

Evaluation of Recovery Profile in Patients Undergoing Ambulatory Anorectal Surgery Under General Anaesthesia at a Tertiary Care Hospital

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ABSTRACT

Background: The prevalence of minor anorectal diseases is 4-5% of adult Western population. The present study was planned for assessing the recovery profiles of different anesthetic techniques for ambulatory anorectal surgery.

Materials & Methods: A total of 20 patients who were scheduled to undergo ambulatory anorectal surgery under general anesthesia were enrolled in the present study. Complete demographic details of all the patients were recorded in a self-framed performa. Complete medial and biochemical examination of all the patients was done. A master chart was prepared, where recovery profile of all the subjects was recorded and compared. All the results were analysed by SPSS software.

Results: In the present study, mean duration of anesthesia was 42.1 minutes. Mean duration of surgery was 25.7 minutes. Mean duration of hospital stay was 229.7 minutes.

Conclusion: Ambulatory anorectal surgeries under general anesthesia have excellent recovery profile.

Key words: Ambulatory, Anorectal, Anesthesia.

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INTRODUCTION

The prevalence of minor anorectal diseases is 4-5% of adult Western population. Operations are performed on ambulatory or 24-hour stay basis. Requirements for ambulatory anaesthesia are: rapid onset and recovery, ability to provide quick adjustments during maintenance, lack of intraoperative and postoperative side effects, and cost-effectiveness. Anorectal surgery requires deep levels of anesthesia.¹⁻³

Anorectal benign diseases are haemorrhoids, anorectal fistulas, anal-fissures, pilonidal sinuses, papillomas, anal condylomas and paraproctitis. Paraproctitis and haemorrhoid thrombosis are treated as acute cases, while other ones are operated electively. Haemorrhoids, anal fissures and fistulas are the most common.⁴⁻⁶ Hence; present study was planned to assess Recovery Profile in patients undergoing Ambulatory Anorectal Surgery under general anesthesia.

MATERIALS & METHODS

In the present study, assessment of recovery Profile in patients undergoing Ambulatory Anorectal Surgery under general anesthesia was done. Ethical approval was obtained from institutional ethical committee and written consent was obtained

from all the patients after explaining in detail the entire research protocol. A total of 20 patients who were scheduled to undergo ambulatory anorectal surgery under general anesthesia were enrolled in the present study.

Exclusion Criteria

- Patients with presence of any metabolic disorder,
- Patients with presence of any malignant pathology,
- Patients with presence of any systemic illness,
- Patients with any known drug allergy

Complete demographic details of all the patients were recorded in a self-framed performa. Complete medial and biochemical examination of all the patients was done. A master chart was prepared, where recovery profile of all the subjects was recorded and compared. All the results were analysed by SPSS software. Chi-square test was used for assessment of level of significance. P-value of less than 0.05 was taken as significant.

RESULTS

In the present study, a total of 20 patients scheduled to undergo ambulatory anorectal surgery were enrolled in the present study. Mean age of the patients of the present study was 45.8 years.

There were 16 males and 4 females in the present study. Mean BMI of the patients of the present study was 25.1 Kg/m² while mean weight was 75.2 Kg.

In the present study, mean duration of anesthesia was 42.1 minutes. Mean duration of surgery was 25.7 minutes. Mean duration of hospital stay was 229.7 minutes.

