



Severe Abdominal Pain presented by Lead Poisoning and diagnosed by x-rays : A Case Report

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Abstract

Lead poisoning is a rare but serious disease. The clinical manifestations of lead poisoning are various and nonspecific such as abdominal pain, headache, dizziness, nightmare, fatigue and so on. Rapid diagnosis of lead poisoning is challenging because it does not have special symptoms and the morbidity is very low. Our case was a 25 young man with generalized tenderness of abdomen and anemia in lab data's. We found his problem with x-rays graphs.

Lead poisoning is a rare disease and easy to be misdiagnosed as acute abdomen disease when present with abdominal pain. Lead poisoning should be considered when common causes of abdominal pain are excluded, especially patients with anemia and abnormal liver function. The diagnosis of lead poisoning is mainly replied on the blood or urine lead concentrations.

Then we should firstly cut off the contact with lead and use metal complexion agent to facilitate lead excretion. Lead poisoning is not an enough known pathology by practitioners. It can affect the mental future of our children and lead to neurological or kidney damages.

Key words: Lead, Poisoning, Abdominal pain, Gastrointestinal symptoms, Opium.

Background:

Lead poisoning is a rare but serious disease. The cause can be due to occupational or environmental exposure. Ingestion, inhalation, or dermal exposure to the lead contamination can cause poisoning[1,2]. The clinical manifestations of lead poisoning are various and nonspecific such as abdominal pain, headache, dizziness, nightmare, fatigue and so on.[3] Abdominal pain in leading poisoning can be misdiagnosed as an acute abdomen[4]. Rapid diagnosis of lead poisoning is challenging because it does not have special symptoms and the morbidity is very low[5]. Lead poisoning is a major public health risk which may involve major organs. Recently, there have been reports of an outbreak of lead toxicity due to opium contamination with lead in Iran. Gastroenterology symptoms were the most presentation of lead toxicity in opium users[6]. Abdominal pain may be a presenting symptom of lead poisoning and is often difficult to diagnose. This study aimed to determine the prevalence of abdominal pain in patients seen in the Laghman Hakim Hospital ED and GI clinic who were lead-intoxicated, with or without opiate use disorder.[7]. Lead poisoning is not an enough known pathology by practitioners. It can affect the mental future of our children and lead to neurological or kidney damages.[8] Lead affects major organ systems in the body including hematopoietic, gastrointestinal, respiratory, renal, nervous, and cardiovascular systems mainly through increased oxidative stress, ionic mechanisms, and apoptosis[9,10,11]. This case shows use of opium can have dangerous and illusory signs and symptoms

Case presentation:

our case was a 25 years man who admitted by sudden, acute generalized abdominal pain, in surgery pat was examined that had generalized tenderness and guarding. In lab data's he had anemia and no Leukocytosis. We performed upright chest x-ray, lie down and upright Abdominopelvic x-ray graphs and we found this exposure:



Figure 1: Ileus of GI tract



Figure 2: Particle of metal



Figure 3: Particles of lead in GI tract

Conclusion:

Lead poisoning is a rare disease and easy to misdiagnose as acute abdomen when present with abdominal pain. Lead poisoning should be considered when common causes of abdominal pain are excluded, especially for patients with anemia and abnormal liver function. The diagnosis of lead poisoning is mainly relied on the blood or urine lead concentrations. We should firstly cut off the contact with lead and use metal complexion agent to facilitate lead excretion when the diagnosis of lead poisoning is made[12] . Lead poisoning is not an enough known pathology by practitioners. It can affect the mental future of our children and lead to neurological or kidney damages[8].

Declarations:

Ethical Approval and Consent to participate:

The content of this manuscript are in accordance with the declaration of Helsinki for Ethics. No committee approval was required. Oral and written consent to participate was granted by the her husband.

Consent for publication:

“Written informed consent was obtained from the patient's legal guardian for publication of this case report and any accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal.”

- Availability of supporting data

It is available.

- Competing interests:

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Ahmad Reza Shahraki is the surgeon of patient and writes this paper. Reza Abaee collected Data's and Elham Shahraki reviews paper.

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Only in uncommon circumstances of unclear imaging findings or deterioration in the patient's conditions, a diagnostic laparoscopy as a minimal invasive approach may settle the diagnosis and can be extended to a therapeutic maneuver.

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