TITLE: EFFICACY OF DIFFERENT DOSAGES OF ORAL FAMOTIDINE IN COMPARISON TO RANITIDINE FOR ASPIRATION PROPHYLAXIS

AUTHORS: P Talke, MD and D Solanki, MD, FFARCS
AFFILIATION: Department of Anesthesiology, The University of Texas Medical Branch, Galveston, Texas 77550

Introduction: Famotidine is a new H_2-blocker which is more potent and has a longer half-life than ranitidine or cimetidine.[1] The efficacy of different dosages of oral famotidine was compared to placebo and ranitidine, on decreasing the gastric volume and increasing gastric pH.

Methods: The study was approved by the Institutional Review Board. 99 surgical inpatients free of gastrointestinal disease or medications were randomly assigned to one of five study groups. All patients received a tablet with a sip of water at 9:00 PM the night before surgery (HS) and at 6:00 AM the morning of surgery (AM). Group A (Control) received placebo HS and AM. Group B received ranitidine 150 mg HS and AM. Group C received famotidine 40 mg HS and AM. Group D received famotidine 40 mg HS and placebo AM. Group E received placebo HS and famotidine 40 mg AM. A #18 French Salem nasogastric tube was introduced after induction of general anesthesia. Position was verified by auscultation and gastric contents evacuated into a mucous trap. The samples were analyzed for pH and volume. Data were analyzed using the ANOVA. Values are expressed as mean±SEM.

Results: All groups receiving an H_2-blocker had significantly higher pH values compared to Group A (table). There was no significant difference in the pH values between Groups B and C. The patients who received Famotidine HS only had significantly lower pH values compared to Groups B and C. Gastric volumes did not vary between groups.

Discussion: Ranitidine (150 mg) and famotidine (40 mg) administered HS and AM were equally efficacious in providing prophylaxis against acid aspiration pneumonia. Single doses of famotidine were not as effective, with the single dose given only HS being significantly worse. Our data suggests that a single dose of famotidine HS will not provide adequate aspiration pneumonia prophylaxis for outpatients, who are known to be at increased risk compared to inpatients.[2]

References:
1. Can Anaesth Soc J 25:36-39, 1978
2. Pharmacol Res 21:339-352, 1989

Group	n	pH	volume(cc)	# with pH<2.5	# with vol>25	# with Both
A (P/P)	19	3.1±2.1^{+x}	15.6±14.0	3	11	2
B (R/R)	20	7.0±0.9*	8.4±10.7	2	0	0
C (F/F)	25	6.9±1.1*	10.5±12.2	3	0	0
D (F/P)	17	4.8±2.2^{*+x}	14.2±11.6	3	2	0
E (P/F)	18	6.2+1.9*	12.7+12.5	4	1	1

* p 0.05 from Group A; $^{+}$ p < 0.05 from Group B; ^{x} p < 0.05 from Group C

Title: The Structure of the CA-3 Year: A Look at the Current Status and Recent Trends

Author: T.D. Meakem, M.D.
Affiliation: Anesthesiology Dept., Univ. of Arizona Tucson, Arizona 85724

The recent implementation of the Clinical Anesthesia III (CA-3) year specified that a resident in that year would follow either the Advanced Clinical Track (ACT), the Subspecialty Clinical Track (SCT), or the Clinical Scientist Track (CST). A recent report on the implementation of these tracks showed little uniformity among programs.[1] This study was undertaken to determine the current status of the CA-3 year and to examine ongoing trends.

In the fall of 1989 a cover letter and confidential questionnaire were sent to the program directors of the complete programs in the 1988-89 Graduate Medical Education Directory. Questions concerned track popularity and availability, use of time within each track and mechanisms of conflict resolution.

Completed responses were received from 97 program directors, a 64% response rate. The table below shows the continued preference for the ACT and SCT, despite an increase in the number of CST positions offered.

	CA-3 Residents		Potential CA-3 Positions	
	'88-89	'89-90	'88-89	'89-90
ACT	416 (49%)	471 (52%)	559 (45%)	585 (42%)
CST	366 (44%)	365 (41%)	509 (41%)	551 (39%)
SCT	58 (7%)	66 (7%)	170 (14%)	269 (21%)

23% of the responding programs did not offer all three tracks, compared to 22% in '88-89. In the ACT, 53% of the responding programs would pay for electives outside of the department, for a mean of 3.7 months per resident. Residents in the SCT can expect to spend >50% of their time supervising junior residents in 25% of cardiac, 33% of OB, 11% of peds, 37% of ICU, 26% of neuro and 25% of pain rotations. The 6+6 month option was offered in 64% of the SCT rotations, which represents a mean 11% increase in the availability of this option from the 88-89 survey. For the CST, 83% of the responders allowed the resident to choose between lab or clinical research, while 17% offered only one option. The programs requiring commitment to "fellowship" time in order to take the CST has not changed since '88-89 (14%), but the mean amount of time in '89-90 was 23 months, compared to 11 months in '88-89.

Major changes are planned by 38% of the responding programs in the upcoming year.

Conflicts among residents for track and subspecialty selection were experienced by 74% of the responding programs. 35% of these were resolved by the discretion of the dept. chairman, while most of the rest were settled by using evaluations, exam scores, lotteries or matching-type processes. Comments indicated that some programs gave priority to residents who had demonstrated ability in a given area while others gave preference to residents who were weak in that area. 3% of the responders let residents work out conflicts themselves. Among the 26% of programs who have not experienced these conflicts, the distribution of residents was ACT 54%, SCT 38%, and CST 12%, compared to 52%, 41%, and 7% respectively in all CA-3's.

In conclusion, it appears that programs who have adopted the tracks of the CA-3 year are continuing to expand — offering more options and more track positions. Those who did not offer all three tracks before, still do not. Programs are generally flexible, funding outside electives in the ACT and offering more 6+6 options in the SCT.

Reference
1. Anesthesiology 71: A968, 1989.

Downloaded from http://pubs.asahq.org/anesthesiology/article-pdf/73/3A/NA/418662/0000542-199009001-01076.pdf by guest on 18 January 2022