Table 1: Demographic data

Parameter	Value
Mean age (years)	45.8
Mean weight (Kg)	75.2
Males	16
Females	4
Mean BMI (Kg/m ²)	25.1

Table 2: Recovery profile

Parameter	Value
Mean duration of anesthesia (mins)	42.1
Mean duration of surgery (mins)	25.7
Mean duration of hospital stay (mins)	229.7

DISCUSSION

Minor anorectal diseases are rather common. The prevalence of haemorrhoids and other anorectal diseases is 4–5% in adult population in the United States; approximately 10% of the cases require an operation. According to Argov, internal haemorrhoids are present in 4 percent of Western adult population.⁶⁻⁹

In the present study, a total of 20 patients scheduled to undergo ambulatory anorectal surgery were enrolled in the present study. Mean age of the patients of the present study was 45.8 years. There were 16 males and 4 females in the present study. Mean BMI of the patients of the present study was 25.1 Kg/m² while mean weight was 75.2 Kg. Li S et al compared three commonly used anesthetic techniques for anorectal procedures in the ambulatory setting. Ninety-three consenting adult outpatients undergoing anorectal surgery were randomly assigned to one of three anesthetic treatment groups: group 1 received local infiltration with a 30-ml mixture containing 15 ml lidocaine, 2%, and 15 ml bupivacaine, 0.5%, with epinephrine (1:200,000) in combination with intravenous sedation using a propofol infusion, 25-100 microg. kg⁻¹. min⁻¹; group 2 received a spinal subarachnoid block with a combination of 30 mg lidocaine and 20 microg fentanyl with midazolam, 1-2-mg intravenous bolus doses; and group 3 received general anesthesia with 2.5 mg/kg propofol administered intravenously and 0.5-2% sevoflurane in combination with 65% nitrous oxide. In groups 2 and 3, the surgeon also administered 10 ml of the previously described local anesthetic mixture at the surgical site before the skin incision. The mean costs were significantly decreased in group 1 (\$69 +/- 20 compared with \$104 +/- 18 and \$145 +/- 25 in groups 2 and 3, respectively) because both intraoperative and recovery costs were lowest (P < 0.05). Although the surgical time did not differ among the three groups, the anesthesia time and times to oral intake and home-readiness were significantly shorter in group 1 (vs. groups 2 and 3). There was no significant difference among the three

groups with respect to the postoperative side effects or unanticipated hospitalizations. However, the need for pain medication was less in groups 1 and 2 (19% and 19% vs. 45% for group 3; P < 0.05). Patients in group 1 had no complaints of nausea (vs. 3% and 26% in groups 2 and 3, respectively). More patients in group 1 (68%) were highly satisfied with the care they received than in groups 2 (58%) and 3 (39%).¹⁰

In the present study, mean duration of anesthesia was 42.1 minutes. Mean duration of surgery was 25.7 minutes. Mean duration of hospital stay was 229.7 minutes. Preoperative patient education and the setting of expectations is another key element in the success of ambulatory anorectal surgery management. The Study conducted by Nelson D W setting realistic patient expectations have been shown to improve patient satisfaction.¹¹ Song D et al compared the cost-effectiveness of an ilioinguinal-hypogastric nerve block (IHNB) - monitored anesthesia care (MAC) technique with standardized general and spinal anesthetics techniques for inguinal herniorrhaphy in the ambulatory setting. They randomly assigned 81 consenting outpatients to receive IHNB-MAC, general anesthesia, or spinal anesthesia. They evaluated recovery times, 24-h postoperative side effects and associated incremental costs. Compared with general and spinal anesthesia, patients receiving IHNB-MAC had the shortest time-to-home readiness (133+/-68 min vs. 171+/-40 and 280+/-83 min), lowest pain score at discharge (15+/-14 mm vs. 39+/-28 and 34+/-32 mm), and highest satisfaction at 24-h follow-up (75% vs. 36% and 64%). The total anesthetic costs were also the least in the IHNB-MAC group (\$132.73+/-33.80 vs. \$172.67+/-29.82 and \$164.97+/-31.03). They concluded that IHNB-MAC is the most cost-effective anesthetic technique for outpatients undergoing unilateral inguinal herniorrhaphy with respect to speed of recovery, patient comfort, and associated incremental costs.¹²

CONCLUSION

Under the light of above mentioned data, the author concluded that ambulatory anorectal surgeries under general anesthesia have excellent recovery profile. However; further studies are recommended.

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