

**Title:** Subarachnoid blockade versus general anesthesia for knee arthroscopy in outpatients.

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Spinal anesthesia (SAB) for outpatients (OP) has been the focus of recent debate. We compared general anesthesia (GA) to SAB for arthroscopic procedures (ARTH) in OP.

After approval of the Institutional Review Board, we reviewed the anesthesia, operating room (OR), recovery room (RR), and OP records of all adult OPs undergoing ARTH. Age, sex, ASA classification, narcotic use, complications, nausea and vomiting (N/V) and time spent in OR, RR and OP were recorded. Follow-up was made one to three days after discharge. Unpaired t-test and Yates correction of chi square were used where appropriate.

Table 1 summarizes results for 134 patients. Patients receiving SAB were older, spent a longer time in RR, received fewer narcotics, and had a lower incidence of N/V than those receiving GA. Follow-up was successful in 75% of patients. Postdural

puncture headache occurred in 5% of the SAB group. Epidural blood patch was not required on any patient. Sore throat occurred in 4% and headache in 2.5% of patients in the GA group.

Our data failed to show an increase in total postop time when SAB was used for OP arthroscopies. The occurrence of postdural puncture headache must be weighed against the negative aspects of GA.

	SAB	GA
Patients (#)	67	67
Sex (% female)	27%	37%
Age (years)	* 43+15	32+16
ASA	1.9+0.8	1.6+0.7
OR Narcotics	70%	81%
RR Narcotics	*** 9%	55%
OP Narcotics	21%	18%
Total Narcotics	*** 27%	65%
RR N/V	** 1.5%	25%
OP N/V	** 1.5%	19%
OR Time (min)	118+43	117+35
RR Time (min)	128+88	178+66
OP Time (min)	80+53	67+43
Total Time (min)	208+82	246+72

\* p < .01 compared to GA  
\*\* p < .005 compared to GA  
\*\*\* p < .001 compared to GA

**TITLE:** Chewing Gum Preoperatively May Warrant Delaying Induction of Anesthesia

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**Introduction:** Patients chewing gum upon arrival in an ambulatory surgical unit has lead to cases being either delayed or canceled due to fears of increased risk of aspiration pneumonitis. This is based upon the theory that mastication alone will stimulate gastric acid production thus increasing gastric acidity and volume. We tested this hypothesis in an outpatient population where we compared one group of patients who chewed gum while waiting to go to the OR with a control group.

**Methods:** Approval from the hospital Human Assurance Committee was obtained. Pt were randomly assigned to one of two groups. Group 1 -Control with standard NPO orders post midnight. Group 2- NPO post midnight but were allowed to chew gum upon arrival in ambulatory surgical unit and were instructed to discard the gum when called to the OR. Anesthesia was induced using a rapid sequence induction with cricoid pressure. A blinded observer then passed a number 18 gastric tube orally into the stomach and aspirated gastric content into a mucus trap. The patient was turned side to side and placed in head-down position to facilitate gastric emptying. The volume of the gastric

aspirate and the pH (Cole Palmer Model 5985-75 pH Wand) were determined. Statistical analysis included Student's t-test with a p<0.05 being significant..

**Results:** Twenty one patients have presently been enrolled with 10 patients who chewed gum and 11 who did not. Results are shown in table 1. There was no significant differences between groups in relation to weight, height, gastric volume and gastric pH.

Table 1- Results

Group	n	Avg weight (kg)	Avg height (cm)	Gastric volume (cc)	Gastric pH
control	11	65.9	167	27.2 *	2.0
gum	10	70.9	166	47.3 *	1.6

\*- difference between groups p=0.08

**Discussion:** In this preliminary study, no significant increase in gastric volume or pH was shown, however, the average volume was greater in the patients who chewed gum. Waiting a short period of time after the patients discards the gum may be warranted. With increased patient numbers perhaps this difference will reach statistical significance and a regression analysis of the time the gum was discarded until anesthetic induction could be generated.