

Letter to Editor

Gastrointestinal sarcoidosis mimicking malignancy: A confusing scenario

Dear Editor

Sarcoidosis is a global multisystem granulomatous disease characterized by the accumulation of non-necrotizing granulomas in the lungs and other organs, leading to fibrosis and resulting clinical symptoms. Clinical manifestations can vary greatly depending on the involved organs. Some of the most common presentations include bilateral hilar adenopathy, reticular and/or nodular opacities in the lungs, as well as lesions on the skin, joints, or eyes. The risk of sarcoidosis is strongly associated with certain demographic characteristics, such as gender, race, and ethnicity (1). In a large database study of adults over the age of eighteen in the United States, women were found to be twice as likely as men to have sarcoidosis (2). While clinically detectable gastrointestinal (GI) involvement occurs in less than one percent of patients with sarcoidosis, the incidence of subclinical involvement may be much higher (3). The stomach is considered the most commonly involved part of the gastrointestinal tract, but sarcoidosis has also been described in the oral cavity, oesophagus, small intestine, appendix, colon, rectum, pancreas and peritoneum (4, 5).

A 60-year-old female patient presented with complaints of dysphagia, myalgia, a weight loss of six kilograms in twenty days, as well as nausea and vomiting. Fifteen years ago, the patient was diagnosed with dermatomyositis but missed follow-up after two years. She did not adhere to regular medication use. Physical examination revealed bilateral hard nodular lesions on the patient's legs. The patient's laboratory tests were as follows (table 1). The patient's serum ACE level was also assessed and found to be elevated at 235 (normal range <40 mcg/l). Lung imaging was normal (figure 1). Because of the previous diagnosis of dermatomyositis, the patient was referred to the internal medicine service for possible GI or pharyngeal malignancy investigation. Gastroscopy performed on the patient revealed no pathology.

However, an MRI scan revealed a six-centimeter conglomerate lymphadenopathy adjacent to the head of the

pancreas. Due to the patient's pre-existing diagnosis of dermatomyositis, unexplained weight loss, acute kidney injury, and hypercalcemia, she was referred to an external center for further investigation with endoscopic ultrasound (EUS). During EUS, a biopsy was taken from the conglomerate lymphadenopathy adjacent to the hepatic hilum and the patient was readmitted to our service. Pathological analysis revealed granulomatous inflammation (figure 2), and the pathology report recommended investigation of granulomatous diseases, particularly sarcoidosis. As a result, the patient was diagnosed with sarcoidosis and started on corticosteroid treatment. After one year of corticosteroid treatment, the patient's laboratory tests were as follows (table 2). Her vitals were stable and the patient had no symptoms.

Lung involvement occurs in more than 90% of sarcoidosis cases and is the most common manifestation of the disease. Extrapulmonary symptoms may also affect organs such as the lymph nodes, bone marrow, skin, eyes, heart, nervous system, and GI tract. Gastrointestinal sarcoidosis is rare, but can cause significant clinical symptoms, so early diagnosis and clinical suspicion are important. Medical treatment is mainly based on immunosuppressive therapy, with corticosteroids often being the first-line treatment. The optimal dosage and duration of treatment is not fully understood (6). Isolated liver or GI lymph node involvement without lung disease is even rarer, accounting for only 13% of patients with systemic sarcoidosis (7). A 2006 study of 180 patients found liver involvement without lung disease in 23 (13%) patients (7). In 2007, a case of sarcoidosis with isolated liver and pancreas involvement was reported (8). Our patient also had GI lymph node involvement of sarcoidosis without lung involvement. Some cases of pancreatitis developing in the course of sarcoidosis have also been reported in the literature. In a 2018 case report, a patient presenting with vomiting, abdominal pain and altered mental status was found to have hypercalcemia and acute kidney injury, with

sarcoidosis manifesting as hypercalcemic pancreatitis. The patient responded well to steroid treatment (9). Furthermore, in a case report from 2005, early relapse sarcoidosis in a liver allograft was diagnosed by biopsy in a patient who presented with hypercalcemia, acute kidney injury and enlarged intra-abdominal lymph nodes. Interestingly, there was no deterioration in the patient's liver function tests, and both hypercalcemia and acute kidney injury improved with steroid treatment, leading to remission (10). Our patient also presented with hypercalcemia and acute renal failure on admission. We observed that her hypercalcemia responded positively to steroid treatment.

