

"Multicenter Scientific Collaboration: Future of Clinical Toxicology"

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Development of clinical toxicology is retarded by lack of prospective controlled trials. This fact was underlined in many recent reviews and guidelines [1, 2]. Actually we can see case and case series descriptions regularly published but large comparative researches of treatment given to poisoned patients are scarce. Working in toxicological unit for 24 years I can observe several barriers to toxicological research:

First of all it is a lack of cases. Toxicological service is presented by poison information centers (PICs) in majority of countries. PIC's data as a rule don't include cases admitted to general hospitals which were not consulted in PIC. Limitations of PICs data have been described by Hoffman RS [3]. Poisoning treatment units which exist in some big hospitals usually admit not more than 1,000 poisoned patients annually and there are only a few units all over the world admitting more than 5,000. Lack of patients causes the lack of cases which can be involved into the studies. For example we wanted to check if hemodialysis is effective for baclofen removing. But we have only 6–8 cases of severe baclofen poisoning annually. How many years will it take us to complete our study?

The next barrier is lack of toxicological analysis availability. Especially it is concerned to toxic agent measurement. It complicates the dose - response studies and evaluation of toxin removing techniques effectiveness.

And the last – approaches to the poisoned patient's management are different. For example gastric lavage is used for 34% poisoned patients in Yekaterinburg, Russia [4] and for 9% in Oslo, Norway [5]. Sometimes it is impossible to compare the patient's outcomes even in different hospitals located in the same city.

It is difficult to overcome these barriers but we are able to do it. Only joint multicenter studies allow us to produce

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evidence base recommendation. We could see excellent examples of international collaboration for the latest time: American College of Medical Toxicology established the Toxlc, a prospective registry for toxic exposures managed by clinical toxicologists in 2010 [6], we could see excited analysis of risk factors related to poor outcome after methanol poisoning given by toxicologists from five countries in 2012 [7]. Euro-DEN Research Group was established for recreational drugs poisoning study in 2013 [8]. The benefit of such investigators associations is a possibility to collect data in united protocol prospectively with appropriate quantity of cases.

I would like to encourage our authors to cooperate for toxicological researches. I do believe this collaboration will give us a development of clinical toxicology. We will be excited to publish the manuscripts produced by a multicenter research networks.

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