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Case Report

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An atypical presentation of non-specific interstitial pneumonitis

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Introduction

Epigastric pain can occur from various underlying conditions. Typical diagnoses to consider include peptic ulcer disease, functional dyspepsia, H. pylori gastritis, cholecystitis, and pancreatitis. However, in some cases, the origin of symptoms may be unrelated, e.g. cardiopulmonary issues. It is essential to explore alternative diagnoses if patients do not respond to usual treatments. Here, we describe a case of Non-Specific Interstitial Pneumonia (NSIP) where abdominal pain was the sole presenting symptom, with no accompanying respiratory complaints reported by the patient.

Chest imaging

Her HRCT was reported as patchy abnormal mosaic attenuation areas predominantly involving the bilateral lower lobes, right middle lobe and left lingular segment, along with lower segments of the bilateral upper lobes. These areas were associated with fine fibrotic changes and secondary traction bronchiectasis. Her HRCT can be found in Figure 1.

Background

Non-Specific Interstitial Pneumonia (NSIP) is a form of chronic interstitial pneumonia [1].

Prevalence of NSIP in Asia and LMIC (Lower Middle-Income Countries) is not well documented. The increasing recognition and reporting of ILDs (Interstitial Lung Diseases) in these regions suggest that the prevalence of NSIP may be significant [3,4]. A study conducted among ILD patients in Karachi, Pakistan revealed different sub-types in which IPF was 38% and NSIP was 15% [5]. Another study cited similar rates of NSIP prevalence [6]. NSIP is characterized by interstitial fibrosis, usually involves bilateral lungs with a predisposition for lower lobes [7]. It can be idiopathic; however, it can also be seen in association with HIV, connective tissue diseases and drugs/toxins [8,9]. NSIP, in comparison with other ILDs, has a better prognosis [10]. There is no association with smoking, unlike IPF. It typically has a female predominance and presents in patients aged 40-50 years old, with progressive dyspnea, cough, fever and weight loss, progression of symptoms may be variable [9,11]. Gastrointestinal symptoms are not typically the primary manifestations of Non**Citation:** Asad M, Fatima S, Sabzwari S. An atypical presentation of non-specific interstitial pneumonitis. J Clin Images Med Case Rep. 2025; 6(4): 3542.



Figure 1: High-resolution computed tomography chest coronal view.

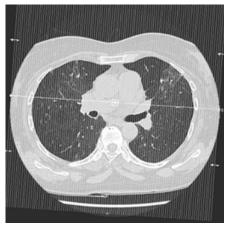


Figure 2: High-resolution computed tomography chest axial view.

Table 1: American thoracic society classification of interstitial lung disease [2].

Classification	Types
Exposure related	Hypersensitivity pneumonitis, pneumoconiosis
CTD*-related	Rheumatoid arthritis, systemic sclerosis, polymyositis, dermatomyositis, systemic lupus erythematosus, mixed connective tissue disease
Idiopathic	IPF*, NSIP*, RB-ILD*, DIP*, COP*, AIP*
Other	Vasculitis, diffuse alveolar hemorrhage, Langerhans cell histiocytosis, eosinophilic pneumonia, neurofibromatosis, lymphangioleiomyomatosis

*AIP: Acute Interstitial Pneumonia; *COP: Cryptogenic Organizing Pneumonia; *CTD: Connective Tissue; *DIP: Desquamative Interstitial Pneumonia; *IPF: Idiopathic Pulmonary Fibrosis; *NSIP: Non-Specific Interstitial Pneumonia; *RB-ILD: Respiratory Bronchiolitis associated Interstitial Lung Disease.

specific Interstitial Pneumonia (NSIP). However, they can occur, particularly in cases where NSIP is associated with systemic autoimmune or connective tissue diseases. Upper gastro-intestinal symptoms like heartburn, reflux, belching and abdominal or epigastric pain have been reported in several studies [12]. One such study revealed that regurgitation and reflux was present in almost 40% of the patients [13]. Another study concluded high prevalence of gastro esophageal reflux disease which did not respond to standard PPI dose, among patients with ILD [14]. Many studies have reported abdominal pain, dyspepsia,

and GERD as common symptoms in patients with ILD [15]. However, gastrointestinal symptoms as the primary presenting complaint are atypical and were not found during literature review on Google Scholar and PubMed. Therefore, our case highlights the importance of keeping other systemic differentials in mind while investigating upper gastrointestinal symptoms that are persistent and non-responsive to standard therapy.

Conclusion

Abdominal pain can be a distressing symptom for many patients. When conventional treatments fail to provide relief, it is essential to broaden the differential diagnosis to include potential causes specially related to the lungs and heart. This holistic approach can lead to more accurate diagnoses and effective treatment plans.

Ethical consideration: Informed written consent was taken from the patient. Ethical approval was obtained from Aga khan university hospital with ERC number 2024-10468-32377. For this case report the electronic information was used from database, reviewing the investigations and discharge summaries via mypatient@aku application using patient's medical record number. Patient's name and medical record number and all other identifiers were removed to maintain patient's confidentiality.

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www.jcimcr.org Page 2

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www.jcimcr.org Page 3