

ASSESSMENT OF ANTIDOTE STOCKS IN HOSPITALS OF THE ITALIAN REGION EMILIA ROMAGNA

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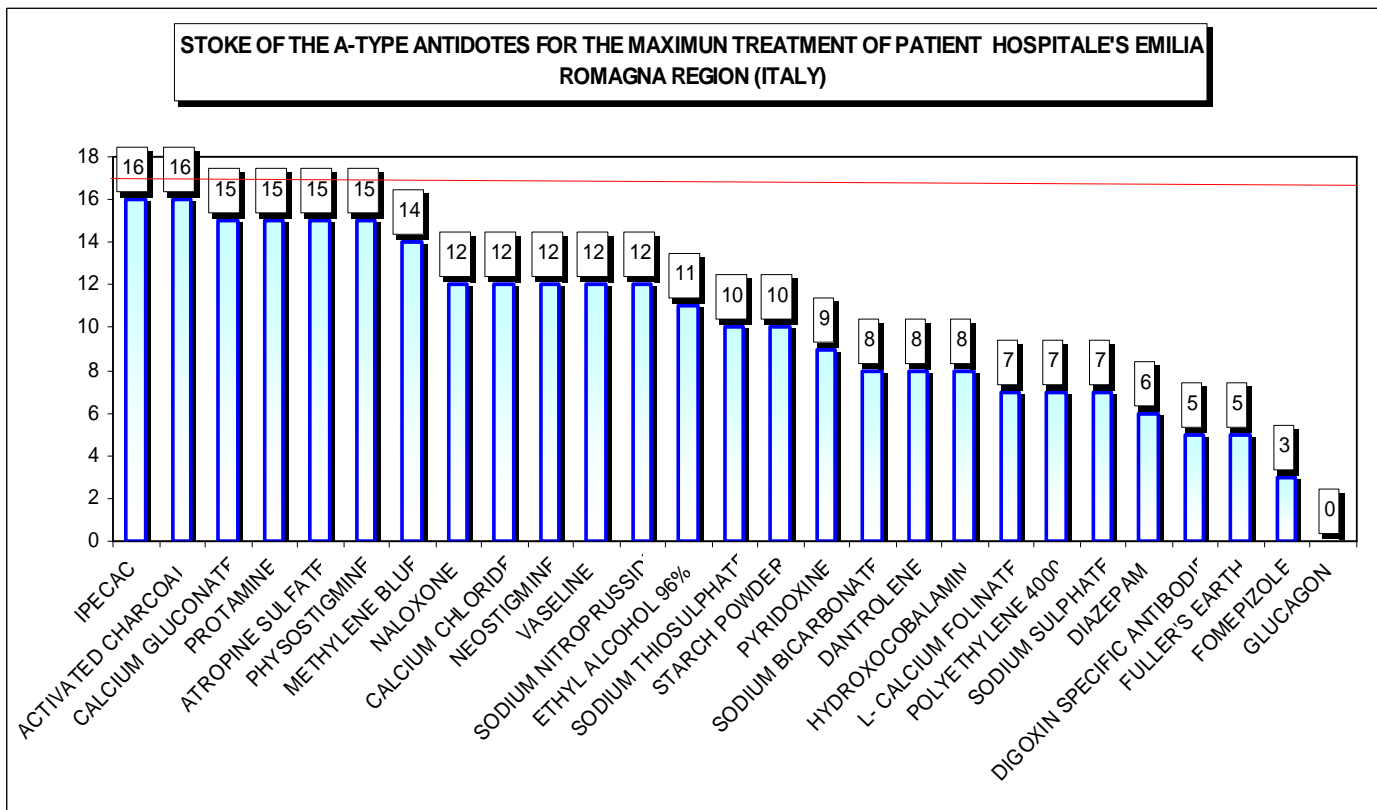
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Background: The Department of Pharmacy of the University Hospital of Ferrara (AOUFE) has been appointed Regional Centre of Reference for the supply of some antidotes by the Region Emilia Romagna (RER). In order to assess their availability, a qualitative-quantitative analysis of antidotes available in regional hospitals has been carried out.

Purpose: We paid particular attention to antidotes supposed to be used within 30 minutes, namely the A-type, and which should be available in all hospitals.

Methods: All 17 regional hospitals were asked for information about the kind and the quantity of stocked antidotes. The number of potential intoxicated users has been calculated according to the maximum dosage.



Results: All 17 regional hospitals provided the required information with the following results. Among the 27 A-type antidotes we analyzed, the stock for the maximum treatment of a patient was the following: 2 antidotes (activated charcoal, ipecacuana) were available in 16 hospitals; 4 antidotes (atropine sulphate, calcium gluconate, physostigmine and protamine sulphate) were available in 15 hospitals, and antidote methylene blue was available in 14 hospitals. Eleven A-type antidotes (pyridoxine, hydroxocobalamin, sodium bicarbonate, dantrolene, l-calcium folinate, polyethylene glycol 4000, MgSo₄, diazepam, Fuller's earth, digoxin-specific antibodies, fomepizole) were available in less than 10 hospitals. Antidote glucagon was not present in any hospital to treat a patient.

The availability of antidotes to be used within 2 hours (B-type) was limited: ammonium chloride was found in 1 hospitals and dimercaprol was not available in any hospital.

Conclusion: Quantities of some antidotes available in regional hospitals are not sufficient to treat a single patient. This is the case for fomepizole, digoxin-specific antibodies and Fuller's earth among A-type antidotes, and of Prussian blue, dimercaprol and pralidoxime among B-type ones.

Therefore, the need to provide many regional hospitals with higher stocks of antidotes is recognized.