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**TITLE:** DO NOT RESUSCITATE ORDERS (DNR) IN THE PRESURGICAL PATIENT: A STUDY OF U.S. ANESTHESIOLOGY DEPARTMENT POLICIES

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Most American hospitals have developed (DNR) policies in response to quandaries posed by life-support techniques. DNR orders are now considered routine in the management of patients with terminal diseases. Patients with such conditions, however, frequently require palliative surgical procedures which often require anesthesia. Concerns are often voiced as to whether the DNR order should or should not remain in effect while these patients are in the operating room, and as such may prove to be a dilemma for those anesthesiologists who are ultimately responsible for resuscitative care.

In light of these concerns, and because recent legislation requires that all hospitals must inform patients of their right to make their own care decisions<sup>(1,2)</sup>, we conducted a survey of hospitals with residency programs in anesthesia, in an effort to gain insight into their DNR policies for patients undergoing surgery.

A questionnaire was forwarded to 156 hospitals in the contiguous U.S. with accredited residency programs in anesthesia. Both the program director, as well as to the director of legal affairs for that particular hospital were surveyed. This was done to determine whether hospital policy differed from that perceived by the individual department. Questions asked appear in Table 1. Responses were analyzed geographically so as to assess for regional differences.

106 of 156 (68%) institutions responded. Seven were excluded from the final analysis, as the legal affairs and anesthesia program directors differed as to the nature of their policies. There were no statistically significant geographical differences in the 99 programs analyzed. Table 1 details the results of this study. Those institutions with a DNR policy had it in effect for a mean of  $4.4 \pm 3.9$  years. Table 1.

Question	# Positive Response / Respondents
Anesthesia programs which:	
1. have an existing DNR policy for the surgical patient	53/99
2. have a DNR policy and suspend it at the time of surgery	42/53
3. despite maintaining DNR status in the OR still administered CPR to the patient	16/52
4. did not resuscitate a patient who maintained DNR status in the OR	10/53
5. are planning to initiate a DNR policy	16/46

It is apparent from this study that a need exists for hospitals to formulate policies regarding the care of the DNR patient presenting for surgery. Only half of the programs responding to our survey have established policies. Of the programs that do not, only one-third plan to do so. It is also of interest that a number of programs have internal inconsistencies regarding the knowledge of their institution's DNR policies. Finally, the majority of programs suspend DNR in the operative period, which appears to be in concert with recommendations made in the recent anesthesia literature.

- References:
1. JAMA 265(14):1868-1871, 1991.
  2. JAMA 265(14),1874-1875, 1991.
  3. Anesthesiology 74:606-608, 1991.

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**TITLE:** ORAL FAMOTIDINE FOR ASPIRATION PROPHYLAXIS IN SURGICAL OUTPATIENTS

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**Introduction:** Famotidine, a new H<sub>2</sub>-blocker, is used preoperatively to decrease gastric volume and acidity. The efficacy of different dosage regimen of oral famotidine have not been studied in detail. We evaluated the effect of different dosage regimen of 20 mg and 40 mg of famotidine on gastric volume and acidity in surgical outpatients.

**Methods:** The study was approved by the Institutional Review Board. 124 surgical outpatients free of gastrointestinal disease and medications were randomly assigned to one of seven study groups. All patients received a tablet at home the night before surgery (HS) and at 6.00 AM the morning of surgery (AM). Group A (placebo) received placebo HS and AM. Group B received famotidine 20 mg HS and AM. Group C received famotidine 20 mg HS and placebo AM. Group D received placebo HS and famotidine 20 mg AM. Group E received famotidine 40 mg HS and AM. Group F received famotidine 40 mg HS and placebo AM. Group G 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 ANOVA. All famotidine groups were compared to the placebo group. Groups B, C and D (20 mg dose) were compared to each other as were Groups E, F and G (40 mg dose). 20 and 40 mg groups with similar dosage regimen were compared to each other (B vs E, C vs F and D vs G). Values are expressed as mean+SEM.

**Results:** All famotidine groups had significantly higher pH values compared to the placebo (table). Group F had lower pH values compared to Groups G and E and higher volume values compared to group G. None of the famotidine groups had significantly lower volume compared to the placebo.

**Discussion:** Our data suggests that for surgical outpatients 1) 20 mg and 40 mg of oral famotidine are equally effective, 2) there is no significant difference between the HS+AM and AM dosage, and 3) a single dose of famotidine HS is least effective in reducing gastric acidity. Famotidine had no significant effect on gastric volume.

Group	n	pH	volume(cc)	# with	
				pH<2.5	vol>25
A (P/P)	17	2.8+0.2	12.7+3.3	11	3
B (F <sub>20</sub> /F <sub>20</sub> )	19	6.1+0.5*	8.7+2.0	3	2
C (F <sub>20</sub> /P)	13	5.7+0.4*	14.4+4.8	1	2
D (P/F <sub>20</sub> )	20	5.7+0.5*	7.1+2.2	2	3
E (F <sub>40</sub> /F <sub>40</sub> )	16	6.2+0.4*	7.6+1.9	1	1
F (F <sub>40</sub> /P)	21	4.3+0.5*+x	14.6+2.7+	6	4
G (P/F <sub>40</sub> )	25	6.2+0.4*	7.6+1.3	1	0

\* p < 0.05 from Group A, + p < 0.05 from Group G, x p < 0.05 from Group F