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The management of bullet ingestion in a child

To the Editor,

Ingestion of foreign bodies is most commonly observed in children aged between 6 months and 3 years. Generally, the children in this age group put foreign bodies into their mouths to know them. Foreign bodies most commonly lead to obstruction at the cricopharyngeal muscle level, in the 1/3 middle part of the esophagus, in the lower esophageal sphincter, in the pylor and in the ileocecal valve (1). The most commonly ingested foreign bodies include coins, toy parts, fish bone, pin and batteries (1,2). Foreign bodies pass through the gastrointestinal system spontaneously with a rate of 80-90%. 10-20% of foreign bodies are removed endoscopically and only 1% need surgical intervention (3). In this article, ingestion of bullet which is an unusual foreign body was presented and treatment approach was discussed.

A 14-month-old female patient presented to our outpatient clinic with a complaint of ingesting a bullet approximately 3 hours ago. Her vital signs were found to be normal. It was learned from the family that the child ingested the bullet while playing in the street. Physical examination was found to be normal. White blood cell count was found to be 11 000/mm³ and the other laboratory findings were within normal limits. Abdominal pain and vomiting were not observed in the follow-up. Standing abdominal x-ray revealed that the bullet was at the level of the jejunum. No pathology was found in the patient who was evaluated by the division of Hematology in terms of hemolytic anemia. Serum and 24-hour-urine lead levels were found to be normal. Daily standing abdominal x-ray follow-up revealed that the bullet progressed in the intestines. In the 56th hour, the bullet exited from the anus spontaneously.

Similar to our patient who found and ingested a bullet while playing in the street a child who ingested a piece of lead while eating meat was reported in the literature (4). In

contrast to our patient, the piece of lead was settled in the appendix and preventive appendectomy was performed against potential lead poisoning and appendicitis. In our patient, no surgical intervention was needed, since blood and urine lead levels and abdominal examination were found to be normal.

Lead poisoning is a condition which has been known for a long time and widely described in children. It may lead to symptoms and signs including abdominal pain, vomiting, constipation, joint pain, headache, increased blood pressure, malaise and loss of appetite (5). The time from wounding by firearms to onset of symptoms has been reported to range between 2 days and 52 years (6). Serum lead level should be measured regularly at the first admission to the hospital and before discharge in any patient who has a piece of lead in his/her body. In patients who have bullets in their body as observed in woundings by firearms, serum lead levels should be monitored monthly in the first three months and yearly thereafter (7). In our patient, monitoring of this unusual foreign body was done by observing the clinical symptoms of lead poisoning and serum and urine lead levels. Since the bullet exited from the body, monitoring of serum lead levels was not needed after discharge.

Conclusively, ingestion of bullet should be closely monitored clinically and by laboratory tests in terms of lead poisoning. In addition, it would be more appropriate to follow up the patients before the signs and symptoms of lead poisoning develop instead of urgent surgery.

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