CURRENT COMMENT AND CASE REPORTS

CURRENT COMMENT is a section in Anesthesiology in which will appear invited and unsolicited professional and scientific correspondence, abbreviated reports of interesting cases, material of interest to anesthesiologists reprinted from varied sources, brief descriptions of apparatus and appliances, technical suggestions, and short citations of experiences with drugs and methods in anesthesiology. Contributions are urgently solicited. Editorial discretion is reserved in selecting and preparing those published. The author’s name or initials will appear with all items included.

THE USE OF FLAXEDIL FOR ENDOTRACHEAL INTUBATION

After Baird introduced his pentothal-α-tubocurarine mixture in 1947 as an aid for endotracheal intubation, various combinations of ultra-short and short-acting barbiturates with curare and curare-like drugs have been introduced for the same purpose. Sufficient it to say that all the different combinations have their advantages and disadvantages traceable to either the barbiturate, the curare, or both.

One of the latest synthetic curare drugs introduced is flaxedil (tri-diethylaminoethoxy 1, 2, 3, benzene). It was synthesized by Bovet and his co-workers, based on previous work of Hunt and Renshaw. It has since been used and reported by Huguenard, Wilson and Gordon, Lamonreux and Bourgeois-Gavardin, and Mushin.

In bio-assays of this synthetic curare in conscious human subjects, it was found to be potent as a curariform agent. It was decided, therefore, to study its possible usefulness, in combination with different thiobarbiturates in facilitating endotracheal intubations.

Flaxedil was employed in 470 unselected cases. It was usually combined with sodium pentothal—0.5 Gm. in a 2.5 per cent solution, but was mixed with sodium surital or with spirothiobarbiturates in some cases. The dosage found to be sufficient for the average adult patient was 70 mg. As much as 80 mg. was used in large, well-developed, muscular individuals and as little as 60 mg. in debilitated subjects.

Certain outstanding pharmacological effects which may be directly or indirectly attributed to flaxedil were observed. Apnea occurred quite frequently, especially when intravenous injection of the mixture was rapid. The role of the barbiturate in helping to produce respiratory arrest cannot be minimized.

Hyperactive pharyngeal, laryngeal and tracheal reflexes in the form of gagging, laryngospasm and "bucking" were considerably diminished. Only one case of active laryngospasm was actually observed.

Blood pressure may be elevated from 5 to 20 mm. of mercury or sustained even after sudden changes in position of the patient after induction. Tachycardia was seen in 30 to 40 per cent of the cases. Transient increases in pulse rate up to 140 per minute were not infrequent. This effect has been ascribed to the vagolytic action of flaxedil.

Like curare, flxedid is easily antagonized by prostigmine and the new antcurare drugs, such as tensilon.

Flaxedil seems to be consistent in inducing its pharmacologic effects as seen clinically in the patient. It is a very fast-acting muscle relaxant.

SUMMARY

Flaxedil combined with a thiobarbiturate (sodium pentothal, sodium surital, or spirothiobarbiturate) to facilitate endotracheal intubation was found very satisfactory in a series of 470 patients.

A dose of 70 mg. of flaxedil was found to be necessary to effect relaxation of jaw and neck muscles in the average patient.

Pharyngeal, laryngeal and tracheal reflexes were markedly diminished when flaxedil was employed.

Flaxedil caused a slight to moderate rise
in the blood pressure level and tachycardia in 30 to 40 per cent of cases seen.

Respiratory arrest occurred frequently when thiobarbiturate-flaxedil was given, particularly if the rate of intravenous infusion was rapid.

Flaxedil may have a vagolytic action.

The drug was easily antagonized by propranolol and tensilon.

Max S. Sadow, M.D.,
and Reuben C. Balagot, M.D.,
Dept. of Surgery (Anesthesia),
University of Illinois,
Chicago 12, Illinois

AN INEXPENSIVE AND EFFICIENT "HOME-MADE"
INFANT RESUSCITATOR

One of the problems which has plagued most anesthesiologists has been the difficulty in providing adequate resuscitative apparatus for the newborn, apparatus which in an emergency all physicians and nurses (including obstetric nurses) could use with