We presented a rare case of sarcoidosis without lung involvement outside the liver and pancreas. What raised our suspicion was the presentation of sarcoidosis as a mass at

abdominal region mimicking a malignancy considering the patient's diagnosis of dermatomyositis. We planned an EUS to confirm or rule out malignancy. However, as the pathology revealed granulomatous inflammation and the ACE level was found to be elevated, we diagnosed the patient with sarcoidosis and initiated systemic steroid treatment. We evaluated the diagnosis of sarcoidosis and the diagnosis of dermatomyositis as two separate entities and considered their co-occurrence as coincidental. We are currently following up with daily 2 mg of methylprednisolone and the patient is in asymptomatic remission. In conclusion, although rare, clinicians should consider the possibility of GI sarcoidosis in patients presenting with systemic symptoms of malignancy, even in the absence of pulmonary involvement.

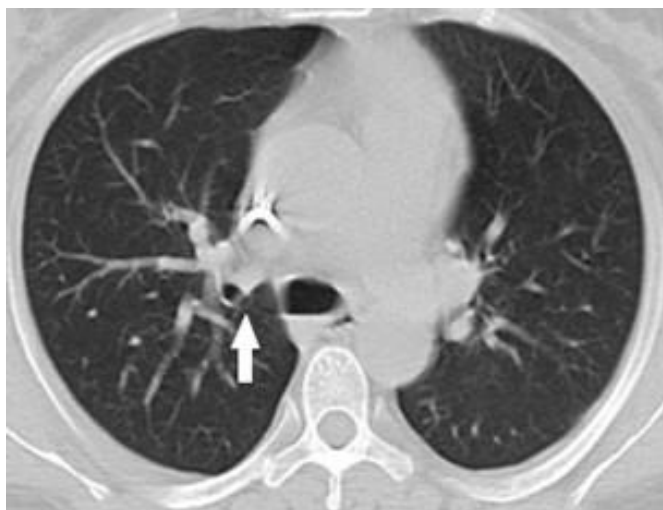


Figure 1. Computerized tomography image of our patient

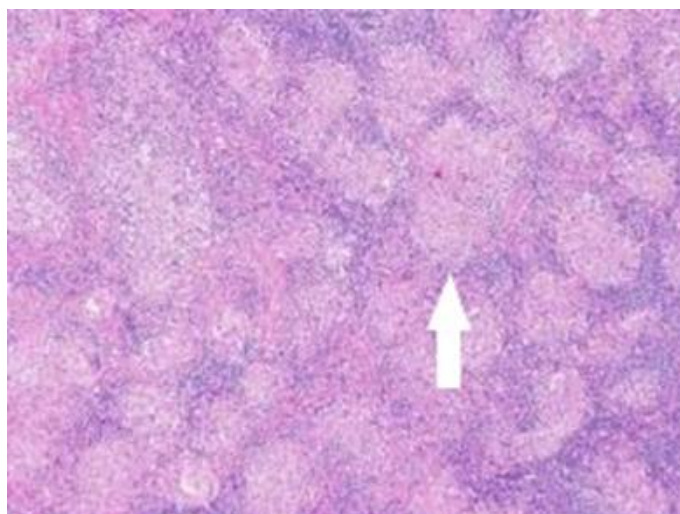


Figure 2. Pathological examination of conglomerate lymph node

Table 1. Laboratory parameters at the time of admission

Variables	(At the time of admission)
Urea	80 mg/dl (normal range:10-40),
Creatinine	3.1 mg/dl (normal range:0.5-1.3)
Calcium	14.2 mg/dl (normal range:8.5-10.5)
Albumin	3.9 g/dl (normal:3.4-5.4)
PTH	7 pg/ml (normal:15-65 pg/ml)
CRP	15 mg/l (normal range:0-5 mg/l)
ESR	40 mm/h (normal:0-30 mm/h)

PTH: parathormone, CRP: C-reactive protein, ESR: erythrocyte sedimentation rate

Table 2. Laboratory parameters at the time of admission

Variables	First year of treatment
Urea	39 mg/dl (normal range:10-40)
Creatinine	0.99 mg/dl (normal: 0.5-1.3)
Albumin	4.54 g/dl (normal range:3.4-5.4)
Calcium	9.6 mg/dl (normal range:8.5-10.5)

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