Arthritis In a Patient with Pancreatic Carcinoma; Is Rheumatoid Arthritis or Paraneoplastic Syndrome?: A Case Report

Pankreas Kanserli Olguda Artrit; Romatoid Artrit mi, Paraneoplastik Sendrom Mu?: Bir Olgu Sunumu

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ABSTRACT

An atypic Rheumatiod Arthritis (RA) may be early manifestation of an occult malignancy. A late age onset of arthritis, exaggerated nature of symptoms and asymmetric joint involment are suggestive. Herein, a 58-year old woman who was followed-up as RA for two years and was later diagnosed to have pancreatic (tail and corpus) cancer is presented. Atypic symptoms in a patient diagnosed with inflammatory diseases such as RA, should also remind paraneoplastic conditions.

Keywords: Paraneoplastic syndrome, rheumatiod arthritis, pancreatic cancer, rehabilitation

ÖZET

Atipik seyir gösteren romatoid artrit (RA) altta yatan kanser hastalığının erken bulgusu olabilir. Artritin geç yaşta başlaması, semptomların abartılı seyretmesi ve asimetrik eklem tutulumu şüphe uyandırmalıdır. Burada iki yıl boyunca RA olarak takip ve tedavi edilen ve detaylı incelemesinde pankreas gövde ve kuyruk kanseri tanısı alan 58 yaşında bir kadın hasta sunulmuştur. Atipik seyreden RA gibi enflamatuvar hastalıklar varlığında paraneoplastik sendromlar da akla getirilmelidir.

Anahtar sözcükler: Paraneoplastik sendrom, romatoid artrit, pankreas kanseri, rehabilitasyon

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Introduction

Malignities could occur or mimic inflammatory diseases such as polymyositis, lupus, rheumatoid arthritis (RA) etc (1). It is a paraneoplastic manifestation of various tumors called carcinomatous polyarthritis (2,3). The most common malignities are breast, lung, ovarian, gastric (1,4).

An atypic RA may be an early manifestation of an occult malignancy. A late age onset of arthritis, exaggerated nature of symptoms and asymmetric joint involvement are suggestive. Herein, a 58-year old woman, who was followed-up as RA for two years and was then diagnosed to have pancreatic tail carcinoma, is presented. Atypic symptoms in a patient diagnosed with inflammatory diseases such as RA, should also have to remind paraneoplastic conditions.

Case

A 58-year old woman patient was admitted to physical medicine and rehabilitation out-patient clinic with diffuse arthralgies. She had been complaining about these symptoms for two years and was diagnosed as RA. She was taking methotrexate (15 mg/week) and prednisolon (5 mg/per day) for two years. As the symptoms became worse, leflunomid (20 mg/day) was initiated 3 months prior to her admittance to our clinic but she did not respond to the treatment.

She has diabetes mellitus for four years. The physical examination revealed pain, tenderness and swelling at her right wrist and right 2-3. MCP joints. Morning stiffness lasted for three hours. She was a nonsmoker and not consume alcohol. Degenerative changes were detected in the plain radiography of the wrist and hands. She was also complaining about a mild epigastric pain.

In the laboratory parameters, ESR:62 mm/hour, CRP:54,81mg/dl (0-5) , RF:97,27 IU/ml (0-20), HgB:12,7 g/dl(12,3-17,5), HgA1C:7,8, anti-CCP:negative, ANA:negative, amylase:17,7 U/L (28-100), lipase:16,94 U/L (22-51), CEA:1,62 ng/ml (0-2,5), CA 19-9:34,6 U/ml (0-33), other liver and kidney function tests were completely normal.

She did not have findings of symmetric arthritis. Her age was advanced for RA. She did not respond to the conventional treatment. For these reasons the diagnosis of RA was not accurate and detailed investigations were initiated.

Total bone scintigraphy with 20 mCi Tc99m MDP showed mildly increased signal uptake in both elbows, wrists and feet metatarsal bones which was consistent with degeneration.

