

Treatment of amlodipine overdose

Sir,

I read the case presented by Kute *et al*, recently published in your journal^[1] with great interest. They described a case of successful conventional treatment of refractory hypotension, non-cardiogenic pulmonary edema, and acute kidney injury after amlodipine overdose. Cases similar to this patient have previously been well described^[2-4] and I think this case report does not add new knowledge to the previous literature in this regard.

In my opinion, their case could better and earlier be managed by the administration of intralipid.^[5] In the previously performed studies, it has been shown that the patient's unstable hemodynamic due to overdose of non-local anesthetic drugs with lipophilic properties such as calcium channel blockers respond to the administration of intralipid.^[5] The probable mechanisms for the action of intralipid emulsion infusion include lipid sink phenomenon, increasing intracellular fatty acid content (overcoming the reduction in the ATP production) in cardiomyocytes, and increase in the intramyocyte calcium level (leading to a direct positive inotropic effect).^[5,6]

Furthermore, Jang *et al*,^[7] recently suggested that methylene blue might be a new antidotal treatment for refractory vasodilatory shock induced by amlodipine overdose. They had successfully managed a patient with refractory shock due to amlodipine overdose with the administration of methylene blue.^[7] In addition, the beneficial effects of metaraminol (aramine),^[8] Levosimendan,^[9,10] and plasma exchange^[11] in the management of significant amlodipine poisoning have previously been shown that could be used in the management of this patient.

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