

A 50-year-old man comes to the physician due to a 2-day history of constipation and inability to pass flatus. For the last 3 days he has been having intermittent, but worsening right lower quadrant (RLQ) pain. He has vomited several times today and feels nauseated. Examination shows a distended abdomen with tenderness in the RLQ; there is no rebound, there are no masses or hernias, and bowel sounds are absent. Rectal examination shows an enlarged prostate. An upright x-ray of the abdomen shows gas distributed throughout the small and large bowel and some fluid levels. After nasogastric tube placement and hydration, his temperature is 36.5 C (97.7 F), blood pressure is 140/80 mm Hg, pulse is 57/min, and respirations are 12/min. Laboratory results are as follows:

Red blood cells	4.5 million/mm ³
White blood cells	7,400 μ /L
Sodium	140 mEq/L
Potassium	3.5 mEq/L
Chloride	100 mEq/L
Blood urea nitrogen	15 mg/dL
Creatinine	1.0 mg/dL
Urine pH	5.5

Urine sediment: WBC 2/hpf and red blood cells 15/hpf, and needle-shaped crystals. Which of the following is the most appropriate next step in management?

- ☐ A. Barium enema
- ☐ B. Colonoscopy
- ☐ C. CT of abdomen
- ☐ D. Enteroclysis
- ☐ E. Sigmoidoscopy

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- ☐ A. Barium enema [11%]
- ☐ B. Colonoscopy [9%]
- ☒ C. CT of abdomen [73%]
- ☐ D. Enteroclysis [5%]
- ☐ E. Sigmoidoscopy [2%]

Proceed to Next Item

Explanation:

User Id: [redacted]

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Proceed to Next Item

Explanation:

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This ileus is possibly due to a vagal reaction caused by ureteral colic. Needle-shaped crystals on urinalysis indicate uric acid stones. Uric acid stones, which are radiolucent, have to be evaluated by CT of the abdomen or intravenous pyelography. Abdominal ultrasonography may also detect radiolucent stones. CT is also useful for diagnosing other pathology, such as appendicular abscess or bowel obstruction, especially in this patient with ileus. Ileus will resolve when the ureterolithiasis is treated. Stones <1 cm may pass spontaneously with hydration and analgesia; otherwise, surgical intervention is needed.

(Choices A and E) There is no left-sided pathology in this patient to indicate performing a barium enema or sigmoidoscopy.

(Choice B) Colonoscopy is not indicated for right-sided pathology and should not be performed in acute pathology of the bowel wall due to the risk of perforation.

(Choice D) Enteroclysis is used to diagnose small bowel tumors and other pathology, which can cause intestinal obstruction.

Educational objective:

Uric acid stones, which are radiolucent, have to be evaluated by CT of the abdomen, ultrasonography, or intravenous pyelography.

References:

1. [Ultrasonography versus computed tomography for suspected nephrolithiasis.](#)