



INGUINAL HERNIA AT LEVEL TWO HOSPITAL IN BISSAU: EPIDEMIOLOGICAL AND THERAPEUTIC PROFILE

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Article Info

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Abstract

Aim: The objective was to study the epidemiological and therapeutic aspect of inguinal hernia at level 2 hospital in Bissau. **Patients and methods:** We carried out a prospective and descriptive study of patients operated on for inguinal hernia in the surgical department of level 2 hospital in Bissau. **Results:** 74 patients were operated on for inguinal hernia over a period of 12 months. The average age was 40.51 years (1 and 80 years old). There were 98.65% (72) men and 1.35% (1) woman. Farmers and workers accounted for 30.13% (22). In 57.5% (42), patients consulted for inguinal swelling. Preoperatively, the hernia was complicated in 14 (19.1%) patients, including 5 cases of recurrence. Hernial strangulation was the main preoperative complication (10/14). The patients were operated under locoregional anesthesia in 93.15% (68) and under general anesthesia in 6.85% (5) of the cases. The most practiced surgical technique was the cure according to Désarda (35.89%), the immediate operating morbidity was 4.05%. **Conclusion:** inguinal hernia was common in our practice. It mainly concerned young adult males. Surgery is always an effective treatment and stress-free cures should be preferred. In children, the isolated closure of the vaginal peritoneal canal without Parietal strengthening is the rule.

Keywords: Inguinal hernia, Bissau, Désarda, Lichtenstein.

Introduction :

Inguinal hernia is a very common surgical pathology that affects all ages, from newborns to the elderly. In Africa, it is still considered in some countries as a shameful disease explaining the delay in consultation. The diagnosis of an inguinal hernia is simple and the surgical treatment must not suffer from any delay, because of the risk of occurrence of formidable complications can be fatal, justifying to systematically consider the preventive surgical

treatment of any hernia. The aim of this study, carried out at level 2 hospital in Bissau, was to share our experience on the management of inguinal hernias, by studying the epidemiological and therapeutic profiles.

Patients and methods :

The study took place in the surgical department of the level 2 hospital in Bissau. It was a prospective study which covered 12 months from

November 2018 to October 2019. Were included in our study, patients operated on for an inguinal hernia by the surgical team of the Senegalese armed forces health service deployed in Bissau. Data collection was done through the survey sheets which were filled in from the pre-established files for each patient, the consultation register and the operating report notebooks. The variables studied were socio-demographic, clinical and therapeutic information. The entry was made on Excel software, and the analysis made by Epi info 7 software.

Results :

During our stay in Bissau, we operated on 306 patients over a 12-month period; inguinal hernia cures represented 23.85% of our operating activities. Seventy-four patients were operated on for groin herniation with an average age which was 40.51 years (1 and 80 years). The age group most concerned was that between 16 and 35 years with a proportion of 32.87%. The pediatric population (0-15 years old) represented 10.95% figure 1.s

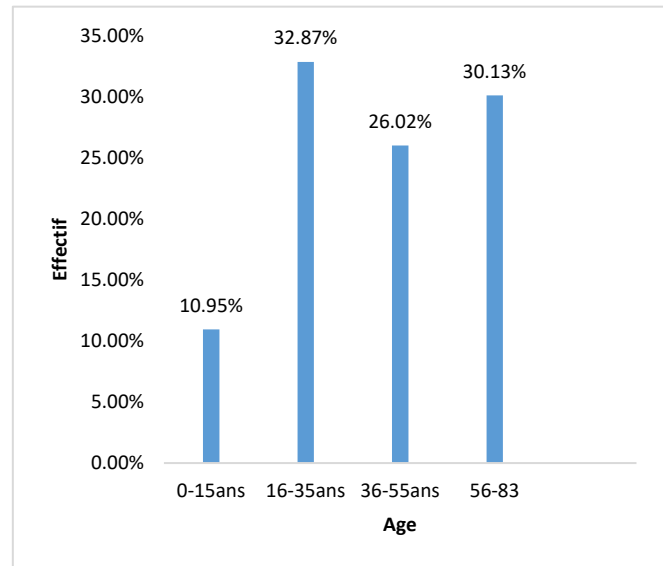


Figure 1: Distribution of patients by age

The majority of our patients were male, 98.65% (72) and 1.35% (1) female. The patients did intense activities (cultivator, worker) in 39.72% of the cases and 6.85% had an intellectual activity (civil servant, student / pupil). In 56.16% of cases the inguinal hernia was on the right; 36.98% had left inguinal hernia and 6.84% had bilateral inguinal hernia. The reasons for consulting our

patients were painless inguinal swelling in 86.30% of cases, followed by painful inguinal swelling in 13.70% of cases Figure 2.



Figure 2: Right inguino-scrotal hernia by persistence of the peritoneal-vaginal canal

Preoperative hernia was complicated in 19.1% (14) of our patients. The types of preoperative complications were hernial strangulation in 7 patients, followed by recurrence in 5 patients and hernial infatuation in 3 patients. We found associated pathologies in 27.4% of patients; the umbilical hernia was found in 8/20 patients Table I.

