Title: **Drinking Before Discharging Children From Day Surgery : Is it Necessary?**

Authors: Thalia Martin M.D., Lance Whitney,M.D., Jessica Seidl-Friedman, Susan Nicolson, M.D., Mark Schreiner, M.D.

Affiliation: Department of Anesthesiology and Critical Care Medicine, The Children's Hospital of Philadelphia, Philadelphia, PA 19104

The ability to tolerate clear liquids following anesthesia and surgery is a commonly used criteria for discharge of day surgical patients. However, the necessity of drinking prior to discharge remains to be established. We tested the hypothesis that requiring children to drink following day surgical procedures would actually increase morbidity by increasing the incidence of vomiting and thereby delaying discharge from the day surgery unit (DSU).

1002 children aged 1 month - 25 years were randomized by week of the month to one of two sets of discharge criteria. Minimum intravenous fluid was calculated to equal 8 hours of maintenance (D5LR) and was administered during the operation and while in the PACU. Discharge criteria from the DSU required that all children 1) be easily arousable, 2) be able to follow simple commands, 3) be hemodynamically stable, 4) have adequate pain control and 5) have minimal vomiting. The control patients (Drinkers) were in addition, required to demonstrate the ability to tolerate liquids prior to discharge. The experimental group (Non-Drinkers) were allowed liquids but were not required to drink. The parents of the Non-Drinkers were given postoperative feeding instructions that stated that they should wait until their child was hungry prior to offering liquids post-discharge. All families were telephoned on the day following surgery to ascertain if, how often, and when each child had vomited post-discharge.

There were minor differences between the two groups in age and weight. There was no significant difference between the groups in the incidence of vomiting in the PACU or post-discharge, however Drinkers experienced more than a 50% increase in vomiting in the DSU compared to Non-Drinkers and on average stayed 16 minutes longer. (TABLE). No patient in either group required admission for vomiting.

Forcing children to drink in the DSU prior to discharge increases the incidence of vomiting and delays discharge. Most children (78%) given a choice will choose to drink. Instructing parents to withhold liquids until the child is hungry did not decrease the incidence of vomiting post-discharge.

TABLE	Drinkers	Non-Drinkers
Number	473	529
Age (years)	5.5±5.1	4.8±4.4 *
Weight (kg)	23.8±1.85	21.2±16.3 *
Calc'd Fluid Require. (ml/kg)	34±12	36±22 *
# Patients not receiving Calc'd Amount (%)	69 (15)	65 (12)
OR Time (min)	72±35	77±40
PACU Time (min)	70±24	68±20
DSU Time (min)	100±57	84±40 §
PACU Vomiting % (Conf. Int)	5.7 (3.9-8.1)	5.5 (3.9-7.7)
DSU Vomiting % (Conf. Int)	22.7 (19-27)	13.9 (11-17) §
Post-Discharge Vomiting % (Conf. Int)	26.8 (23-31)	25.7 (22-30)
Total Vomiting % (Conf. Int)	38.2 (34-43)	32 (28-36)
# Patients Not Drinking Prior to Discharge (%)	22 (4.7)	114 (21.6)
Time to 1st Emesis Post Discharge (min)	129±148	126±188

* $P < 0.05$, § $P < 0.01$

Title: **Hypotension, Flushing and Bronchospasm in Myelodysplasia Patients**

Authors: R.S. Holzman M.D., N.F. Sethna M.D., S. Sockin, M.D.

Affiliation: Dept. of Anesthesia, The Children's Hospital, Depts. of Anaesthesia and Allergy, Harvard Medical School, Boston, MA

Introduction: Patients with myelodysplasia present for numerous surgical procedures. We noted events suggestive of anaphylaxis occurring during anesthesia for these patients, and here review them and propose an etiology.

