

**Figure 2.** Biopsy specimen from the bladder mass. Leukocytoclastic vasculitis and extravasation of red blood cells in the sub-epithelial stroma were observed. The arrowhead represents leukocytoclasia. (hematoxylin and eosin stain, **A**, bar: 100  $\mu\text{m}$ , **B**, bar: 10  $\mu\text{m}$ ).

## References

1. Dalpiaz A, Schwamb R, Miao Y, Gonka J, Walzter W, Kah SA. Urological manifestations of Henoch-Schönlein purpura: a review. *Curr Urol* 2015;8:66-73.
2. Siegenthaler GM, Rizzi M, Bettinelli A, Simonetti GD, Ferrarini A, Bianchetti MG. Ureteral or vesical involvement in Henoch-Schönlein syndrome: a systematic review of the literature. *Pediatr Nephrol* 2014;29:235-9.
3. Allen SJ, Sprigg A, Davidson DC. Haemorrhagic cystitis and urinary retention in Henoch-Schönlein purpura. *Eur J Pediatr* 1992;151:312.

## Pulmonary Sarcoidosis: An Unusual Presentation with Acute Abdominal Pain

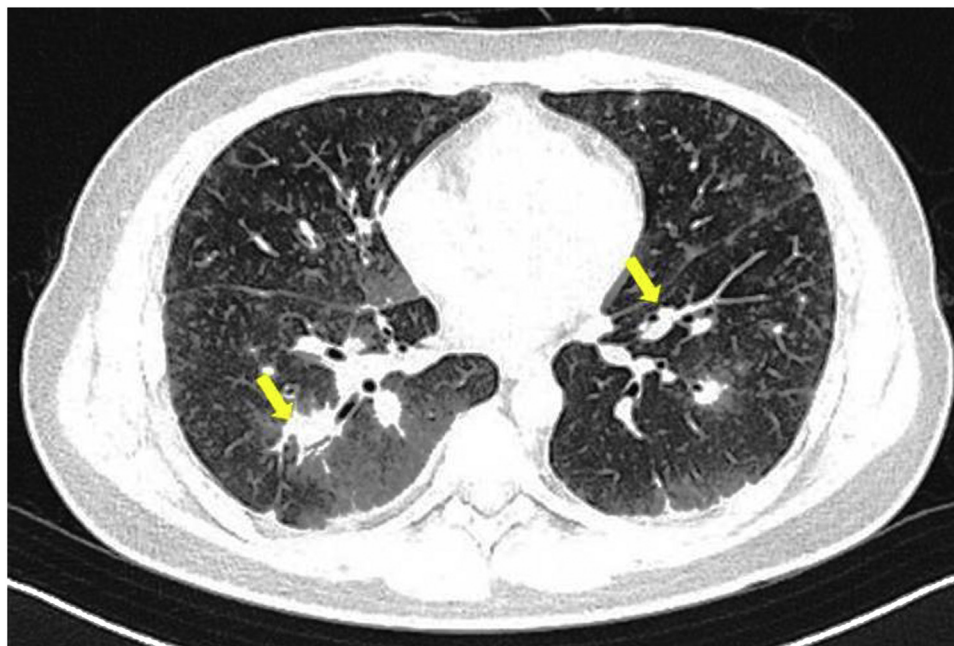


An 18-year-old boy with no prior medical history presented to the emergency department with an acute-onset, severe, upper abdominal, nonradiating pain with nausea and constipation. He also complained of excessive fatigue and muscle cramps. His general physical examination was unremarkable. The abdomen was soft, with mild tenderness in the epigastrium. Laboratory results showed elevated serum calcium of 15.5 mg/dL (reference, 8.4-10.2 mg/dL) and elevated serum creatinine of 1.9 mg/dL (reference, 0.8-1.5 mg/dL). Electrocardiography demonstrated a short QT interval. His complete blood counts, liver function tests, serum electrolytes, and serum amylase and lipase levels were normal. Further investigation revealed low serum levels of phosphorous (1.5 mg/dL; reference, 2.5-4.5 mg/dL) and serum parathyroid hormone (7.6 pg/mL; reference, 15-68.3 pg/mL) and elevated serum 1, 25-hydroxyvitamin D level (183 ng/mL; reference, 51-80 ng/mL). His 24-hour urinary calcium was elevated, at 350 mg/day (reference, 50-300 mg/day). Computed tomography (CT) of the abdomen and gastroduodenoscopy was normal.

