

CORRESPONDENCE

muscle group that is most responsive to the stimulation, as suggested by Roberts and Dorsch.

We endorse the motion sensor placement procedure described by Roberts and Dorsch as:

- 1) Place the stimulating pad over the ulnar nerve before administration of any muscle relaxant.
- 2) Electrically stimulate the nerve using a train-of-four or single twitch stimulation.
- 3) Observe visually where the maximum motion on the hand occurs in response to electrical stimulation.
- 4) Place the piezo-electric motion sensor over the joint of the hand where maximum motion was observed.

We realize that it is not always possible to observe muscle movement and position the motion sensor before muscle relaxants are given because there may not be adequate analgesia to use the stimulator. In these situations, placement over the intersection of the hypothenar eminence and the fifth digit, as described by Roberts and Dorsch, is appropriate.

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Practice Guidelines for Blood Component Therapy

To the Editor:—Regarding the recent Practice Guidelines for blood component therapy, I have a suggestion concerning the use of fresh-frozen plasma. If, after excessive bleeding and massive transfusion of erythrocytes, the addition of fresh-frozen plasma becomes necessary, we use the fresh frozen plasma from the same donor. We think that the fresh-frozen plasma from the same donor is the best fresh-frozen plasma you can give a patient who has already received the blood cells from this blood donation. Our blood donation center always separates erythrocytes and fresh-frozen plasma. It gives the same registration number to the erythrocyte unit and the fresh-frozen plasma and then stores the fresh-frozen plasma according to the registration numbers. When we need fresh-frozen plasma, we tell the blood donation center the number of the fresh-frozen plasma we

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In Reply:—Günter correctly points out that it is possible to freeze the plasma after separation from a donated unit of blood, and thereby have the plasma, in addition to the erythrocytes, available from the same donor, when necessary. The potential reduction of the number of donors to which the recipient is exposed is the rationale for the recommendation to use whole blood rather

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Reference

1. Kern SE, Johnson JO, Westenskow DR, Orr JA: An effectiveness study of a new piezoelectric sensor for train-of-four measurement. *Anesth Analg* 1994; 78:978-82

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want (which is the number of the erythrocyte unit already given). We think this is the better way to use fresh-frozen plasma than to add something toxic to the fresh-frozen plasma (methylene blue with ultraviolet-radiation or chemicals in the hope of killing viruses). The above has been used for 10 yr in our hospital without problems and with very low costs.

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than the combination of packed cells and fresh frozen plasma to treat massive blood loss.¹

Although it is possible to carry out Günter's suggestion in a small blood center, it would be logistically more difficult to effect for nondirected allogeneic units in larger centers or when transportation is required. It is easier (and likely less prone to error) to store the