26448 - MEASURING OUTCOME AFTER PEDIATRIC DAY CASE ANESTHESIA

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INTRODUCTION: Quality of day case anesthesia can be measured by patient or parent satisfaction, as well as anesthesia outcome measurement: readmission rate, adequacy of pain management and side effects. To assess parental satisfaction and anesthesia outcome, we analyzed data from the second phase (pilot test) of a project to develop a validated assessment tool for measuring the quality of day case surgery in a pediatric hospital.

METHODS: The study was prospective and observational. Ethical approvals were obtained from the UBC and from CW Health Center of BC. Patients were recruited between September 2004 and July 2005. Parents were administered a telephone questionnaire on day 1 after surgery (448) and repeated on day 7 (222). Association between multiple measured variables and satisfaction was sought.

RESULTS: Parental satisfaction was high; 94% (417/443) rated the care their child received as very good/excellent and only 1% (3/222) answered that they were somewhat/very dissatisfied with recovery from surgery.

At day 1 after discharge, more than mild to moderate pain had been experienced by 10% (42/430) of the children. However, pain, secondary effects of general anesthesia (see table) and age were not correlated with the rating of care received at day 1. Only one variable showed statistically significant association with satisfaction: prolonged delay between scheduled time and start of surgery (> 2-3h). The strongest correlations were between satisfaction and courtesy, respect and understanding of the child's needs, trust in the nurses, feeling that time was taken to answer questions and comfort of waiting area. The readmission rate was 1.1%: 2 for vomiting and dehydration, 1 for pain/swelling, 1 for sialadenitis and 1 for fever.

DISCUSSION: Defining and assessing quality of day case anesthesia is a difficult task; however, improvement of anesthesia management obliges us to find ways of doing it. Similar to other study (1), parental satisfaction is high. It is likely because the only important expectation after anesthesia is recovery. If parental satisfaction is an appropriate way to measure quality of care, treating pain or avoiding side effects of anesthesia are not important issues. However, decreasing delays is of prime importance. Outpatient anesthesia is acceptable if pain and nausea control can be achieved. The incidence of moderate to severe vomiting at home might have been lowered by more consistent use of anti emetic prophylaxis; only 8/45 patients experiencing moderate to severe vomiting had received dexametasone. The under prescription of NSAID and narcotics or the lack smooth PO relay after local and regional analgesia could be explanations for the occurrence of more than mild to moderate pain in 10% of the patients. Better use of anti emetic prophylaxis and optimal pain management could have avoided the anesthesia related readmissions.

TABLE

PERCENTAGE (AND INCIDENCE) OF ANESTHESIA
SIDE EFFECTS (DAY 1 QUESTIONNAIRE)

moderate to severe symptoms

NAUSEA	12% (54/433)
VOMITING	10% (45/442)
FEVER	4% (16/435)
THIRSTINESS	3% (133/433)
ITCHINESS	10% (31/304)
DIZZINESS	12% (48/399)
THROAT IRRITATION	14% (59/417)