

Intossicazione acuta da piombo inorganico in addetti alla ristrutturazione edilizia

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KEY WORDS

Lead; saturnine colic; building industry

SUMMARY

«Acute inorganic lead poisoning in workers employed on building renovation». Background: Occupationally, there are a number of work processes that constitute a long-term risk as sources of exposure to lead. In these processes the presence of lead is not evident but represents a hidden risk of poisoning. Objectives: Study of two cases of hidden exposure to lead that were discovered during renovation work on a historical building. Methods: Acute lead poisoning symptoms appeared in the 2 workers. The current protocol for treatment of lead poisoning was applied, which consisted in administration of a chelating agent (EDTA), with subsequent monitoring of indicators of dose (PbB: blood lead level, PbU: urinary lead level) and indicators of effect (erythrocyte Protoporphyrin IX, urinary δ -aminolevulinic acid (ALA-U), urinary coproporphyrins). Results: The lead colic and anaemia appeared at PbB values (102 $\mu\text{g}/\text{dl}$ e 104 $\mu\text{g}/\text{dl}$) that were higher than the PbB action value (40 $\mu\text{g}/\text{dl}$) and higher than the limit value (60 $\mu\text{g}/\text{dl}$). Conclusions: The gravity of the symptoms, the high number of persons potentially involved, the difficulty of reclamation and probable urban contamination, with relative consequences concerning particularly infants and women in fertile age, are sufficient grounds to require effective legislative action and improvement in the services available at the hospitals involved.