INTELLIGENT SYSTEM FOR DIFFERENTIAL DIAGNOSIS AND MONITORING OF PATIENTS AFTER CARBON MONOXIDE POISONING

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ABSTRACT

According to statistical data, with the development of oil, chemical, gas industries cases of poisoning caused by toxic substances employed in these branches have become more frequent recently. A special place among them is occupied by carbon monoxide, poisoning with which has been growing steadily. This research deals with poisonings caused by carbon monoxide and chemical substances which are clinically close to carbon monoxide in pre-laboratory situation and this calls for conducting differential diagnosis. Considering such consequences of similar-poisonings as myocardial infarction, Parkinson's disease u.a. it is expedient to perform monitoring of a patient after staying in a stationary hospital which determines optimum time of its performance, kind and the number of analyses required for developing an intelligent system. This paper proposes an elaboration of an intelligent information system for differential diagnosis and monitoring in cases of poisonings with toxic substances using carbon monoxide as an example.

Keywords: Carbon monoxide, differential diagnosis, monitoring, biostatistical methods, intelligent system.