B CELL LYMPHOMA MIMICKING RHEUMATOID ARTHRITIS, A CASE REPORT

LINFOMA DE CELULAS B SIMULANDO ARTRITIS REUMATOIDEA. REPORTE DE UN CASO.

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Abstract:

Non Hodking´s lymphoma (NHL) may involve bones but synovial involvement is uncommon. We describe a patient who presented with polyarthritis, sicca symptoms and rash suggestive of rheumatoid arthritis. An atypical skin rash prompted skin and synovial biopsies. A diagnosis of synovial and skin malignant large B-cell lymphoma anaplastic subtype was performed. Chemotherapy with dexamethasone, vincristine and rituximab was started. Following treatment the patient had complete resolution of cutaneous and articular lymphoma manifestations.

Key words: polyartrithis, non hodking`s lymphoma, skin rash

Introduction:

Musculoskeletal symptoms are frequent in Non-Hodkin´s lymphoma (NHL), but not as a presenting symptoms. Arthritis per se is very rare. There are a few cases in the literature of NHL presenting with polyarthritis1-6.The involved mechanism behind arthritis in patients with lymphoma is unknown; some authors suggested direct synovial involvement by the lymphoma or a reaction to adjacent lymphomatous process7-8.

Herein we report a patient with NHL previously diagnosed with Rheumatoid arthritis (RA) presenting with skin rash and symmetrical hand polyarthritis.

Case report:

A 74 years old Caucasian female attended to our clinic in February 2013 with two months history of acute onset pruriginouspapulo-erythematous generalized rash compromising arms, legs, face, trunk and periorbital edema. She also referred pain, and swelling in wrists, metacarpophalangeal and interphalangeal joints of both hands with prolonged morning stiffness and3-4 months history of dry eyes and mouth. The skin rash was initially treated with fexofenadine and oral steroids without response.

Her past medical history was unremarkable except for hepatitis A infection, osteoporosis and hemorrhoids. She was currently taking alendronate, calcium and vitamin D.

Physical examination revealed dorsal and flexor tenosynovitis in both wrists, synovitis in 1st to 5th proximal interphalangeal joints. Skin examination showed erythematosus violaceous plaques in legs, arms, trunk, and neckline. Rest of physical examination was unremarkable. There was no evidence of lymphadenopathy or hepatosplenomegaly. Figures 1-3

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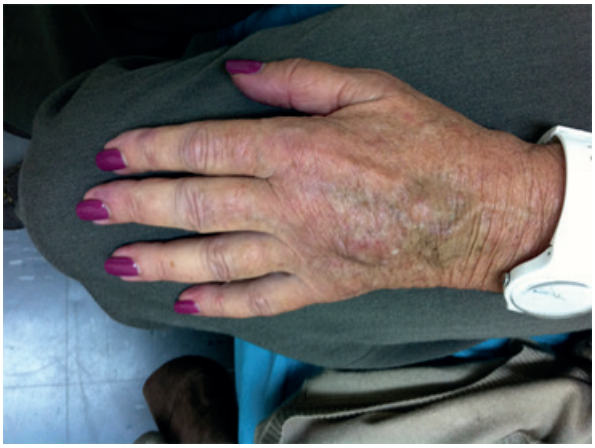


