Poster Abstracts

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LEAD POISONING DUE TO INCENSE STICK BURNING

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Background: In Asia region, incense burning is an important folk activity and has been noted to relate with several health impacts, including chronic respiratory diseases and neoplasms. Heavy metal exposure, or even increased blood lead levels in children had also been demonstrated a dose-dependent relationship with frequent incense burning at home. But, there was no documented case report of lead poisoning just only due to incense burning.

Case Report: A 65-years-old housewife was admitted to the hospital due to severe anemia, lower legs pitting edema, bone soreness, abdominal pain and exertional dyspnea for several months. Severe anemia with basophilic stippling in red blood cell and blood lead level about 60 μg/dL was finally diagnosed after weeks' workup. She is now under chelating therapy. Tracing back her histories, she was a clergy of Buddhist or Daoist and has been exposed to the smoke of more than 30 sticks of burning incense every day for more than 20 years. Negative other lead exposure was noted after survey, including herbs or contaminated drinking water. Her husband who worked with her was also found with blood lead level more than 80 μg/dL.

Discussion & Conclusion: Lead and other heavy metals contamination have been found in incense sticks. In addition to the prevalence of airway diseases and neoplasms, chronic and frequent exposure to smoke of incense burning might result in lead poisoning.