No pathological findings were detected in chest X-ray and thoracic computerized tomographic investigations.

Endoscopy and colonoscopy were performed because of epigastric and resulted normal. The pancreatic region was declared to be suspicious with the abdominal tomography and cancer at the pancreatic tail was demonstrated with dynamic abdominal MRI (Figure 1 A, B). The patient was undergone a surgery but as the tumor was spreaded and unresectable, only biopsy was performed instead of pancreatectomy. The histopathologic diagnosis was pancreatic adenocarcinoma (Figure 2, 3). Chemotherapy was started but she died in 3 months period.

Discussion

Malignancies may present with musculoskeletal symptoms initially (3). They can mimic RA clinically and serologically. A late age onset of arthritis, exaggerated nature of symptoms and asymmetric joint involment are suggestive of these condition. Also a seropositive, symmetric polyarthritis can be seen. It is often refractory to conventional therapy (2).

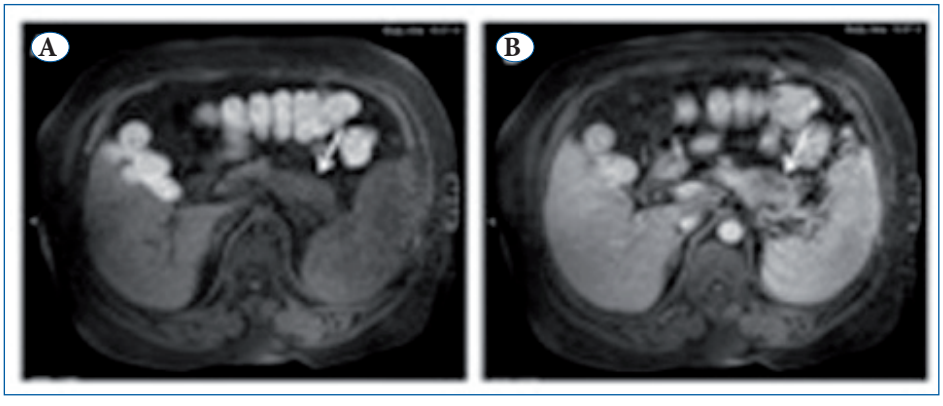

Figure 1. A) Precontrast fat saturated T1 weighted MR image shows the expansion in pancreatic tail with ill defined borders (arrow). B) Contrast- enhanced fat saturated T1 weighted MR image in portal phase shows the hypointense expansile mass with ill defined borders in the tail of pancreas (arrow).

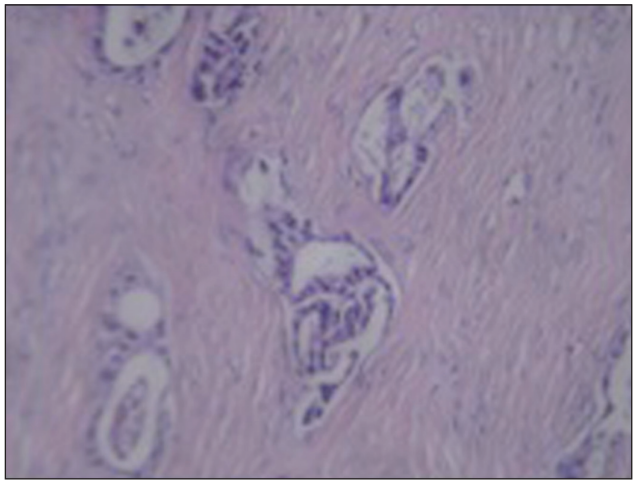

Figure 2. Malignant tumor in desmoplastic stroma that is made up of tubuls and polyadenoid formations laid by large, pleomorphic cells with hyperchromatic nucleus(H&Ex200).