CT of the thorax revealed multiple areas of patchy consolidation with ground glass opacification (**Figure 1**) and multiple homogenous nonnecrotic enlarged hilar and mediastinal lymph nodes (**Figure 2**). Bronchoscopy showed

granular bronchial mucosa with nodularity (**Figure 3**). An endobronchial biopsy specimen showed numerous collections of foreign body giant cells with noncaseating granulomas; few of the giant cells showed concentric bodies (Schaumann bodies) (**Figure 4**), which was consistent with the diagnosis of sarcoidosis. Serum angiotensin converting enzyme level was elevated, at 90 nmol/mL/min (reference, <40 nmol/mL/min).

Sarcoidosis is a rare multisystem granulomatous disorder of unknown etiology.<sup>1</sup> Pulmonary involvement is the most common; however, primary gastrointestinal tract involvement is extremely rare, and the majority of cases are asymptomatic.<sup>2</sup> The biochemical profile of our patient was very typical of sarcoidosis, showing hypercalcemia, hypoparathyroidism, and elevated 1, 25-hydroxyvitamin D, indicating underlying granulomatous etiology. The mechanism of hypercalcemia is due to the uncontrolled synthesis of 1, 25-dihydroxyvitamin D<sub>3</sub> by macrophages. 1, 25-dihydroxyvitamin D<sub>3</sub> leads to increased absorption of calcium in the intestine and increased resorption of calcium in the bone, which results in a low parathyroid hormone level.<sup>1,2</sup> Hypercalcemia is a known complication and variably reported in 2%-63% patients with sarcoidosis.<sup>3</sup> Abdominal pain is one of the common symptoms of hypercalcemia in sarcoidosis.<sup>4</sup> However, other causes, including peptic ulcer, pancreatitis, and nephrolithiasis, also may be complicated by hypercalcemia, which was not present in our patient. The constellation of symptoms has led to the mnemonic of “stones, bones, abdominal

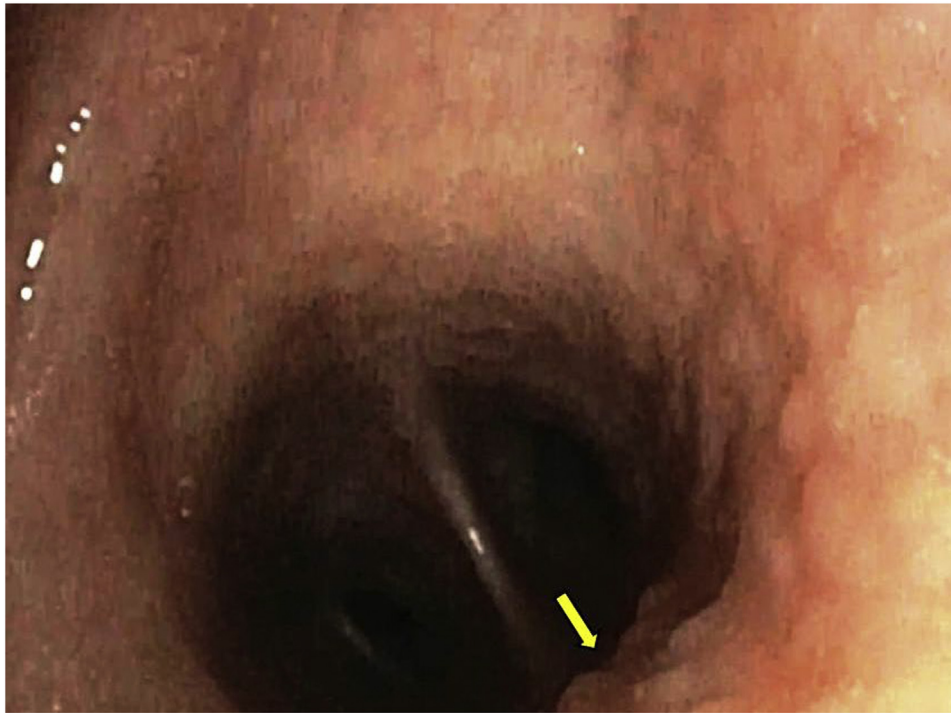


**Figure 1.** CT thorax (axial section) showing multiple areas of patchy consolidation and pulmonary micronodules (*arrow*).