Fig.1

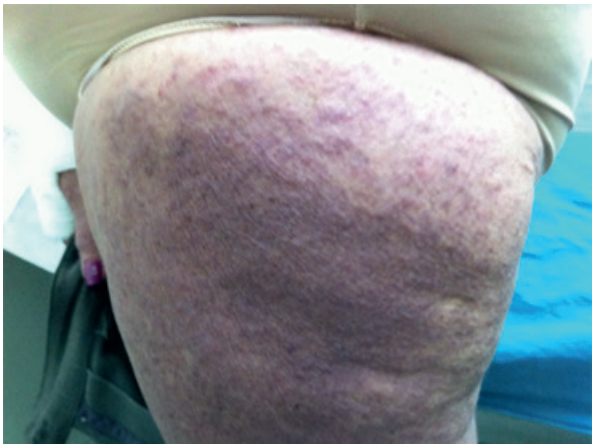


Fig.2

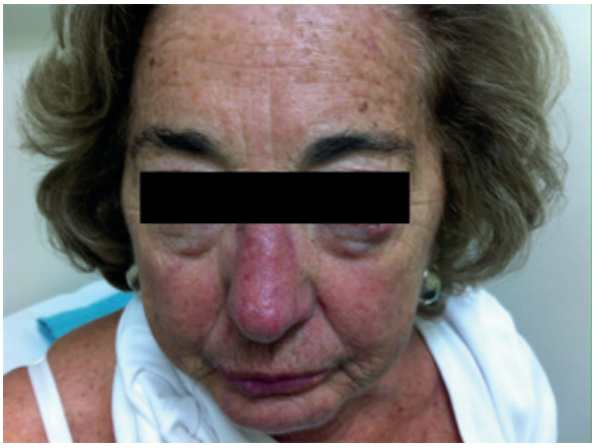
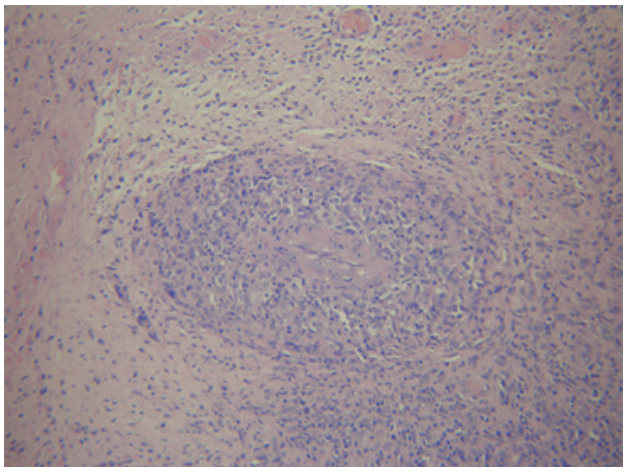


Fig.3

Blood tests revealed normal blood cell counts, ESR was 77 mm/h, C-reactive protein was 0.91 mg/dl. Antinuclear antibody was positive 1/160 with a pleomorphic speckled pattern, extractable nuclear antigens, rheumatoid factor and anti citrulinated antibodies were negative.
A salivary gland scintigraphy demonstrated symmetric isotope arrival without post stimulation change. Ocular tests for dry eye (Schirmer, Break up time and Bengala rose stain) were abnormal. Hands and feet radiographs were normal.
An initial skin biopsy showed perivascular, superficial, deep and periadnexial dermatitis. She started treatment with meprednisone at 12 mg per day and methotrexate with an initial diagnosis of seronegative rheumatoid arthritis (RA) and secondary Sjogren syndrome (SS).
The rash worsened and it was suspected it was not related to RA/SS diagnosis. A second skin biopsy was done. The new biopsy showed dermal perivascular lymphoid infiltrate, CD3/CD20/ CD4 /CD8 /CD68 /and CD30 positive. A diagnosis of lymphomatoid papulosis was performed and treatment with radiotherapy and interferon was started. The skin rash improved with treatment, but she had persistent and marked proliferative wrist synovitis and tenosynovitis. We suspected synovial lymphoma involvement and carried out a synovial biopsy. Figure 4.

Fig.4



The biopsy showed big cells size proliferation, arranged diffusely with binucleate and anaplastic elements with clear nucleousand conspicuous nucleoli, a few lymphocytes of different sizes and some plasmocytes.The anaplastic cells were CD45/CD20/PAX5/CD30 positive. The diagnosis was malignant large B-cell lymphoma anaplastic subtype. Bone marrow biopsy was normal. A positron emission tomography (PET), abdomen, chest and pelvis CT scans were performed. The PET scan showed metabolic activity (SUV max 14.5) in subcutaneous tissue from hands, forearms, legs

and similar images in left posterior chest wall and posterior abdominal wall. CT scans were normal. Chemotherapy with dexamethasone, vincristine and rituximab was started. Following treatment the patient had complete resolution of cutaneous and articular lymphoma manifestations. Figure 5-7

