

Salicylate poisoning

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To the Editor,

We would like to clarify a few points with regard to the letter on salicylate poisoning published in this issue of NEFROLOGÍA.

Firstly, we would like to thank Drs Nogué and Dueñas for their recommendations, which appear to be extremely useful for the management of such cases of poisoning.

They are correct in doubting that we started urine acidification treatment because the text later goes on to state that urine alkalinisation treatment was required. The purpose of urine alkalinisation treatment is to increase urinary pH in order to decrease reabsorption of salicylates by the proximal convoluted tubule. In fact, it increases excretion of metabolites by 10 to 20 times with respect to patients who do not receive this treatment.¹

Regarding the administration of activated charcoal and gastric lavage, both treatments have been shown to decrease absorption of the toxin, and their use depends on the time elapsed between ingestion and receiving medical care. It has been proven that combined therapy produces better results than monotherapy,¹ and therefore numerous guidelines recommend concomitant administration. Gastric lavage is a very useful technique in this type of situation, mainly in the first hour after ingestion of the toxin, although it may be indicated during the first 8 to 12 hours if the salicylate tablets have enteric coating, as was true in our case. As for activated charcoal, its action lasts for the first 2 to 4 hours after ingestion,^{2,3} and it is currently a key treatment for most types of poisoning as Drs Nogué and Dueñas

state. In our clinical case, gastric lavage was performed; activated charcoal was not administered since more than 4 hours had elapsed between ingestion and assessment of the patient by the emergency department, and it would not have been very effective.

After examination, the patient was prescribed urine alkalinisation, gastric lavage and saline to correct hydroelectrolytic alterations, and admitted to the intensive care unit. After 5 hours, despite receiving treatment, the patient experienced decreased cognitive state, hypotension and oliguric renal failure, and we then decided to start haemodialysis treatment. Extracorporeal therapy was indicated because of the patient's poor clinical evolution (worsening neurological state, sustained hypotension despite saline administration and acute oliguric kidney failure), and not because of the serum salicylate level.¹⁻³ The literature describes numerous cases in which levels below 100mg/dl have proven fatal for the patient, and many articles recommend the use of haemodialysis for rapid correction of the acid-base disorder and hydroelectrolytic imbalance in such cases.^{4,5} However, it is true that there are no studies comparing conservative treatment and use of dialysis. In our opinion, a nephrologist should be consulted in cases of salicylate poisoning in order to evaluate the option of haemodialysis, particularly in cases with poor clinical evolution.

Conflicts of interest

The authors affirm that they have no conflicts of interest related to the content of this article.

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Use of estimated glomerular filtration formulas for dose adjustment

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To the Editor,

While we agree with many of the ideas expressed in the letter by Peral et al,¹ we would like to expand on the following:

1. Clinical laboratories in Spain, according to national recommendations,² generate analytical reports including the glomerular filtration rate (GFR) calculated by means of an equation. Unpublished data from a national