Table I: Distribution of patients according to associated pathologies

Associated pathologies	Effective
Umbilical hernia	8
Hydrocele	3
Cryptorchidism	1
Diastasis greatrights	1
Scrotaltexiloma	1
Lipoma	1
Other	4

The patients were operated under locoregional anesthesia in 93.15% (68) and under general anesthesia in 6.85% (5) of the cases. The approach was inguinal in all patients. In adults, the stress-free cure was performed in 56.4% of the cases. The most practiced surgical technique was the cure according to Désarda (35.89%) The other

techniques practiced were: the cure according to Bassini (28.20%), the cure according to Lichtenstein (20.51%), the isolated closure of the peritoneal-vaginal canal in the children (10.25%) and the cure according to Mac Vay (1.33%) Figure 3. Anastomosis resection was performed in the patient who presented with a strangulated inguinal hernia with necrosis. The hernia was direct in 62.16% of cases and indirect by persistence of the peritoneal-vaginal canal in 37.84% of cases. The hernial sac was treated by repression in 17.6 of our patients and by ligation in 82.4% of cases Surgery was ambulatory in 86.3% of cases. Immediate postoperative follow-up (0 to 8 days) was marked by an inguinal or scrotal hematoma in 2.7% (2), acute retention of urine in 2.7% (2 cases) and parietal suppuration in 1.3% (1 case).

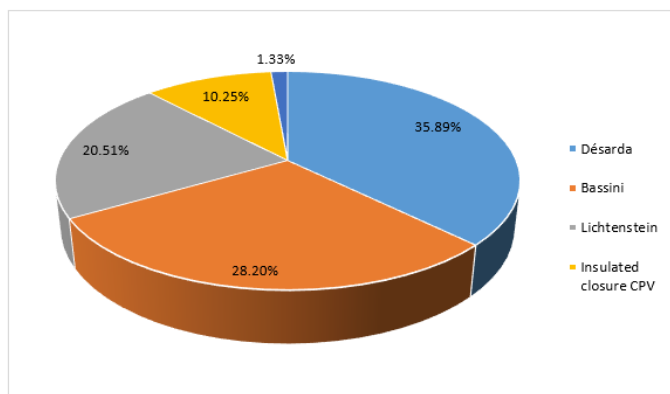


Figure 3: Distribution of patients according to the operating technique

Discussion :

The inguinal hernia was the most encountered pathology during our stay in Bissau. The frequency in our series was 23.85% of all interventions performed. This is similar to the frequencies found in most African series (1-3). In our series, it mainly interested young adults with an average age of 40.51 years and a peak in the age 16-35 years. In Africa, inguinal hernia occurs in younger subjects as shown by several series (2, 4-6). This is in contrast to European data which find an average age greater than 50 years (7,8). This difference in age lies in the fact that in Africa the rural population lives exclusively work requiring a lot of force. In this work, 39.72% of the patients practiced intense professional activities. The various studies carried out have shown that force workers are predominantly

represented, which is an argument to support the theory which states that acquired hernia is linked to repeated physical exertion which, each time causing intra-abdominal hypertension, drives out the viscera mobile towards the dehiscence zones where they gradually exteriorize(9). Besides its acquired forms, there is the malformative cause in this case the persistence of the peritoneal-vaginal canal which is at the origin of the inguinal hernia in the pediatric population. In our study, 10.95% of the patients were aged less than 15 years. Almost all of our patients were male. Some authors have explained this male predominance by an anatomical difference between the two sexes (10). In men, the inguinal canal is crossed by the cord which makes it fragile. This is not the case in women whose inguinal canal contains only the round ligament. In the developing countries this predominance of men could also be explained by the difficulty that women have in accessing health care (6,11). In 56.16% the hernia was located on the right, which is similar to that obtained in the other series. No precise etiopathogenic explanation has been provided in the literature. The main complication of an inguinal hernia is hernial strangulation, which is an absolute emergency. We found a rate of 9.4% which is lower than that of Konaté et al who found 32.4% on 749 operated patients (3). This difference may be due to the sample size which is more important in their study and the mode of recruitment of hernial throttle.

The approach was inguinal in all our patients; laparoscopy was not used because it did not exist in our department. This technique is increasingly used in certain countries of sub-Saharan Africa (12). The most widely used anesthesia technique for adults were spinal anesthesia, which is easily reproducible and economical.

Several techniques can be used but currently hernial cures without tension should be preferred. Indeed, these are better tolerated with less post operative pain and recurrence (5, 13). The Désarda technique is reserved for young adults with a fascia Lichtenstein's prosthetic cure finds its relevance in recurrent forms and in the elderly. In our series, the majority of patients benefited from a stress-free cure. However, the

stress treatments (Bassini, Mac Vay) always keep their indications in inguinal hernias (3).

Morbidity related to inguinal hernias is low. In our review, it was 6.7%. Complications noted were mainly scrotal hematoma, parietal suppuration and acute postoperative urine retention. All our patients except those who had a strangulated hernia received ambulatory surgery.

Conclusion:

inguinal hernia was common in our practice. It mainly concerned young adult male practicing intense professional activities. Surgery is always an effective treatment and stress-free cures should be preferred. In children, the isolated closure of the vaginal peritoneal canal without Parietal strengthening is the rule.

Keywords: Inguinal hernia, Bissau, Désarda, Lichtenstein

Conflict of interest: No

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