

(RESEARCH ARTICLE)



Practice of ambulatory surgery: Indications and therapeutic follow-up in the general surgery department at the medical center of Ratoma

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Abstract

Introduction: Ambulatory surgery is a mode of surgical management at the end of which the patient has spent less than 12 hours within the hospital structure, without overnight stay. Our study aims to report our observations on the practice of day surgery, to determine the indications and to identify the therapeutic consequences.

Material and methods: This was a descriptive prospective study lasting 6 months from November 01, 2021 to April 30, 2022, on the practice of day surgery in the general surgery department at the medical center. Municipality of Ratoma

Results: Out of a total admission of 389 surgical cases, day surgery represented 139 cases or 35.7%. The age group of 16-35 years was dominant 69% or 96 cases with average age of 24.3 ± 10.5 years extreme of age 7 years and 69 years. The male gender was represented in 80 cases, i.e. 61.2%. Pupils and students were the most concerned 71 cases or 51%. Emergencies were the most represented 93.5% or 130 cases. Biology was normal in 116 patients, i.e. 83.4%. 97.8% (n=136) of patients were classified ASA I; 2.1% (n=3) were classified as ASA II. Appendicitis was the most represented operative indication 64% or 89 cases followed by inguinal hernia 17.3% or 24 cases. The majority of our patients 94.2% or 131 cases benefited from general anesthesia and appendectomy was the most practiced surgical technique followed by herniorrhaphy with respective rates of 64% and 17.3%. 100 patients or 71.9% had a duration of intervention between 21 and 30 minutes with an average duration of intervention: 25.6 Minutes \pm 6.5 minutes Extreme 18 minutes and 53 minutes. The average duration of hospitalization: 8 hours \pm 1.3 hours: Extremes 5 hours and 11 hours. The follow-up was favorable in 116 patients, i.e. 83.5%. The immediate early postoperative complications were present in 23 of our patients, dominated by persistent abdominal pain in 13 patients and those secondary in 03 of our patients including 2 cases of parietal suppuration and 1 case of scrotal hematoma.

Conclusion: outpatient surgery is common in our department, practiced much more in young female subjects whose appendectomy is the most performed surgical technique.

Keywords: Ambulatory surgery; Indications; Therapeutic follow-up; Ratoma

1. Introduction

Day surgery represents all surgical procedures performed under operating safety conditions (technical and anesthetic); followed by postoperative monitoring with a hospital stay of less than or equal to twelve (12) hours without overnight accommodation [1]. It improves the quality of care by reducing the risk of exposure to nosocomial infections, by increasing the satisfaction of patients who only stay for a limited time in the establishment and who can benefit from a

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shorter recovery period. (early rehabilitation) [2]. Advances in surgical and anesthetic techniques as well as the development of routes and means of communication have favored the growth of day surgery [3]. Currently, in France, the overall rate of eligible procedures performed on an outpatient basis is estimated at around 40% in 2014 [4].

2. Material and methods

This was a descriptive prospective study lasting 6 months from November 01, 2021 to April 30, 2022, on the practice of day surgery in the general surgery department at the medical center. Municipality of Ratoma

3. Results

Of a total admission of 389 surgical cases, day surgery accounted for 139 cases or 35.7% (Figure I). The age group of 16-35 years was dominant 69% or 96 cases with average age of 24.3 ± 10.5 years extreme of age 7 years and 69 years (Table I). The male gender was represented in 80 cases, i.e. 61.2%. Pupils and students were the most concerned 71 cases or 51%.

