control group and served for the purpose of a double-blind study. The test situation, ether anesthesia, was chosen because of the reported frequency of nausea and vomiting during recovery, and it was believed that this would be an effective clinical test of the drug's antiemetic potency.

One hundred and ten patients, 57 controls and 53 treated patients, were included in this preliminary study. Their age ranged from two months to 57 years. Only definite symptoms were objectively evaluated and an attempt was made to distinguish different types of surgery.

In the control group, the incidence of vomiting after endotracheal anesthesia for tonsillectomies is not much different from that after anesthesia for tonsillectomies by insufflation through the Davis-Crowe mouth gag. A similar comparison in the treated patients reveals only a suggestive beneficial result with trimethobenzamide and no difference between insufflated and intubated patients. There was also no apparent difference in the incidence of vomiting between tonsillectomies done with endotracheal anesthesia and eye surgery done with endotracheal anesthesia. The over-all incidence of nausea and vomiting in the controls was 22/57 (about 38 per cent); in the treated group it was 20/53 (also approximately 38 per cent). There was no obvious difference in any of the subgroups (*i.e.*, abdominal, ocular, tonsillectomy, miscellaneous excluding neurosurgery and chest surgery) to indicate effectiveness of trimethobenzamide in the prophylaxis of post-ether anesthesia emesis.

The incidence of emesis in the group of abdominal and other surgery is about 22 per cent (7/31) in the control group and 26 per cent (9/34) in the treated group. The incidence of this complication was apparently higher in both groups in those patients undergoing tonsillectomy or ocular surgery. This may be related to the age group or the area of surgery. Thiopental induction made no significant difference.

Forty-three per cent (10/23) of females in the control group exhibited emesis; this figure for males was 39 per cent (13/33). The figures for the treated group are males 43 per cent (14/32) and females 36 per cent (8/22). Untreated female adults vomited no more frequently than premenstrual females. The male group also showed no incidence related to age.

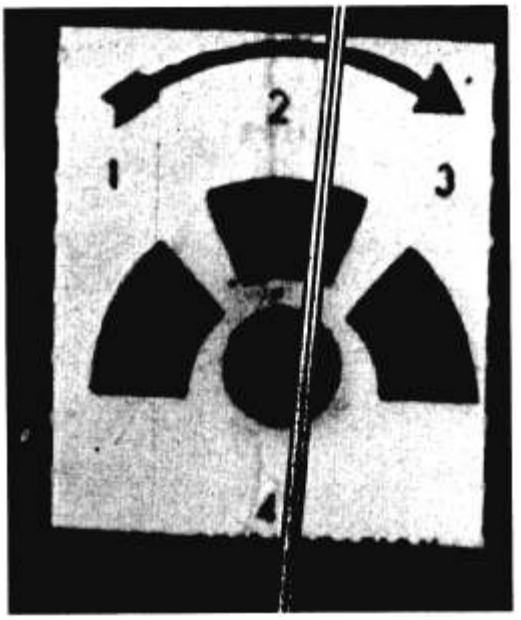
The results show a minimum of 25 per cent and an over-all average of 44 per cent emesis after ether in the control group. No apparent difference was observed in the group treated with trimethobenzamide.

No side effects of the drug were observed. There was no tissue reaction to injection and no effects on the respiratory, cardiovascular, or central nervous systems. Definite therapeutic effects were not evident in this series. This may be attributed to either (1) the low potency of the drug, in spite of its ideal site of action (on the vomiting center itself), (2) the very high potency of the emetic stimulus, or (3) a combination of the two. Ether most likely produces nausea and emesis by some direct effect on the vomiting center as well as indirectly by increasing nasopharyngeal secretions and as an irritant to the gastric mucosa. It is possible that trimethobezamide in much higher doses than used in this study may be somewhat more effective.

Deterioration of Spinal Needles

Drs. William Hamelberg and Jerome Gauthier, of the Ohio State University Hospital in Columbus, Ohio, noted that in an effort to circumvent any error in the sterilizing procedures, various chemical methods have been introduced to indicate the equipment has been autoclaved. Ideally, these indicators should not harm the equipment; however, this report demonstrates that some indicators do.

To avoid contaminating all the spinal needles placed on the tray, thereby reducing the number of needles requiring processing, they began sterilizing each needle in a small test tube (16 × 150 mm.) containing a sterilization indicator (Steam-Clox, Aseptic Thermo Indicator Company). Shortly after this change we noticed the needles were coated, as well as eroded, by a rust-like



material (see illustration). Since this occurred following the change in preparation of the trays everything was rechecked.

At first they thought the problem was created by having inferior spinal needles. However, repeated sterilization of new needles without the sterilization indicator failed to give any evidence that the needles were at fault. Following the above procedure with the old needles, the rust did not reappear. They concluded, therefore, that the source of the difficulty was with the indicators. Confirmation of this premise was obtained by sterilizing 50 new needles with the indicators. After sterilization each needle was coated with this material.

Correspondence with the manufacturers of the indicators concerning this problem answered the question as to why this should occur. The company stated that for the color change to occur in the indicator during sterilization a small amount of chlorine gas is released. Chlorine is known to attack stainless steel and similar metals. This fact in all probability accounts for the appearance of the rust-like material on the spinal needles.

Fortunately, during this time period they did not encounter any neurologic sequelae following spinal anesthesia.

GADGETS

Modification of Crowe-Davis Mouth Gag

Drs. J. B. Rew, A. J. Wyly and G. B. Grant, of the Ochsner Foundation Hospital in New Orleans state that since nasotracheal intubation is not feasible in the small child and preadolescent, it is necessary to use the oral route. With the usual methods the tube is vulnerable to dislodgement or kinking during the procedure. To obviate this, a modification of the tongue blade for the Davis mouth gag has been developed which effectively keeps the tube fixed securely between the tongue and the blade and at the same time completely removes the tube from the operative field.

A slot is cut in the tongue blade which extends approximately two-fifths the length of the blade. The slot must also be wide enough to accommodate the tube without any tendency to pinch the tube on the sides. At the distal end of the blade a short, shallow trough is soldered to the prongs leaving approximately one-fourth inch of the blade protruding. The trough was made of copper tubing in the trial models.