Plain Radiograph of Abdomen Mimicking Contrast Study

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Received: 15 November 2017 / Accepted: 27 February 2018 / Published online: 5 March 2018
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Abstract

A case of road traffic accident with incidental finding of multiple opacities in the pelvis radiography was evaluated and diagnosed as chalk eating was the cause and managed conservatively. We report here the details of the case.

Keywords Eating disorders · Kaolin · Chalk chunks · Pica

Introduction

We present an interesting case of incidentally detected chalk chunks eating in a young female.

Case Report

A 17-year-old female was admitted with a history of trauma with signs of left femur fracture. Radiography of femur with pelvis revealed a fracture with multiple opacities in the pelvis. Plain radiography of abdomen (Fig. 1) and plain computerized tomography (Fig. 2) revealed opacities in entire colon starting from cecum to the rectum. History revealed ingestion of chalk chunks from childhood with passing hard white fecal pellets. As the patient was not passed motion for the past 5 days, proctoclysis enema was given and multiple hard white fecal pellets were evacuated. Initial stabilization of fracture with skin traction followed by definitive fixation was done after improving her nutrition. Patient was counseled by psychiatrist about behavioral modification.

Discussion

Pica is an eating or feeding disorder characterized by recurring ingestion of non-nutritive substances, such as hair, paper, paint, stones, soil, chalk, and coal [1]. According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-V), 2 years is the suggested minimum age for a pica diagnosis; at younger ages, this was considered as developmentally normal [1]. Pica is most commonly seen in pregnant women, small children, institutionalized persons, and adults with developmental disabilities like schizophrenia and obsessive compulsive disorder [1, 2]. Culture-bound ingestion of chalk was reported in few communities [3, 4]. The clinical presentation of pica is highly variable and is associated with toxic ingestion, parasitic infestation, micronutrient deficiencies, and constipation [1, 5]. Occasional cases of bowel obstruction and perforation were reported [6, 7]. Currently, behavioral strategies like training in discrimination between edible and nonedible items are considered the most effective in the treatment of pica [8]. In conclusion, strong suspicion for pica should be kept in mind when multiple opacities were noted in the radiograph mainly in colon.

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Fig. 1 Plain radiography of abdomen showing calcified fecoliths in the colon

Fig. 2 Computed tomography of abdomen showing calcified fecoliths in the colon

Compliance with Ethical Standards

Conflicting Interest The authors declare that they have no conflict of interest.

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