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Digestive Surgical Emergencies at Tominian: Therapeutic Aspects

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Abstract **Original Research Article**

Purpose: To describe the therapeutic aspects of digestive surgical emergencies at the Tominian referral health center. ***Methodology***: This was a prospective cross-sectional study from December 1, 2022 to November 30, 2023, i.e. 12 months, in the general surgery department of Tominian CS Réf. We enumerated 116 patients during our study period, and included in this study all patients received and operated on for digestive surgical emergencies. The parameters studied were etiologies, duration of disease evolution, treatment and postoperative follow-up. ***Results***: Digestive surgical emergencies (n=116) accounted for 22.97% of all procedures (n=505). Men accounted for 73.3% (n=85) and women 26.7% (n=31), with a sex ratio of 2.74. Mean age was 29.25 years, with extremes of 4 and 71 years. 61.2% (n=71) consulted between 49 and 72 hours of disease evolution. The main etiologies were acute appendicitis 47.4% (n=55), acute peritonitis 29.3% (n=34). The surgical procedures performed were appendectomy 47.4% (n=55), appendectomy + lavage 13.8% (n=16), perforation suture 12.9% (n=15). Postoperative follow-up was uncomplicated 87.9% (n=102), complicated by surgical site infection 7.8% (n=9). There were 3.4% (n=4) deaths. Hospital stay was 8 to 14 days in 49.1% of cases (n=57). ***Conclusion***: Digestive surgical emergencies are numerous in Tominian. Their management requires multiple and varied therapeutic means, the rapid initiation of which guarantees a good oronostic outcome.

Keywords: Digestive surgical emergencies, therapeutic aspects, complications, Tominian.

INTRODUCTION

Surgical emergencies concern all patients admitted on an emergency basis and for whom a decision to undergo surgery may be required within 24 hours [1].

According to the WHO, these are abdominal pains that have been evolving for a few hours or a few days (less than three days) and are related to a surgical pathology, requiring emergency treatment. In short, it is any non-traumatic disorder of the abdominal sphere requiring urgent surgical intervention [2].

They play an important role in the activity of surgical emergency departments, due to their high frequency, difficult management and high mortality and morbidity rates [3].

In a 1979 series in Dakar, Padonou [4] found 5 etiologies (occlusion, peritonitis, appendicitis, EP, evisceration).

A Malian study by Kéita S of acute abdominal cases reported a mortality rate of 17% [5]. In 2022 at the SAN C.S.REF, 21.57% of all procedures were digestive surgical emergencies [6].

Surgical emergencies are a concern for the surgeon because of their frequency and their often multidisciplinary management.

The prognosis of surgical emergencies is grave [7]. This seriousness is linked to:

- Delayed diagnosis resulting from late consultation.
- Poor intraoperative patient
- Patients intraoperatively, due to a lack of equipment.

Adequate therapeutic means are therefore necessary for the management of digestive surgical emergencies, hence the interest of this study.

METHODOLOGY

This was a prospective cross-sectional study from December 1, 2022 to November 30, 2023, i.e. 12 months, in the general surgery department of the CS Réf in Tominian.

Tominian is a chief town in the Ségou region of Mali. We enrolled 116 patients during our study period.

We included in this study all patients received and operated on in the general surgery department of C.S.Réf de TOMINIAN for digestive surgical emergencies.

The parameters studied were etiologies, duration of disease evolution, treatment and postoperative follow-up.

RESULTS

During our study period, digestive surgical emergencies (n=116) accounted for 22.97% of all procedures (n=505).

Men accounted for 73.3% (n=85) and women 26.7% (n=31), with a sex ratio of 2.74. Mean age was 29.25 years, with extremes of 4 and 71 years.

61.2% (n=71) consulted between 49 and 72 hours of disease evolution, and 2.6% (n=3) after 72 hours.

The main etiologies were acute appendicitis 47.4% (n=55), acute peritonitis 29.3% (n=34), strangulated hernia 8.6% (n=810), acute intestinal obstruction 6% (n=7).

The preoperative medical treatment protocol was Analgesic + Antibiotic + Rehydration 87.9% (n=102); Analgesic + Antibiotic + Rehydration + Transfusion 4.3% (n=5).

The surgical procedures performed were appendectomy 47.4% (n=55) Figure 1, appendectomy + lavage 13.8% (n=16), perforation suture 12.9% (n=15) Figure 2, resection + anastomosis 12.1% (n=14), hernia cure 8.6% (n=10), flange section 5.2% (n=6). Mmune II of the Bamako district. Med thesis: 2019; 96(19M390.

Figure 1: Acute Appendicitis in per opératoire

Figure 2: Péritonitis by ileal perforation en per opératoire

Post-operative complications were simple 87.9% (n=102), complicated by surgical site infection 7.8% (n=9), haemorrhage 0.9% (n=1). There were 3.4% (n=4) deaths.

Hospital stay was 8 to 14 days in 49.1% of cases (n=57), 1 to 7 days in 44.8% of cases (n=52), and more than 30 days in 0.9% of cases (n=1).

DISCUSSION

The mean age was 29.25 years, with extremes of 04 and 71 years. This result is inferior to that of Ismail I [8] and Y. FANE [9] who respectively found a range of 30 to 44 years, with a mean age of 33.7 and 11 to 20. This difference may be due to the size of our sample.

