COMMENTS

The Clinical Toxicity of Cinnabar

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In their important and timely mini-review article on mercury in traditional medicines, Liu et al. (1) compare the clinical toxicity of cinnabar with other chemical forms of mercury. We would like to comment on several of the issues.

In Table 1 they state that methyl mercury is used as preservative in vaccines. However, so far, we are unaware of any studies in which methyl mercury was used safely as preservative (2, 3, 4).

In Table 3 of the article, the authors summarized the clinical application of mercury chelating and/or mobilizing agents as treatment of mercury-induced toxicity and state that "No chelators" are available during methyl mercury intoxication (1).

It is true that, unfortunately, most patients with organic mercury intoxication had had unsatisfactory responses to chelation approach (5). However, it is important to acknowledge that in case of individuals who had acute methyl mercury overexposures and/or poisoning the meso-2, 3-dimercaptosuccinic acid (DMSA) should be administered as early as possible to prevent multisystem toxicity (6, 7).

Also, as shown in Table 3, Liu et al. suggest that EDTA (edetate, ethylendiamintetracetic acid) is clinically indicated in individuals with mercury chloride overexposure. However, there is no evidence that the use of calcium disodium EDTA is able to remove any mercury forms from human tissues owing to the very low affinity of EDTA for mercury molecules (6, 7).

By comparing the clinical toxicity of cinnabar with the other forms of mercury, clinicians should remember that cinnabar may cause an idiosyncratic non-allergic toxic reaction to mercury, which is independently related to the dose.

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