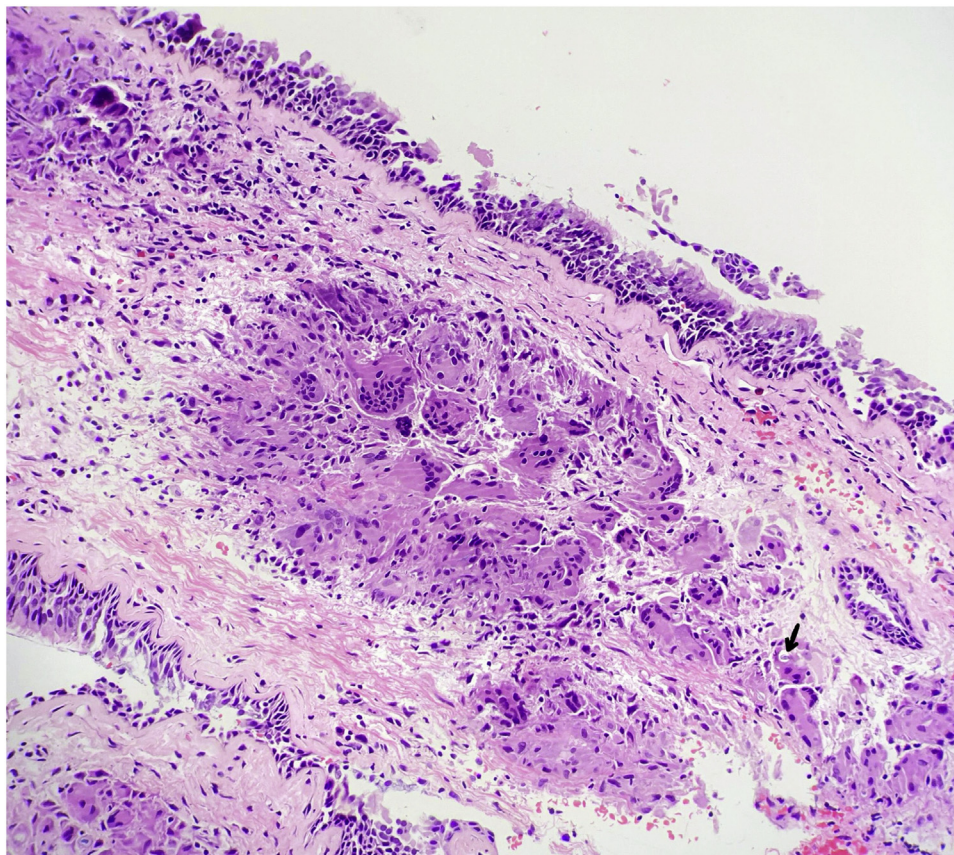


**Figure 2.** CT thorax (coronal section) showing bilateral hilar and mediastinal adenopathy (*arrow*).





**Figure 3.** Bronchoscopy showing granular bronchial mucosa and nodularity (*arrow*).



**Figure 4.** Endobronchial biopsy specimen showing collections of foreign body giant cells with noncaseating granulomas.

moans, and psychic groans,” which is used to recall the signs and symptoms of hypercalcemia.<sup>4</sup>

The patient was managed with intravenous fluid, calcitonin, diuretics, and oral prednisolone (40 mg/day for 4 weeks, followed by tapering). His symptoms and calcium profile normalized in the next 3 days. A low-dose steroid (10 mg) was continued, and he remained asymptomatic during the 12-month follow-up, with normal CT of the thorax and normal calcium profile. ■

### Data statement

Data sharing statement available at [www.jpeds.com](http://www.jpeds.com).

