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Lidocaine-Dextran Solutions

To the Editor: — In the supplement to the September 1979 issue, there are two abstracts entitled "Nerve Block Duration with Bupivacaine" and "The Duration of Action of Nerve Blocks Produced by Local Anesthetic: Dextran Mixtures."2 The first abstract starts "Since 1960 when Loder claimed that low molecular weight dextran increased the action of lidocaine" and ends "The results make us seriously doubt that low molecular weight dextran has any effect on the duration of local anesthetic action." The second article comes to the same conclusion. The solutions used were 5 per cent dextran 40 and 1 per cent lidocaine, 0.75 per cent bupivacaine or 0.25 per cent bupivacaine. I am sure that their conclusions were right. However, in the articles by me, as quoted,^{3,4} I described that, in man, 1 per cent lidocaine in 10 per cent dextran with 1:250,000 epinephrine prolongs the action of the lidocaine by a factor of 5 or 6, and it still does.

The mistake has come about by their use of 5 per cent dextran instead of 10 per cent and Dextran 40 instead of Dextran 110.

A 10 per cent solution of dextran with a high molecular weight (average 110,000) retards the absorption of local anesthetics, probably by a simple physical process. My original article³ describes how to make the solution by adding a lidocaine HCl powder to the 10 per cent Dextran 110, autoclaving, and adding the epinephrine just before use.

May I suggest that Curtiss, Scurlock, Buckley, and Fink repeat their experiments using the correct solution.

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Anesthesia and Pet Euthanasia

To the Editor: — At a recent elementary school career day a young boy persisted in asking questions about the meaning of the term "put to sleep," supposedly in relation to a pet of his which had been euthanitized in the not-too-distant past. His persistence struck me as unusual, so I pursued the matter with him and discovered that his real concern was for himself. It seems that he was soon to go into the hospital for surgery and was told that he would be "put to sleep" for the procedure. In his mind he put two and two together and came up with five. I attempted to correct his misconceptions and received assurances from his teacher that she would follow up on the problem with his parents.

I had never thought about young children's misconceiving this euphemism for euthanasia in such a manner, and was sufficiently impressed that I felt this note to be warranted. Apparently, veterinarians, pediatricians, pediatric surgeons, and anesthetists need to be a little more careful with the terminology used when discussing pet euthanasia or child surgery with our young clients/patients and their parents.

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