# Auto-Immune Pancreatitis in Rheumatoid Arthritis

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Autoimmune pancreatitis (AIP) is a chronic form of pancreatitis which develops as a result of the autoimmune inflammation process which accompanies lymphocyte infiltration and fibrosis. By reporting in this paper a case of rheumatoid arthritis (RA) determined with autoimmune pancreatitis, it was aimed to draw attention to AIP.

(Rec.Date: Nov 05, 2014

Accept Date: Nov 11, 2014)

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#### Letter to the Editor

#### Auto-Immune Pancreatitis in Rheumatoid Arthritis

Autoimmune pancreatitis (AIP) is a chronic form of pancreatitis which develops as a result of the autoimmune inflammation process which accompanies lymphocyte infiltration and fibrosis [1]. By reporting in this paper a case of rheumatoid arthritis (RA) determined with autoimmune pancreatitis, it was aimed to draw attention to AIP.

A 48-year old female with a 20 year history of seropositive RA presented at the gastroenterology polyclinic with complaints of epigastric pain, loss of appetite and weight loss. In the history, it was learned that the RA disease was kept under control with 15mg/week methotrexate, occasionally non-steroid anti-inflammatory drugs (NSAID) were used and for the last month the epigastric pain had not responded to proton pump inhibitors (PPI) as it had done previously. In the physical examination, there was epigastric sensitivity spreading in the right upper quadrant of the abdominal region. In the peripheral blood count, the leukocyte count was 11500 /mm<sup>3</sup>. Hemoglobin, platelets, amylase and lipase values and other liver function test results were observed to be within normal limits. No pathological findings were determined in the upper GIS endoscopy examination. On USG, diffuse swelling was determined in the pancreas. Dynamic tomography with contrast was applied and regular expansion was seen in the pancreas (Figure 1). As the serum IgG4 level was determined as 300 mg/dl, it was evaluated as a significant increase. In the light of these findings, AIP was considered and treatment of 40mg/day prednisolone was started. Within 4 weeks the patient showed a significant clinical response, which confirmed the diagnosis.

AIP may be seen in approximately 5% of chronic pancreatitis patients [2]. Besides common causes such as medication toxicity, cholelithiasis and metabolic diseases, there are rarer causes such as amyloidosis, ischaemia and neutrophilic dermatosis [2,3]. Although the pathogenesis has not yet been fully clarified, as CD4 Th1 cells are involved more than Th2, autoimmune etiology is suggested [4]. Type 1 AIP is known as lymphocytic sclerosing pancreatitis and is characterised by increased levels of G4 (IgG4) or IgG4 positive plasma cell infiltration in inflamed tissue [5]. In the case presented here, the high IgG4 levels were consistent with Type 1 AIP. In Type 2 AIP, or idiopathic ductocentric pancreatitis, the IgG4 levels are normal.

AIP and RA

#### Letter to the Editor

doi: 10.5455/medscience.2014.03.8212



**Figure 1.** Abdominal CT scan shows a swollen pancreas with some peripancreatic fluid accumulation and peripancreatic fat infiltration.

AIP can be determined in the form of focal and multifocal lesions in the head, body and tail of the pancreas and it may mimic pancreatic cancer. It is extremely difficult in some cases to differentiate AIP that occurs with a mass in the pancreas from cancer of the pancreas [6]. On the other hand, many AIP cases which have not led to a pancreatic mass may not be able to be diagnosed [7].

AIP may be seen together with autoimmune diseases such as Sjögren syndrome, rheumatoid arthritis, primary biliary cirrhosis, primary sclerosing cholangitis, inflammatory intestinal disease, systemic lupus erythematosus and retroperitoneal fibrosis [8-10]. This combination strengthens the idea that this disease may be a systemic autoimmune disease [11]. In addition, as in the case presented here, the dramatic response to glycocorticoid medications supports that it is an autoimmune mechanism and is found in the diagnostic criteria of AIP [12]. With steroid treatment, a reduction in the size of the pancreas and improvements in histopathological changes are achieved [13].

Involvement of the pancreas is rarely seen in the course of RA disease. The prevalence of AIP in RA is not clear. In a case series of 17 patients, RA was determined in 1 case [14]. Just as in the case presented here, in RA patients with abdominal pain, a diagnosis of AIP should not be overlooked.

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