

A FORGOTTEN REASON FOR ABDOMINAL PAIN: MESENTERIC PANNICULITIS CASE REPORT AND REVIEW OF THE LITERATURE

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ABSTRACT Background: Mesenteric Panniculitis an inflammatory condition that usually presents with vague abdominal symptoms such as pain and diarrhoea. The ambiguity of the symptoms makes the diagnosis of MP a challenge. Case summary: a twenty-five years old lady presented to the emergency room with vague abdominal complaints including pain and loss of appetite along with fever for the last two days. Workup for acute appendicitis was done including a CT scan which showed possible radiological signs of Mesenteric Panniculitis for which steroids was given. Conclusion: Mesenteric Panniculitis is a puzzling diagnosis as the presenting symptoms are ambiguous thus a high index of suspension for this entity should be there for accurate diagnosis.

KEYWORDS Inflammation, Mesenteric Panniculitis, Appendicitis, Acute Abdomen

INTRODUCTION

Mesenteric Panniculitis (MP), also known as retractile mesenteritis, is a fibro-inflammatory condition was first described in 1924 [1]. The condition usually affects adults between 20s to 60s years old, with an average of age at first presentation of 60 years and higher incidence in males. A study in 2016 by Masulovic et al. described the prevalence of MP to be around 0.6% in more than 7000 Abdominal CT examinations [2]. MP patients may be asymptomatic or may present with vague abdominal symptoms such as discomfort, fever, nausea, vomiting, diarrhoea and constipation. Other possible presenting symptoms include a fever of unknown origin, weight loss. Abdominal examination may reveal poorly defined abdominal mass or masses [3,4]. Biochemical and laboratory investigations are often normal or nonspecific. Some notable findings are anaemia, neutrophilia, prolonged erythrocyte sedimentation rate (ESR) and high levels of C-reactive protein (CRP) which can be used to monitor disease progression

and rarely hypoalbuminemia [5]. This study aims to shed light on a commonly misdiagnosed condition, with a review of the current literature.

CASE REPORT

A twenty-five years old Arab female, presented to the accident and emergency with a history of the supra-pubic pain of two days duration; fever; Loss of appetite. Upon further history her last menstrual period was one week ago, she was diagnosed with hypothyroidism three years ago, and has a history of migraines. Physical examination was significant for tachycardia and low-grade fever. Her laboratory investigations are presented in table 1. An immediate surgical referral to rule out acute appendicitis and or ectopic pregnancy was done. A diagnostic CT scan was ordered which showed appendix appears normal. No evidence of renal calculi or hydronephrosis. However, showed evidence of haziness at the root of mesentery with few mesenteric lymph nodes noted at the root and in between the leaves (Figure 1). Informed consent was taken before the publication of the paper.

DISCUSSION

Several theories to explain the aetiology of MP have been postulated including autoimmune pathophysiology as the disease would respond to immunomodulator medications including

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Corticosteroids and immunosuppressants and the fact that it is associated with several other autoimmune conditions such as autoimmune thyroiditis and primary sclerosing cholangitis [6].

MP is associated with several neoplasms including breast, renal and gastric carcinomas. Usually, the discovery of a neoplastic lesion precedes the diagnosis of MP. Another association with autoimmune disorders such as autoimmune hemolytic anaemia, rheumatoid arthritis and lupus can be seen in some cases [7,8].

Computed tomography is the best modality for the diagnosis of MP findings include increased thickness of the involved mesentery, increased fat density, fibrosis and enlarged lymph nodes, fat halo sign, well-defined or poorly defined mesenteric mass (usually small bowel mesentery) with a displacement of the bowel loops [9,10]

The course of MP is variable as the disease can regress spontaneously, run a stationary course or progress to varying degrees of fibrosis. The disease is generally benign but could result in some rare complications including bowel obstruction or vascular compression. It is hard to assess the response of the disease to the therapeutic strategies because MP is a rare condition. Henceforth, treatment options are usually empiric and administered by individual cases, without the use of a reliable measure to determine the severity of symptoms. Some of the drugs used in the treatment of MP include corticosteroids, colchicine [11].

Durst et al., in 1977, reviewed 62 cases of MP and concluded that mesenteric panniculitis is a distinct clinical entity of unknown aetiology, with a benign course and a favourable outcome [12]. Sivrioglu et al., in 2013, published a case of vague abdominal pain in a 50 years old male with no other complaints. Radiological findings of the case pointed out towards MP, and symptomatic treatment was given [13].

TAKE HOME POINTS

1. Mesenteric panniculitis is a fibroinflammatory condition of unknown aetiology.
2. Computed tomography is a test of choice for diagnosis and follow-up of mesenteric panniculitis.
3. Some clinicians consider mesenteric panniculitis as a spectrum with multiple pathological subgroups: in common subgroup inflammation, and fat necrosis predominates, and in a rare subgroup, fibrosis is more seen.

COMPETING INTERESTS

The authors declare that they have no competing interests.

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