ARCHIVES OF HELLENIC MEDICINE: ISSN 11-05-3992

CONTINUING MEDICAL EDUCATION
ΣΥΝΕΧΙΖΟΜΕΝΗ ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

Surgery Quiz – Case 42

ARCHIVES OF HELLENIC MEDICINE 2022, 39(5):712–713
ΑΡΧΕΙΑ ΕΛΛΗΝΙΚΗΣ ΙΑΤΡΙΚΗΣ 2022, 39(5):712–713

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A 71-year-old female patient, with a history of primary refractory newly diagnosed acute myeloid leukemia with myelodysplasia-related cytogenetic changes under salvaged liposomal daunorubicin and cytarabine waiting for allogeneic hematopoietic cell transplantation, presented to the emergency department complaining of acute onset of severe, diffuse abdominal pain with associated fever. On presentation, the patient was afebrile and reported that abdominal pain was ameliorated; physical examination of the abdomen was normal, white blood cell (WBC) count and C-reactive protein (CRP) level were normal, and arterial blood gas analysis was within normal reference range. Abdominal radiograph and computed tomography (CT) on presentation presented below (figures 1 and 2). As life-threatening conditions such as bowel perforation, ischemia and severe colitis were not established based on initial clinical, laboratory and imaging findings, the patient underwent a trial of conservative treatment under strict re-evaluation.

What is your diagnosis?

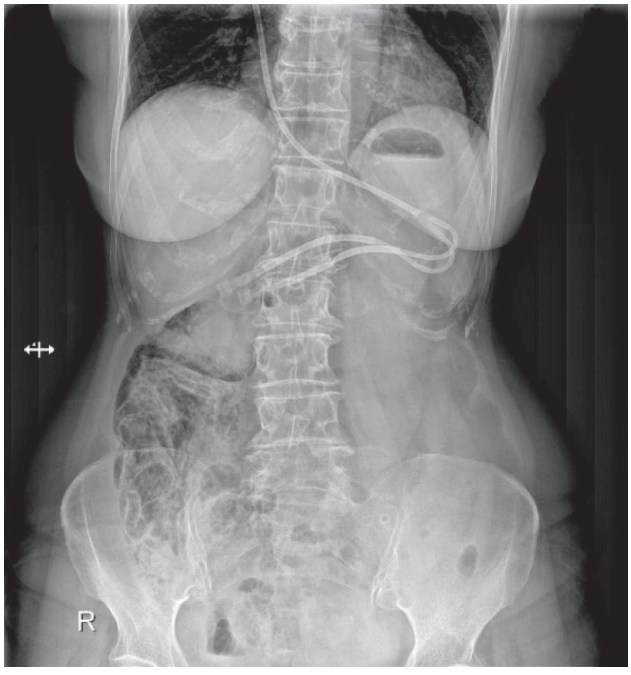

Figure 1

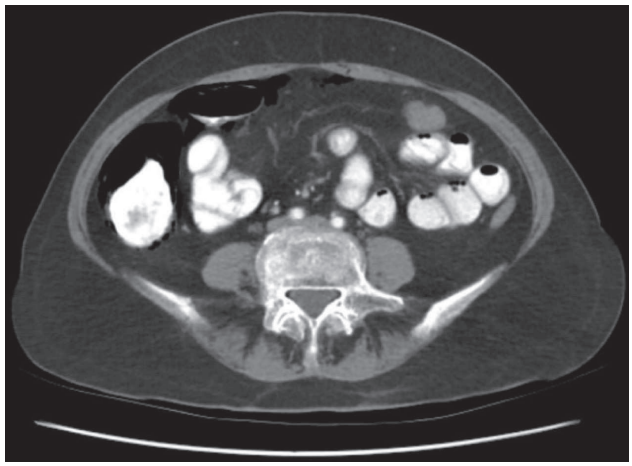

Figure 2

Comments

Based on CT findings, the present patient diagnosed with right-sided colonic pneumatosis. Upon diagnosis, our main dilemma was whether surgical intervention was required or not. As exclusion of life-threatening conditions required high priority, bowel perforation, ischemia and severe colitis were excluded on initial assessment. The patient treated conservatively with cessation of enteral nutrition and broad spectrum antibiotics (piperacillin/tazobactam) under strict re-evaluation. On re-assessment, pneumatosis coli seemed to be benign as no worrisome clinical (peritonitis, bowel obstruction and sepsis), laboratory (leukocytosis, elevated C-reactive protein [CRP] level, lactate value of more than 2.0 mmoL/L) and imaging (bowel wall thickening, mesenteric stranding, ascites, bowel

dilation, location in the small bowel, portal and mesenteric vein gas) findings developed. As no other etiologic factors identified, pneumatosis coli considered to be chemotherapy-induced. After one week of hospitalization, interval CT showed partial resolution of imaging findings (fig. 3); the patient referred to a tertiary hospital for hematology and oncology specialty care.

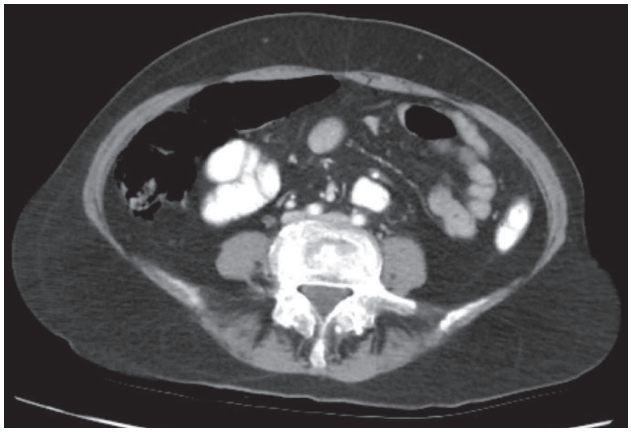

Figure 3

References

1. FERRADA P, CALLCUT R, BAUZA G, O'BOSKY KR, LUO-OWEN X, MANSFIELD NJ ET AL. Pneumatosis Intestinalis Predictive Evaluation Study: A multicenter epidemiologic study of the American Association for the Surgery of Trauma. *J Trauma Acute Care Surg* 2017, 82:451–460
2. KIRMANIDIS M, BOULAS K, KARIOTIS I, PARASKEVA A, HATZIGEORGIADIS A. Surgery quiz – case 17. *Arch Hellen Med* 2019, 1:137–139

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Answer: *benign chemotherapy-related pneumatosis coli*