays a prominent role.

***Corresponding author**
Kaba Mohamed, General surgery department at the Ignace Deen University Hospital, Faculty of Health Sciences and Technology, Gamal Abdel Nasser University of Conakry, Guinea.

Received: October 24, 2024; **Accepted:** October 28, 2024; **Published:** November 09, 2024

Keywords: AIO, Prognosis, Ignace Deen

Introduction

Acute intestinal obstruction is a common cause of admission to abdominal surgical emergencies [1,2]. Their etiologies remain multiple and vary depending on the country or age [3]. Anesthetic and surgical management remains a delicate exercise for anesthesiologists and resuscitators and for the surgeon, particularly because of the numerous organic disturbances they are confronted with [4].

Its prognosis depends on several factors: the clinical state of the patient preoperatively, the etiology, the therapeutic means and the time of management [1].

In developing countries, the absence of a health care subsidy system would promote late medical consultations. In addition, the under-equipment of health services is a source of difficulties during the management of certain pathologies including OIA.

Patients and Methods

This was a prospective descriptive study of six months from January to June 2021 on patients admitted and operated on in the general surgery department of the Ignace Deen National Hospital for acute intestinal obstruction.

All patients admitted and operated on in the surgery department for acute intestinal obstruction during the study period were included.

Results

During the study period, acute intestinal obstruction represented 10.1% (n = 102) of abdominal surgical emergencies (n = 1005). The mean age was 47.64 ± 19.16 years with extremes of 1 and 86 years. The sex ratio was 1.37 in favor of men. The site of the obstacle was high (58.8%), low (33.3%) and mixed in 7.8%. The mechanism by strangulation was the most frequent 92.3%. Necrosis 27.5%. An intestinal resection was done in 37.3%. Septic complications were 14.1% including parietal suppuration 7.6%. The average hospital stay was 13.25 days. The overall mortality was 15.6% (n = 16). This was statistically correlated

with strangulation (p = 0.015), intestinal necrosis (p = 0.004), delay in consultation (p = 0.000), age (p = 0.008) and delay in care (p = 0.021).

Discussion

The frequency of acute intestinal obstructions appears high in our study, i.e. 10.1%. Similar results were reported by Adamou Harissou et al, in Niger who reported 24.5% [3]. This result in our study could be explained by the increase in the incidence of postoperative adhesions and bands in recent years.

The average age observed in our study has been reported by many African authors i.e. 43.1 years, 45.8 years respectively [1,5].

The prognostic factors that significantly influenced complications and mortality with the 95% confidence interval and P-value bed on table at 0.05 were: age over 50 years, consultation delay of more than 72 hours, strangulation mechanism, the occurrence of intestinal necrosis were statistically significant.

Harissou A et al. in Niger reported overall mortality factors that were statistically related to age, strangulation, intestinal necrosis, delayed admission and treatment [3]. This confirms the work of several studies on acute intestinal obstructions [2,6-8].

Iconography

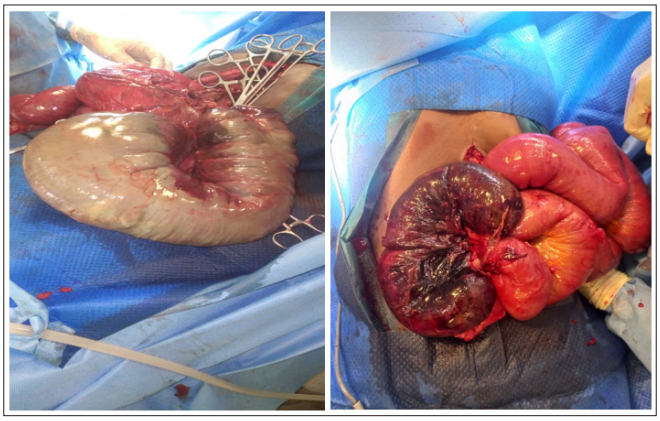

Figure 1: OIA/VCP Avec Nécrose Figure 2: OIA/VCP Avec Nécrose

Conclusion

Acute intestinal obstructions are a common medical and surgical emergency. Morbidity and mortality remain high and are often linked to age, delay in consultation, mechanism, and the occurrence of necrosis, which are prognostic factors that are mostly modifiable.

Management requires multidisciplinary collaboration or resuscitation plays a key role.

Improving the prognosis requires early diagnosis and improving the technical platform.

Conflict of Interest

The authors declare that there is no conflict of interest.

References

1. Kabore R, Egbohou P, Sanou A (2013) Prognostic factors for acute mechanical intestinal obstructions in tropical African environments, J Afr Chir Digest 13: 1435-1441.
2. Urgessa Soressa, Abebe Mamo, Desta Hiko (2016) Netsanet Fentahun:Prevalence, causes and outcome of the management of intestinal obstruction at Adama hospital, Bmc Surg 16: 38.
3. Harissou A, Ibrahim AM, Oumarou H, Amadou M, Halidou M, et al. (2016) Etiologies and prognosis of acute mechanical intestinal obstruction at Zinder National Hospital, Pan African Medical Journal 24: 248.
4. I Gaye, P A Leye, MM Traoré, Pape IN, El Hadji B, et al. (2016) Perioperative management of abdominal surgical emergencies in adults at Aristide Le Dantec University Hospital. Pan African Medical Journal 24: 190.
5. Ali Nuhu, Abubacar Jah (2010) Acute Sigmoid Volvulus in a West African Population. Annals of African Medicine 9: 86-90.
6. H Fofana, GF Mamy, M Dabo, Nikolaos Pararas, Dimitrios Tzertzemelis, et al. (2018) Acute mechanical intestinal obstruction by strangulation in the general surgery department of the hnid. J.afr Chir Digest 18: 2434-2439.
7. JEAN L Kambiré, OUEDRAGO Soulemane, OUEDRAGO Salam (2017) Etiology and results of the management of acute mechanical intestinal obstruction at the regional university hospital of Ouahigouya, Burkina Faso. Rev Int Sc Méd-RIS 19: 126-129.
8. Adamou Harissou, Amadou MM Ibrahim, Habou Oumarou, Mansour A, Amadou M, et al. (2015) Diagnostic delay and prognostic implication in African environment. Cases of emergencies in digestive surgery at the National Hospital of Zinder, Niger. European scientific journal 11: 1857-7881.