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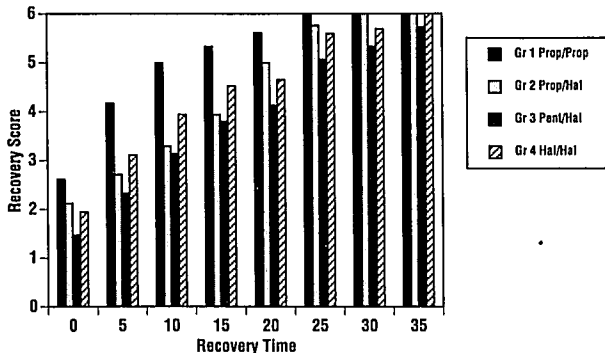
TITLE: RECOVERY & DISCHARGE TIMES FOLLOWING PROPOFOL, THIOPENTAL AND HALOTHANE ANESTHESIA IN PEDIATRIC OUTPATIENTS
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This study evaluates the safety, effectiveness, as well as the speed and quality of recovery when propofol (vs. thiopental and/or halothane) is used for induction and maintenance of anesthesia in pediatric outpatients.

METHODS: With institutional approval and parental consent, 100 children 3-12 yr old scheduled for ambulatory surgery of one hour duration or longer were studied. An iv cannula was inserted in an antecubital vein in conjunction with preoperative phlebotomy. No preoperative sedation was used. The children were randomized to receive one of four possible induction/maintenance combinations: group 1, propofol 3.0 mg.kg⁻¹/propofol infusion 50-500 mcg.kg⁻¹.min⁻¹; group 2, propofol/halothane 0.5-2%; group 3, thiopental 5 mg.kg⁻¹/halothane 0.5-2%; group 4, halothane for both induction and maintenance. Succinylcholine 1.5 mg.kg⁻¹ was used to facilitate tracheal intubation and N₂O/O₂ were used as the carrier gases in each case. All maintenance drugs were titrated according to the clinical response of the patient to prevent movement and maintain BP ± 20% of baseline.

Awakening (extubation), recovery¹ and discharge times were compared among the four groups using analysis of variance. The median recovery scores were compared using the Mann-Whitney test.

RESULTS: Demographic variables, duration of anesthesia and surgery were not significantly different among the 4 groups. The mean propofol dose required to prevent patient movement was 267 ± 83 mcg/kg/min. Awakening (extubation) times were not different among the four groups. Children in group 1 recovered faster (figure) and were discharged home sooner (P < .02) than all others. One patient who received propofol expressed discomfort during injection. There were no serious complications or adverse postoperative sequelae in any of the patients in the study.



DISCUSSION: This study shows that induction and maintenance of anesthesia with propofol is a safe and effective anesthetic technique in children, and is associated with faster recovery and discharge than when halothane is used.

REFERENCES: 1. Canad Anaesth Soc J 22:111, 1975

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THE "NEW YORK EXPERIENCE - QUALITY ASSURANCE ANALYSIS OF UNANTICIPATED ADMISSIONS FOLLOWING AMBULATORY SURGERY

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INTRODUCTION:

Few outcome studies have analyzed the safety of outpatient surgery. We conducted a retrospective analysis of the unanticipated hospital admissions from Ambulatory Surgery from three university-affiliated teaching hospitals located throughout the greater New York City area as part of an ongoing Quality Assurance Analysis.

METHODS:

Three major metropolitan hospitals with integrated Ambulatory Surgery Units participated in the collection of Quality Assurance admission data. Every admission was coded with regard to age, ASA physical status, surgical service, duration of operation, length of hospital admission and reason for unanticipated admission. The reasons for hospital admission were categorized into surgical, anesthesia, medical and social and entered onto a more detailed form. The data was analyzed to identify particular trends in the admission demographics and reasons for admission which were then compared to available data.

RESULTS:

Between November 1989 - October 1990, a total of 11,581 cases were performed in the three hospitals and 284 were admitted - a 2.47% rate. The mean age (+SD) was 45.21 years + 19.09 and 48.2% were ASA physical status I, 37.7% ASA II and 14.0% ASA III. Patients receiving general anesthesia accounted for 69.6% of all admissions, Regional 11.3%, MAC 10.5%, and local 8.1%. Average operating room time (+SD) was 128.28 + 71.19 minutes, and average length of hospital stay was 2.53 days. The surgical services accounting for the admissions were: GYN 29.5%, General Surgery 24.9%, Urology 12.6%, Orthopedics 12.3%, ENT 8.8%, Plastics 6.0%, Ophthalmology 2.8%, Dental 2.1%, GI Endoscopy 1.1%. More detailed reasons for admission were further categorized into: Surgical 64.6%, Anesthesia 9.6%, Pain 9.6%, Nausea-Vomiting 7.8%, Medical 8.2%, and Social 3.6%.

DISCUSSION:

We have generated our own regional profile of patients admitted unexpectedly after Ambulatory Surgery. Our admission rate, average age and mean duration of hospital stay was greater than Gold et al¹ and other reported rates. In addition, our profile included a greater distribution of ASA III patients. Although the majority of patients received general anesthesia, our data differed from Gold's study in that it included more patients admitted after MAC than local anesthesia. In reviewing the more detailed reasons for admission, extensive surgery and inappropriate booking accounted for approximately 30% of all admissions, while nausea, vomiting, pain and bleeding accounted only for 25%. Our admissions appear to be related to utilization issues of an integrated hospital unit rather than actual complications.

REFERENCES:

1. JAMA 262: 3008-3010, 1989