Fig.5

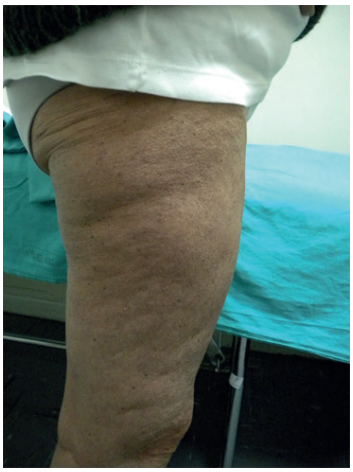


Fig.6

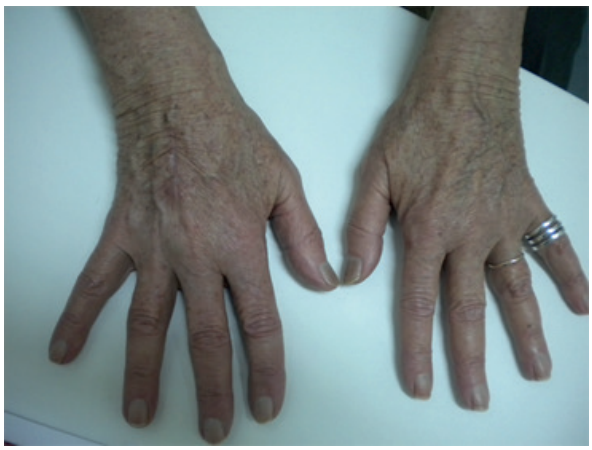


Fig.7

Discussion

During the course of NHL approximately 7-25% of patients develop skeletal involvement, mostly in the poorly differentiated forms. The skeletal involvement is caused by metastasis or by primary bone lymphoma7-8. Lymphomas infiltrating the synovial membrane can simulate classical RA1. However, arthritis as a presenting symptom is uncommon. Very few cases in the literature had arthritis with skin rash like our patient.

We present a 72 years old woman who presented to clinic with rash, sicca symptoms and arthritis. We first suspected seronegative RA with secondary SS based on progressive symmetrical polyarticular symptoms in the small joints, elevated VSG, sicca symptoms withpositive ocular tests. Due to persistent proliferative synovial lesions and atypical skin rash, skin and synovial biopsy were performed. A diagnosis of large B-cell lymphoma anaplastic subtype involving skin and synovium was made. She had good response to chemotherapy and steroids for both manifestations (skin and joints).

Musculoskeletal complaints in patients with NHL are usual, however, polyarthritis as the initial disease presentation is uncommon, with just several reports published1-6.In most reported cases the synovial biopsy was not performed and the diagnosis was made by a lymph node biopsy(Table 1). NHL cases reported in the literature describe patients with monoarticular9-10 or polyarticular involvement1-6. Most of the cases did not have lymphadenopathy and hepatosplenomegaly at the time of the diagnosis. Some of the patients previously reported had x-rays with permeative bone destruction changes but others were normal, making differential diagnosis more difficult8. Often the diagnosis is made with a synovium biopsy and large joints like the knees are chosen for histologic evaluation for technical reasons along with their frequent involvement.

To the best of our knowledge, this is the first case of B cell lymphoma of skin and synovium presenting with sicca symptoms and symmetric polyarthritis.

Ref.	Age/sex	Symptoms	Lymphadenopathy/ hepato-splenomegaly at presentation	Skin rash	X-ray findings	Synovial involvement	Diagnosis
1	48/F	Knee arthritis	No/No	No	ND	Diffuse lymphoid infiltrate	NHL
2	69/F	Ankle and knee arthritis	No/No	No	Osteopenia with cystic changes in hands, knee and ankle were normal	ND	NHL
3	59/F	Symmetrical polyarthritis	No/No	No	Multiple radiolucent areas in the end of the left tibia and hands and feet	ND	Lymphocytic lymphosar-coma
4	63/F	Symmetrical polyarthritis	Yes/Yes	No	Possible erosive changes at MCP and MTT joints	ND	NHL
5	42/ F	Symmetrical polyarthritis	Yes/No	Yes	ND	ND	NHL
5	58/ M	Polyathritis	Yes/No	No	No erosive changes	ND	NHL
5	59/ F	Symmetrical polyarthritis	Yes/No	Yes	ND	ND	NHL
6	63/F	Symmetrical polyarthritis	No/No	No	Soft tissue swelling	non-specific synovitis without lymphoma-tous cell infiltration	NHL

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