12.5% of cases, "the trait caused death or greatly contributed to it."

Sears,[4] in his exhaustive review of the literature, concluded that potential hazards "may exist for the sickle cell trait, but they await convincing demonstration by properly controlled studies." The purpose of a brief report such as ours is, in fact, to stimulate controversy and thought so that these properly controlled studies will be performed and we will no longer have to rely on previous dogma or opinion.

We thank the Editors for giving us the opportunity to reply to one eminent teacher of modern obstetrics.

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One-hour observation period prior to tocolytic therapy

To the Editors:

I should like to take this opportunity to draw to the attention of the readers of this JOURNAL what I consider to be a significant omission in published protocols for the use of β-adrenergic tocolytic agents. This is particularly important at this time because of the current availability of an approved product marketed for this purpose (Yutopar [ritrodrine], Astra Pharm. Products, Inc.).

At the University of New Mexico School of Medicine, we have had over 6 years' experience with the utilization of these drugs for the suppression of labor. Our experience has largely been with terbutaline. Because it has been shown that in any series of patients with suspected premature labor, the condition will subside in at least half of them with the intravenous administration of fluid alone, and because these drugs theoretically could produce more serious side effects in the hypovolemic patient, our established routine prior to the administration of these drugs has been to administer a fluid load. This has generally been planned to represent approximately 10 ml per kilogram of body weight of 5% dextrose in Ringer's lactate over the first hour. This not only provides some fraction of this administered fluid for volume expansion but also necessitates a 1-hour period of observation for the detection of any effects on the patient's contraction pattern prior to the initiation of tocolytic therapy. We also begin tapering the dosage within 2 to 3 hours after cessation of contractions. During a 5-year period of study, encompassing nearly 500 patients, we have seen no case of pulmonary edema develop with this regimen or the subsequent administration of beta-adrenergic drugs. We do not use corticosteroids with any frequency at this institution. We do not use potassium supplementation, except when extreme hypokalemia is observed during therapy (a rare development).

As the only Level III referral center in this large geographic region, we have had occasion to receive in transfer for the development of "toxicity" many patients under tocolytic therapy from other institutions. This toxicity has generally consisted of excessive maternal heart rate in response to usual doses. Our regular observation with such patients is the noticeable lack of appropriate administration of fluid prior to the initiation of the drug. In some cases, simple administration of fluid alone has resulted in the subsidence of not only the signs of toxicity but also the contraction pattern.

We wish to call to the attention of the readership and the drug manufacturers the wisdom of a 1-hour period of appropriate administration of fluid and observation prior to the utilization of β-adrenergic drugs. We consider the lack of such recommendation to be a significant omission in published protocols by the manufacturers for the use of these agents. We recognize the implications of excessive administration of fluid in regard to the development of pulmonary edema,[1, 2] and would advise judicious use of fluid after the drug is started. To date, our regimen has been both successful and safe in common use, with the qualifications mentioned. Steering a safe course between extremes would seem to be most appropriate plan.

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