"Hypercapnia" versus "Hypercarbia"

To the Editor.—I was very interested to read Dr. Lamont's comments (ANESTHESIOLOGY *22: 325, 1961*) on the usage of "capnia" and "carbia" when referring to carbon dioxide tension. Apart from the disadvantage of the combination of Greek prefixes with Latin nouns, is it not reasonable that *carbon* dioxide tension should be referred to as hypo- or hyper-*carbia*? As far as their origin is concerned the use of either word seems reasonable for are not smoke (kapnos) and charcoal (carbon) the waste products of combustion? May I press my plea for a general adoption of "carbia."

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Respiratory Complications and Muscle Relaxants

To the Editor.—The article by Drs. Salanitre and Rackow (ANESTHESIOLOGY *22: 194, 1961*) suggests a causal relationship between the giving of relaxants and the appearance of respiratory complications and of hypothermia in young infants. Their evidence consists of an invidious comparison of the incidence of these complications in a group which had received relaxants (especially *d*-tubocurarine) with a group which had received no relaxant. The argument they present fails to be convincing (as yet) because they do not show that the groups compared are similar except for the use of relaxant.

It would seem likely that the incidence of the use of muscle relaxants would be highest in thoracic and abdominal procedures and lowest in operations outside of the major body cavities. If this be the case, then the association of muscle relaxants with hypothermia and respiratory complications may be merely an association of the last two with the type of procedure. One might expect (1) that exposure of the moist, well-perfused viscera to the outer world would result in hypothermia, (2) that intra-abdominal and intrathoracic procedures would last longer, (3) that postoperative pain at the operative site in the above areas would result in hypoventilation etc., (4) that intrathoracic procedures (*i.e.*, tracheoesophageal fistulas) are often associated with pre-existing lung disease, and (5) that many intra-abdominal procedures at this time of life are associated with an abdomen that is already too full, so that following corrective surgery there may be a deleterious limitation to the movement of the diaphragm. Thus, the association of respiratory and other complications with muscle relaxants in young infants is interesting, but one may not assume that a causal relationship exists from the evidence thus far presented.

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To the Editor.—We thank the Editor for permitting us to answer Dr. Eger's criticism of our paper "Respiratory complications associated with the use of relaxants in young infants," ANESTHESIOLOGY *22*: 194, 1961.

We believe our groups of patients with and without relaxants are comparable as to type of operation, duration of operation and age distribution. We submit these data in support of this statement.

Our data shows 49 cases of major abdominal and thoracic surgery (including tracheoesophageal fistula, diaphragmatic hernia, duodenal atresia, meconium ileus, perforated viscus, biliary atresia) in the nonrelaxant group and 59 similar cases in the relaxant group. The findings in these groups were as follows:

Nonrelaxant group—49	
Hypothermic infants	21 (43%)
Infants with respiratory complications	7 (14%)
Hypothermic infants with respiratory complications	1 (2%)