Methods: Ten patients with myelodysplasia experienced hypotension, tachycardia, wheezing and cutaneous flushing during surgery within a 1 1/2 year period. General anesthesia consisted of nitrous oxide, oxygen, halothane or isoflurane, pancuronium, and fentanyl or morphine sulfate. Routine and invasive monitoring appropriate to patient complexity and surgical procedure were utilized. Changes in systolic blood pressure (SBP), diastolic BP (DBP), heart rate (HR), peak inspiratory pressure (PIP), end-tidal CO_2 ($ETCO_2$) and oxygen saturation (S_pO_2) were examined by Student's t-test for paired observations @ $p < .05$ level of significance.

Results: Patient demography, procedures and symptoms are listed in Table 1; fig. 1-3 illustrate physiologic findings. SBP, DBP, HR, PIP and S_pO_2 all changed significantly from baseline. E_TCO_2 increased in 3 of 10 patients, not achieving statistical significance.

Discussion: Not all patients had identical findings. (Table 1) One had similar symptoms at another hospital while undergoing spinal fusion surgery. Various treatments in addition to volume loading and manipulation of anesthetic depth were necessary (Fig 4). All patients received antibiotics without history of allergy, ranging from 1/2 to 6 hours prior to the event. Blood was administered to 5 of the 11; in 2 it was given after the event, but did not appear to be related temporally. Recent papers (2-9) report rubber anaphylaxis in chronically-ill patients undergoing multiple surgical procedures. Two of our patients had dramatically positive (intradermal, 1:100,000 dilution) testing to latex; several other patients in this group, upon further review, have had lip swelling with balloons, one with lip swelling and shortness of breath with a rubber dam at the dentist, and another with sneezing and pruritis with urethral catheterization while his nurse wears latex gloves.

Conclusions: We describe an anaphylactic symptom complex that we have now seen 11 times in 1 1/2 years in a large surgical population with myelodysplasia. We are prospectively investigating the incidence of latex allergy in our myelodysplasia patients, and believe we have identified a patient population at risk for intraoperative latex anaphylaxis.

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Table 1 PATIENTS AND INTRAOPERATIVE SYMPTOMS

Pt. No.	Procedure	ASA P.S.	Age (yrs)	Weight (kg)	Wheezing	Flushing	Urticaria
1	Ant Release/Post. Spinal Fusion	3	9	15	N	N	Y
2	Ant Release/Post. Spinal Fusion	3	14	36	Y	Y	N
3	Bilat. hamstring release	2	12.7	66.6	Y	Y	N
4	Rem./repl. artif. urinary sphincter	2	14	53	Y	N	N
5	Expl. lap	3	14	40	N	Y	N
6	Pubovaginal sling	3	13	43	N	N	N
7	Nephrolithotomy/Stoma revision	3	16	34	Y	N	N
8	Post. Spinal fusion	2	9	22	Y	Y	N
9	Bilat. prox. fem. osteot./muscle transf.	3	3	13.2	Y	N	Y
10	Takedown/augmentation ileocecal loop	3	18	41.5	Y	Y	N
11	Post. spinal fusion	3	9	31.4	N	N	N

Fig. 1 Changes in Vital Signs

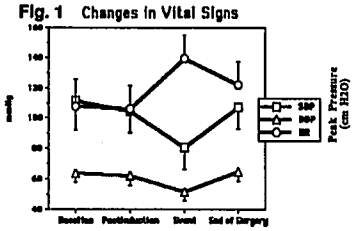

Fig. 2 Peak Inspiratory Pressure

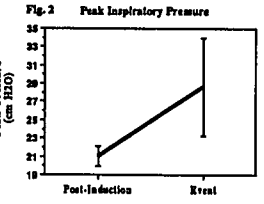

Fig. 3

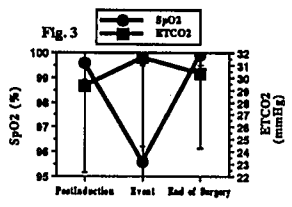

Fig. 4 Treatment During Intraoperative Events