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AN OUTBREAK OF LEAD POISONING FROM TRADITIONAL REMEDIES IN THE NORTH OF VIETNAM

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Objective: To evaluate some epidemiological, demographic, clinical and laboratory features of lead poisoning. To evaluate the treatment of lead poisoning, especially the chelation therapy in small children and the situation of limited resources.

Methods: All the patients already used traditional remedies come to our poison center to be screen or treated for lead poisoning during the outbreak from November 2011. The information about the use of remedies, clinical signs and symptoms, blood lead levels, blood count, biochemical tests (including urea, creatinin, calcium, iron, protein and liver enzyme) . The traditional remedies will be tested for lead content. If the blood lead levels is higher than 20 ∝g/dL, she/he will be evaluated about the mental development. The lead level is defined as increased if it is higher than 10 ∝ g/ dL. The chelation therapy is indicated if the lead level is increased and the patient is symptomatic. The treatment includes decontamination (whole bowel irrigation if the patient come early after ingestion), chelation therapies with the use of D-penicillamine, Ca_2Na_2EDTA, succimer and BAL. The adverse effects of the chelators, clinical and laboratory improvement (including blood and urine lead levels) are evaluated.

Results: The outbreak is still ongoing. The study has been being performed and final results and details will be available before the presentation at APAMT congress in 2012. Preliminary results: 1639 patients [39 (2.38%) adults, 1600 (97.62%) children] have been screened or treated until June 12, 2012. The patients have been coming from 26 provinces of the country, mainly in the North of Vietnam. The blood lead levels have been available in 1333 patients [higher than 10 ∝g/dL in 499 (37.43%) patients, lower than 10 in 834 (62.57%)], the highest blood lead level has been 229 ∝g/dL. Majority of patients used unregistered remedies from sellers or practitioners on the open market, streets. The remedies have high content of lead and it appears that lead oxide is used and intentionally composed. Administration of remedies by ingestion or oral placement 2-3 times a day for 2-3 days can lead to significant poisoning. The observed outbreak is just like a floating ice berg and magnitude of the poisoning seem much larger. Eighty patients have been being treated from November 2011 until now. Low doses of D-penicillamine and EDTA appear to be effective and safe for the treatment of lead poisoning in stable patients.

Conclusions: Using traditional medicine is one important source of lead exposure and small children are vulnerable to lead poisoning with this source. This exposure does affect the health of children. The treatment being individualised in our specific condition of limited available resources is still effective.