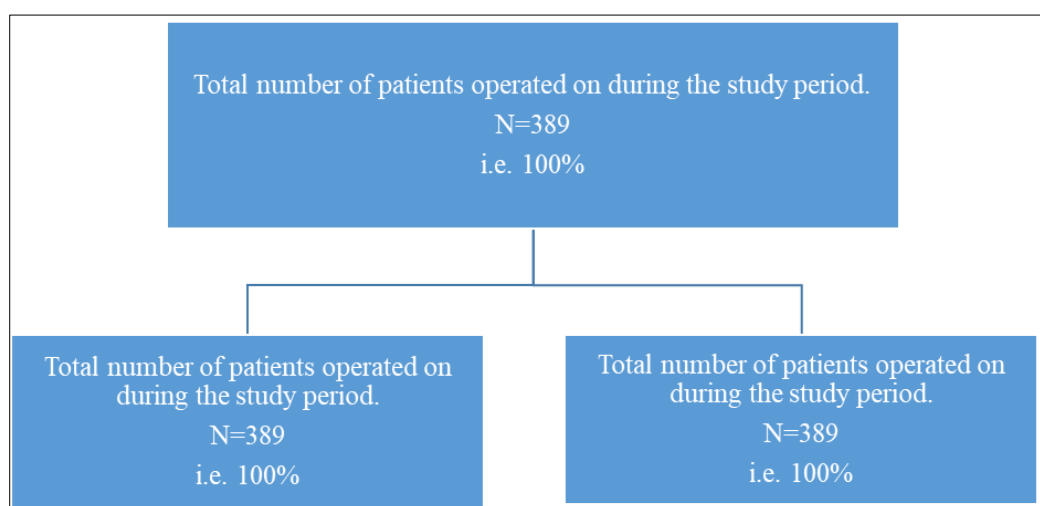


Figure 1 Flow chart of patients included in the study

Table 1 Distribution of patients by age group

Age	Frequency	Percentage (%)
≤15	21	15,1
16-35	96	69
36-45	17	12,2
≥46	5	3,7
Total	139	100

Average age: 24.3 ± 10.5 years Age extremes: 7 years and 69 years

Biology was normal in 116 patients, i.e. 83.4%. The majority of our patients 97.8% (n=136) were classified ASAI; followed by 2.1% (n=3) were classified as ASAI. Appendicitis was the most represented operative indication 64% or 89 cases followed by inguinal hernia 17.3% or 24 cases. The majority of our patients 94.2% or 131 cases benefited from general anesthesia and appendectomy was the most practiced surgical technique followed by herniorrhaphy with respective rates of 64% and 17.3% (Table II).

Table 2 Distribution of patients according to operative indication and surgical technique

Indication for surgery	Gesture	Effective	Percentage (%)
Acute appendicitis	Appendectomy	89	64
Eventration	Disembowelment treatment	2	1,4
White line hernia	Herniorrhaphy	7	5
Inguinal hernias	Herniorrhaphy	24	17,3
Umbilical hernia	Herniorrhaphy	12	8,7
Hydrocele	Cure of Hydrocele	3	2,2
Spermatic cord cyst	Cystectomy	2	1,4
Total		139	100

Many of our patients 100 or 71.9% had a duration of intervention between 21 and 30 minutes with an average duration of intervention: 25.6 Minutes \pm 6.5 minutes Extremes 18 minutes and 53 minutes. The average duration of hospitalization was 8 hours \pm 1.3 hours, Extremes 5 hours and 11 hours. The follow-up was favorable in 116 patients, i.e. 83.5%. The immediate early postoperative complications were present in 23 of our patients, dominated by persistent abdominal pain in 13 patients and those secondary in 03 of our patients including 2 cases of parietal suppuration and 1 case of scrotal hematoma (Tables IV and V).

Table 3 Distribution of patients according to immediate early postoperative complications

Immediate early postoperative complications	Effective	Percentage (%)
Persistent abdominal pain	13	9,6
Nausea/Vomiting	3	2,2
Vertigo	7	5
Total	23	16,5

There were 116 patients or 83.5% had no immediate early postoperative complication.

Table 4 Distribution of patients according to secondary post-operative complications

Secondary early postoperative complications	Effective	Percentage (%)
Normal	136	97,8
parietal suppuration	2	1,5
Scrotal hematoma	1	0,7
Total	139	100

4. Discussion

The frequency of day surgery varies from one country to another. The frequency noted in our study is lower than that of Sury MRJ et al, who reported that most surgical procedures in England performed on an outpatient basis were 65% in pediatric patients compared to 50% in the adult population in 2015 [5]. The figures of our study would be explained by the specific context of this one and by an uncommon or under-notified practice of ambulatory care. This frequency of day surgery would have been different if a national study had been conducted. In our study, the most represented age group was that of 16 to 35 years, i.e. a rate of 69% (n=96) and the average age of the patients was 24.3 \pm 10.5 years with extreme ages 7 years old and 69 years old. Franck L and col [6] reported an average age of 31 (25-43). Our data could be explained by the fact that life expectancy in France is higher than that found in Guinea. In addition, the pathologies that we have encountered are more frequent in young subjects. The high frequency of acute appendicitis could be

explained by the fact that acute appendicitis is frequent in visceral surgery. In addition, it is a pathology that affects young subjects, often without medical or surgical history and therefore eligible for outpatient surgery; therefore appendectomy was the most performed surgical procedure. During our study, all patients with abdominal pain received an analgesic and all those with nausea and vomiting received an antiemetic. The low incidence of surgical site infections in day surgery could be explained on the one hand by the mode of hospitalization, and on the other hand, by the characteristics of the operated patients. On an outpatient basis, interventions are most often scheduled, short, in a clean contamination class. Patients are most often in good general condition with ASA I or II scores.

5. Conclusion

Day surgery was an infrequent surgery but this frequency was not negligible given the context of developing countries in which we operate.

Compliance with ethical standards

Disclosure of conflict of interest

There is no conflict of interest.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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