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Dermal decontamination for corrosive exposures

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LETTER TO THE EDITOR

Dermal decontamination for corrosive exposures

To the Editor:

I thank Dr. Donoghue and Drs. Fosse et al for their interest in our recent mini-review. Donoghue is correct that the data in Table 2 of his paper² refer to time to irrigation with Diphoterine. However, the data showing that the group that applied Diphoterine first had a shorter time to its application than the group that applied water prior to Diphoterine is not surprising. As stated in Donoghue's paper, the workers were issued a personal supply of Diphoterine, a carrying case and a belt. Thus, those workers choosing to apply the Diphoterine clearly had the opportunity, and likelihood, of earlier decontamination than the water-first group.

In our review we, like Donoghue,² raised the issue of the potentially earlier water decontamination of more serious burns. Donoghue now speculates that this was not likely to have been the case because the mean measured burn surface areas (water-first 2.9%, Diphoterine-first 1.6%) were not statistically significantly different. However, these data, as discussed in my mini-review, are consistent with the possibility that more serious burns, treated with early and aggressive water decontamination, appeared better when evaluated because of that decontamination. The data in Donoghues paper² does not allow for a distinction between that possibility and the possibility of Diphoterine superiority.

Fosse et al., from Laboratoire Prevor (the marketers of Diphoterine), argue that earlier decontamination with Diphoterine is possible because they supply Personal Wash Units that workers carry attached to their belts. Certainly such devices are not unique to Diphoterine and could be filled with water.

The final message remains the same. The Donoghue study and the rodent study with hydrochloric acid burns of Cavallini and Casati,³ both done independent of Laboratoire Prevor, raise the possibility of Diphoterine superiority for decontamination of alkali burns. However, additional independent studies are necessary before any such conclusion could be confidently adopted. I believe that these, and subsequent independent studies, are subject to an extra measure of scientific scrutiny because of the discomfort medical practitioners harbor about utilizing a pharmaceutical (witch Diphoterine should be considered) of proprietary chemical structure. This contrasts markedly with other substances used therapeutically.

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Declaration of interest

The author reports no declarations of interest. The author alone is responsible for the content and writing of the paper.

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