Poster Abstracts

PO-13

D-PENICILLAMINE; A LEGENDARY SUBSTITUTE FOR STANDARD CHELATING THERAPY IN LEAD POISONING

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Objectives: The aim of this study is to evaluate the efficacy of D-penicillamine in treatment of lead poisoning mainly in the outpatient setting.

Methods: In a cross-sectional study during the recent epidemic flaw of lead poisoning in Iran, the lead-poisoned patients referring to our clinic were treated by D-penicillamine capsules, 250 mg/QID for 5 or 10 days. They were recommended to check another blood lead level (BLL) almost four weeks after termination of the treatment and refer to our clinic again.

Results: A total of 67 patients were evaluated. Median [IQR] BLL was 106.00 [84, 131] µg/dL at the initiation of therapy that reached to a mean of 52.6 ±28.8 µg/dL after a median [IQR] treatment period of 7 [5, 10] days (P< 0.001). There was no statistically significant difference between the 5- and 10-day protocols regarding complications and improvement. Treatment had resulted in a median [IQR] reduction of 54 µg/dL [33, 90] (range; -20 to 231 µg/dL) in the patients' BLL which is a 33.9-percent (range; -29.69 to 99.06– percent) reduction in this measure.

Conclusion: D-penicillamine is probably a safe and efficient treatment in lead poisoning particularly in special situations such as epidemics and shortage of first-line antidotes.