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Management of Strangulated Inguinal Hernias in People Aged 60 Years and Over at the Prefectural Hospital of Kissidougou, Republic of Guinea-Conakry

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ABSTRACT

Introduction: Strangulated inguinal hernias in the elderly remain a real public health problem due to their risk of intestinal necrosis leading to a high rate of morbidity and mortality. The objective of our study was to evaluate the management of strangulated inguinal hernias in people aged 60 and over at the prefectural hospital of Kissidougou.

Methods: This was a retrospective descriptive study over a 3-year period from January 1, 2018 to December 31, 2020. The material consisted of all the files of patients operated on for a strangulated inguinal hernia in the elderly during the study period.

Results: During this study period, we recorded 76 files of patients operated on for HIE in the elderly, i.e. a frequency of 3.34% compared to the types of hernias. The average age of our patients was 70.46 years with extremes of 60 years and 83 years. 88% of patients were male with a sex ratio of 7.4. Farmers were the most affected, i.e. 32.89%. HBP and diabetes were the main associated pathologies with 51.32% and 34.21% respectively. General anesthesia was used in all our patients. The BASSINI technique was performed in 100% of cases. The evolution was favorable in 80.26%. The case fatality rate was 3.95%. The average length of hospitalization of our patients was 8.38 days.

Conclusion: Improving the prognosis of these patients would require early diagnosis and especially early management of all cases of simple inguinal hernias.

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Received: October 23, 2024; **Accepted:** October 28, 2024; **Published:** November 08, 2024

Keywords: Strangulated Inguinal Hernia, Elderly People HPK

Introduction

HIE constitutes a diagnostic and therapeutic emergency due to the risk of intestinal or gonadal necrosis [1]. The particularity in the elderly is that this pathology is very often associated with defects (hypertension, diabetes, asthma, etc.). Its diagnosis is essentially clinical, manifested by a painful, irreducible inguinal swelling, non-expanding with coughing. The treatment is surgical. Therapeutic management requires management of the defects associated with HIE and its cure can be done by raphia or prosthesis [2]. Surgical treatment includes a first visceral stage aimed at freeing the herniated viscus, a second to assess its viability and possibly perform its resection. The third stage consists of a parietal repair. The place of coelioscopy and the interest of prosthetic reinforcement are controversial and must be discussed on a case-by-case basis [3].

Patients and Methods

This was a retrospective descriptive study of a 3-year period from

January 1, 2018 to December 31, 2020 covering all the records of patients operated on for strangulated inguinal hernia in the elderly during the study period.

Results

During this study period, we recorded 76 records of patients operated on for HIE in the elderly, representing a frequency of 3.34% compared to the types of hernias. The average age of our patients was 70.46 years with extremes of 60 and 83 years (shown in Table 1). 88% of patients were male with a sex ratio of 7.4.

Table 1: Distribution by Age Groupe

Age group (ans)	Number of cases	%
60-69	42	55,26
70-79	26	34,21
80 and more	8	10,53
Total	76	100

Age moyen = 70,46 ans Extreme ages = 60 ans et 83ans

Farmers were the most affected, 32.89%. HBP and diabetes were the main associated pathologies with 51.32% and 34.21% respectively.

Table 2 shows that the evolution of hernial strangulation was less than 24 hours with an average duration of 22.14 hours with extremes of 2 hours and 72 hours

Table 2: Distribution According to the Evolution of the Constriction

Deadline (hours)	Number of cases	%
<24	49	64,48
24–48	21	27,63
>48	6	7,89
Total	76	100

Average duration = 22.14 hours Extremes = 2 – 72 hours

Table 3 shows that the nature of the contents of the hernial sac were made of the small intestine 54 cases or 71.06%, followed by the omentum 11 cases or 14.47%

Table 3: Distribution According to the Nature of the Contents of the Hernial sac

Bag contents	Number of cases	%
Hail	54	71,06
Omentum	11	14,47
Caecum + appendix	9	11,84
Sigmoid colon	2	2,63

General anesthesia was used in all our patients. The BASSINI technique was performed in 100% of cases.

The outcome was favorable in 80.26% with a case fatality rate of 3.95% (illustrated in Table 4).

Table 4: Distribution According to Postoperative Outcomes

Post-operative care		Number of cases	%
Simple		61	80,26
	Parietal suppuration	10	13,16
Complicated	Scrotal hematoma	2	2,63
	Death	3	3,95
TOTAL		76	100

Discussion

The average age of our patients was 70.46 years with extremes of 60 and 83 years. The most affected age group was 60 to 69 years with 42 cases or 55.26% [4]. Our result is similar to that of Amin in 2012 in Morocco found an average age of 52.5 years with a predominance between 51-70 years or 48%. This observation could be explained by the effect of old age which leads to secondary parietal weakness, or by the major predisposition to risk factors related to co-existing urological or digestive pathologies [5].

The particularity in the elderly is that this pathology is very often associated with defects. We noted a high frequency of comorbidity namely hypertension, diabetes and asthma with respectively

51.32%, 34.21% and 7.89%. The opinions of general medicine were collected for their respective management in pre, per and postoperative.

In our study 49 patients or 64.48% consulted in less than 24 hours after strangulation and 27.63% within 48 hours. However 7.89% consulted after 48 hours. Our result is similar to that of Qoreichi et al, in 2012 in Morocco who reported a consultation in less than 24 hours in 81.5% of cases [6].

This could be explained by the intensity of the strangulation pain pushing patients to consult early at the hospital.

The BASSINI technique was used in all our patients (100%), however Dieng et al, in Senegal in 2012 stated that DESARDA fascioplasty appears to be a reliable alternative to prosthesis treatments in the treatment of inguinal hernias [7]. The exclusivity of the BASSINI technique in our study could be explained on the one hand by the fact that it is the best mastered by the surgeon, and on the other hand by the simplicity of its implementation.

Iconography



Figure 1: Pre Operative Image

Figure 2: Intraoperative Image

Conclusion

Strangulated inguinal hernia is an uncommon pathology at the Kissidougou prefectural hospital. It concerned an elderly population, mostly male, who presented with comorbidities. The treatment was exclusively surgical, the Bassini technique was used for the cure of HIE. Improving the prognosis of these patients would require early diagnosis and especially management of all cases of strangulated inguinal hernias and simple inguinal hernias as well as comorbidities.

Conflict of Interest

The authors declare that there is no conflict of interest.

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