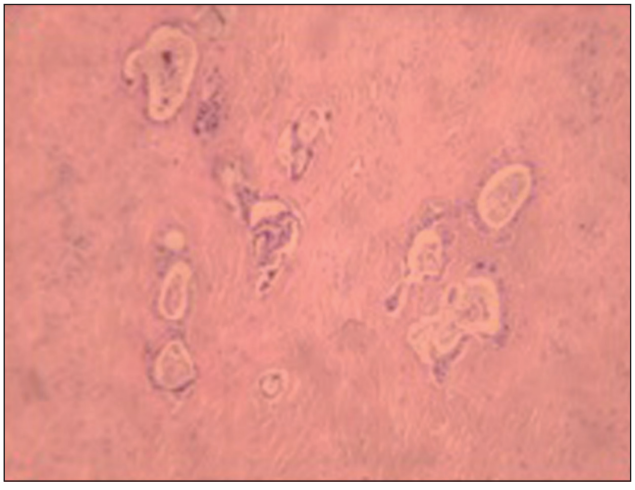

Figure 3. Malignant tumor that forms tubuls which are laid by large, pleomorphic cells with hyperchromatic nucleus and intraluminal violaceous material in desmoplastic stroma (H&Ex100).

Some patients can reveal classical clinical findings of RA. In a study, 8 of 18 patients presented typical RA (5). Samely, Doruk and colleagues reported a case with typical RA findings with metastatic breast cancer (6). Our patient initially presented with a rheumatoid-like arthritis but she has atypical features (2). There was no symmetric joint involvement, no family history, no erosions of joints at the plain radiograpy. And also she did not respond the classic anti-rheumatological therapy. She did not fullfill both the 1987 American College of Rheumatology (ACR) and 2010 ACR/European League Against Rheumatism (EULAR) RA criteria (7,8). Because of these findings, we were away from the diagnosis of RA.

Paraneoplastic symptoms can be seen approximately 10% of all cancer cases. It is associated with various solid tumors (2). Adenocarsinoma is the most frequent hystological type (1). Here the case's pathological type is adenocarsinoma of pancreas either. The pathogenesis is unclear but some hypotheses had been proposed. Substantially it involves an immunity and associated with mediators (hormones, cytokines, peptides, antibodies, cytotoxic lymphocytes) (9). Relief of the symptoms of arthritis after cure of the malignancy is the major criteria for the diagnosis of the carcinomatous polyarthritis (1). This major criteria could not be observed in our patient, as she died in 3 months after the diagnosis.

Polyarthritis of carcinoma is usually tend to be seronegative. However in the literature, some cases were presented pancreas cancer with positive RF and anti-CCP (2). Here our case's RF was high positive. Thus seropositivity does not exclude the malignancy.

As pancreatic adenocarcinoma has non-spesific signs and symptoms, patients are usually diagnosed at an advanced stage. Surgical resection is the only treatment method for pancretaic carcinoma because it is resistant to the medical therapy. However, most of the patients are considered unresectable at the time of diagnosis. The patients with adenocarcinoma of the head of the pancreas usually present with the symptoms related to direct invasion of biliary or pancreatic duct or compression of biliary duct. The mass located in the body and tail causes pain more than the mass located in the head of pancreas (10).

In our case only symptoms were atypic arthritis and mild epigastric pain for few months. She had no weight loss, no nausea or vomitting, no fever, no icterus, etc. In this case we suspected that she has atypical clinical feature, no joint deformation and any response to therapy.

Usually symptoms appear eight to 12 months before the diagnosis of the tumor disease (4). But in our case symptoms had been for two years according to her history. The long duration of symptoms can related to the localization of the cancer to the tail of the pancreas. When the symptoms persist for a long time, insidious and late symptomatic malignancies should be considered.

We presented a case with pancreas cancer which was followed as a RA for two years. The charecteristics of malignancy associated with RA are; advanced aged, acute onset, predominantly asymmetrical lower extremity involvement and wrist and hand joints spareness. Classic signs of RA may not be observed (11). In case of lacking typical RA presentation, the diagnosis should be reconsidered.

In conclusion, clinicians should closely follow the patients with atypic clinical signs of RA, and paraneoplastic conditions should be kept in mind for differantial diagnosis.

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