Heavy metal intoxication

Objectives

1. Discuss the public health aspects of lead poisoning in developed and developing countries
2. Describe symptoms of lead toxicity
3. Describe the radiographic features of lead toxicity

Discussion

By far the most common variety of heavy metal intoxication in children is lead poisoning. Symptomatology related to lead poisoning is primarily neurologic and gastrointestinal, so it is unlikely that the orthopaedist will often be in a position to make the primary diagnosis. In the United States, a somewhat coordinated program has been underway for over 10 years to reduce the exposure of children to lead, lead-free gas being one outcome of this effort. The socioeconomic stratification of exposure to lead has been well documented, and in parts of the world, dust contains significant quantities of lead. Behavioral disorders and developmental delays have been attributed to even low levels of lead intoxication. Dense metaphyseal lines are a cardinal radiographic feature of lead intoxication.

References