Anesthetic Effects on Baroreceptor Reflexes

To the Editor:—This letter is written to clarify certain comments made by Dr. Gebber in his editorial review (Anesthesiology 32: 193, 1970) of papers by Per Skovsted and myself.

Dr. Gebber says (in effect) that since the aortic depressor nerve contains both baroreceptor and chemoreceptor afferents, the experiments reported do not establish "that diethyl ether and fluoroxene . . . blocked baroreceptor-induced reflex inhibition of sympathetic discharge."

However, we were careful to select a limited stimulating voltage which selectively excited the baroreceptor afferents, the threshold for the chemoreceptor fibers being substantially greater (Douglas and Schaumann, J.

Physiol. 132: 173, 1956). When one stimulates at a higher voltage the depressor response observed initially is often transformed into a pressor response when ether or fluroxene is administered, indicating that the excitatory (chemoreceptor) reflexes are better preserved than the inhibitory ones.

While we do not deny that some chemoreceptor fibers probably were stimulated or that carotid sinus distention would have been a purer stimulus, we do believe that our interpretation is sustained by the findings presented.

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Hazards of the Valved Y-piece

To the Editor:-Dr. John Ditzler (ANES-THESIOLOGY 32: 87, 1970) refers to "an incredible series of events" in Dr. Leslie Rendell-Baker's letter regarding a potentially fatal incident involving a valved Y-piece (ANESTHESI-OLOGY 31: 194, 1969) and points out that our training programs must assure that residents will always check the function of anesthesia devices before use. The purpose of Dr. Rendell-Baker's letter, clearly, was to call to the attention of anesthesiologists as forcefully as he could the serious hazards of a valved Y-piece currently available from several manufacturers. The Subcommittee on Standardization has stated twice in the ASA NEWSLET-TER (September, 1969; January, 1970), that the valved Y-piece is a hazardous device if used with a machine which has valves elsewhere in the patient circuit.

Dr. Ditzler's position that such incidents can be avoided is, of course, absolutely correct. However, it is certain that untoward incidents will continue to occur as long as human beings use valved Y-pieces in circle absorption systems, nearly all of which include directional valves located at the canister. This is not a defense of those anesthesiologists who make the mistake, it is merely a fact of life.

In the interest of patient safety, it is up to our specialty to eliminate such risks. The FDA already has authority to do this if we do not accomplish it ourselves. A special committee on devices is already drafting recommendations for national medical devices legislation which may soon affect us. The only positive solution to the problem, the "gas flow sequence" patient circuit, has not been accepted by anesthesiologists essentially because of mechanical difficulties. The safe alternative to this arrangement is not to use the valved Y-piece at all.

ASA SUBCOMMITTEE ON STANDARDIZATION Chester W. White, Jr., M.D., Chairman