In the literature, surgical emergencies concern young adults, with an average age ranging from 30 to 45 years [10-13]. This is consistent with our study.

In our study, males were in the majority, with a sex ratio of 2.74, as observed in the literature [10, 13],

This result is similar to that of BERTHE I. D [14], who found a sex ratio of 2.34, and higher than that of Y. FANE [9] with a sex ratio of 1.5.

In general, in developing countries, most patients consult a hospital without going through a health facility. This often explains the delay in diagnosis and treatment [10]. In 61.2% of cases, patients were seen between 48 and 72 hours after the onset of the disease. This would seem to be linked to the use of traditional treatments as the first resort for care, but also to financial and geographical accessibility. However, this delay remains shorter than that of national hospitals, due to the delay in patient referral by peripheral structures [14].

In our study, appendicitis was the main etiology at 47.4%. This was statistically superior to that of Konaté and Berthé, who found 28.77% and 21.27% respectively [3, 14].

This finding corroborates that of the literature, which attests that appendicitis remains the leading cause of abdominal surgical emergencies [11].

Acute peritonitis was the second most common digestive surgical emergency after acute appendicitis in our practice. Our frequency is similar to that of KONATE, FONGORO and HAROUNA [3, 6, 10] with no statistical difference. P > 0,05. On the other hand, it is statistically higher than that of FANE [9], who found a frequency of 16.5%. P<0,0023. This difference could be explained partly by the size of the sample and partly by the way patients were recruited.

The Antalgic; Antibiotic and Rehydration protocol in pre- and immediate post-operative care was used in the majority of cases (87.9%). Subsequently, it was modified and adapted according to clinical evolution. These combinations have been used by other authors [11, 15].

In our study, appendectomy (n=55) was the most frequently performed procedure (47.4%). This high frequency of appendectomy was linked to the number of cases of peritonitis secondary to complications of appendicitis. This number of appendectomies is lower than that of FONGORO [6] (59.7%) and higher than that of Sangaré S [16] (43.3%); this difference is linked to the location of the study and the frequency of these pathologies (acute appendicitis, acute peritonitis).

Post-operative complications (12.1%) were dominated by surgical site infections, in particular parietal infections; this was mainly observed in cases of peritonitis. These complications, sometimes attributable to precarious asepsis in a context of limited resources, contributed to longer hospital stays.

During the course of our study, we recorded 4 deaths (3.44%).

CONCLUSION

Appendectomy was the main surgical procedure performed. Complications were numerous and mainly related to delayed consultations.

REFERENCE

1. Chiche, B., & Moulle, P. (1980). Urgence chirurgicale. *Masson*, Paris, 2.
2. Maiga, A. A. (2008). Aspects épidémiologiques cliniques et thérapeutiques des pathologies abdominales chirurgicales d'urgence à l'hôpital de GAO, 70 cas. Thèse Med- Bamako, 12, 77.
3. Konate, M. (2005). Urgences Chirurgicales à H.G.T. Thèse de Méd- Bamako, 91, 238.
4. Padonou, N., BA, D., N'doye, M., GM, C., & Nussaume, O. (1979). Urgences abdominales chirurgicales non traumatiques au CHU de Dakar. Statistique de quatre années (1973-1976). *Dakar Med*, *24*(1), 90-137.
5. Keita, S. (1996). Problème diagnostic et thérapeutique des abdomens aigus en chirurgie. Thèse Med Bamako, 13.
6. Modibo, F. (2022). Urgences chirurgicales digestives au centre de sante de référence de San. Thèse de Méd.
7. Doumbia, S. (1982). Abdomens aigus chirurgicaux à l'hôpital national de Point G. Thèse Med Bamako; N° 12
8. Ismail Abdillahi, I. (2021). Les urgences chirurgicales digestives : Diagnostic et traitement à l'hopital militaire de Djibouti; Mémoire Med, 97.
9. Fane, Y. (2017). Urgences chirurgicales digestives : diagnostic et prise en charge, 83(17M208).

10. Haroura, Y. (2001). Deux ans de chirurgie digestive d'urgence à l'hôpital de Niamey (Niger); Médecine d'Afrique Noire, 42(2).
11. Camara, S. (1989). Problème d'anesthésie et réanimation posé par la chirurgie abdominale d'urgence à l'hôpital Gabriel Touré; thèse médecine Bamako (Mali), 68.
12. Issimaila, K. Les urgences abdominales chirurgicales: Etude rétrospective sur deux années de Cocody. Thèse Med Abidjan, N1156.
13. Pandonou, N., Diagne, B., N'diaye, M., Cherbonnel, G. M., & Noussaume, O. (1979). Les urgences abdominales chirurgicales non traumatiques au CHU de Dakar. Statistiques des quatre années (1973-1976). Dakar médical, 24, 190-197.
14. Berthe, I. D. (2008). Prise en charge des urgences chirurgicales digestives dans le service de chirurgie « A » du CHU du Point G. Thèse de Méd- Bamako, 80, 102.
15. Encyclopedie Medico Chirurgicale. (1984.). Occlusion intestinale aiguë de l'adulte. Urgences médico- chirurgicales (EMC) 240 59 A10. 10p.
16. Sangare, S. Les urgences chirurgicales digestives au centre de sante de régence de la co.