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### References

1. Shetty AK, Gedalia A. Sarcoidosis in children. *Curr Probl Pediatr* 2000;30:149-76.
2. Stewart AF. Clinical practice. Hypercalcemia associated with cancer. *N Engl J Med* 2005;352:373-9.
3. Sharma OP. Hypercalcemia in granulomatous disorders: a clinical review. *Curr Opin Pulmon Med* 2000;6:442-7.
4. Carrick AL, Costner HB. Rapid fire: Hypercalcemia. *Emerg Med Clin N Am* 2018;36:549-55.

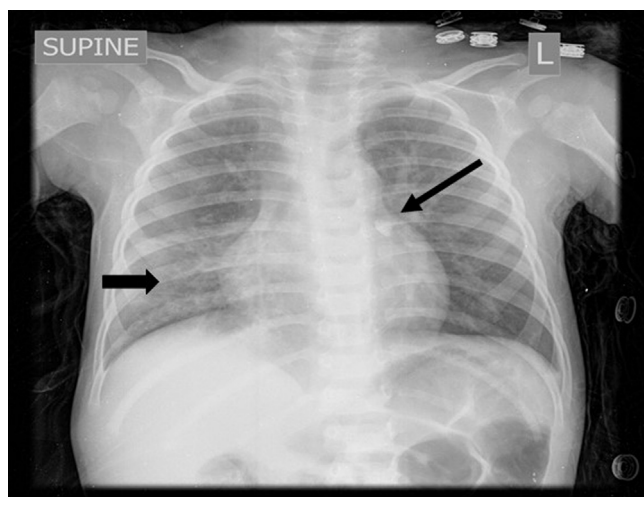
## The Wandering Calcified Lung Nodule



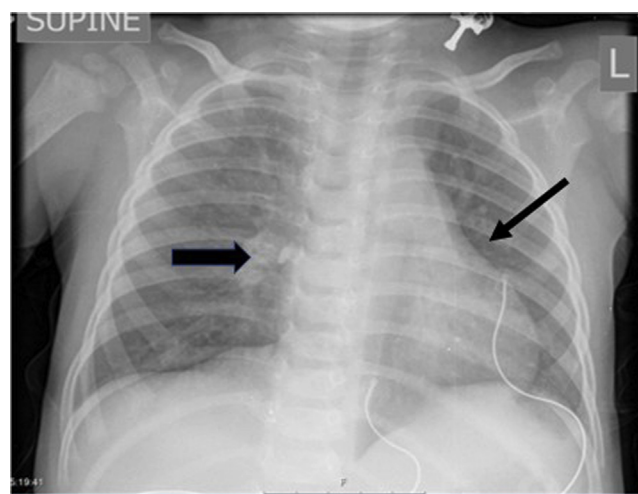
A 1.5-year-old, previously healthy fully vaccinated boy presented to the pediatric emergency department with a 3-day history of fever and cough. A history of foreign body aspiration was denied. His parents were refugees from Eritrea. His father had completed therapy for proven tuberculosis 7 years ago. On presentation, the child's temperature, saturation, and heart rate were 102.6°F, 93%, and 170/minute,

respectively. He was alert but dyspneic with bilateral wheezing on auscultation. Laboratory tests demonstrated 25 000  $\mu$ /L leukocytes with an elevated C-reactive protein. Coronavirus disease-2019 reverse transcriptase polymerase chain reaction was negative. Chest radiograph showed right lower lobe interstitial markings and a calcified left perihilar nodule (Figure 1).

Salbutamol inhalers and cefuroxime were initiated for wheezing and suspected pneumonia. Nasopharyngeal swab was positive for rhinovirus, tuberculin test, and gastric lavage for tuberculosis polymerase chain reaction were negative. The cough persisted with decreased air entry into the right



**Figure 1.** Chest radiography showing right lower lobe interstitial markings (*thin arrow*) and a calcified left perihilar nodule projecting to the left main bronchus (*thick arrow*).



**Figure 2.** Chest radiography showing left lower lobe peribronchial markings (*thin arrow*) and a calcified shadow in the vicinity of the right main bronchus (*thick arrow*).

The authors declare no conflicts of interest.

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