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Psoriatic Rheumatism at ACPA Positive: About a Case Review of the Literature

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Abstract **Clinical Case**

Some clinical presentations of psoriatic rheumatism are similar to those of rheumatoid arthritis. We report the case of a patient aged 72 years, asthmatic for 40 years, ethyl and chronic smoking who was admitted for chronic arthritis. Clinical examination objectified, peripheral joint syndrome, deformities of the hands and feet. The assessment objectified a biological inflammatory syndrome, a CRP at 69mg/L; Rheumatoid factor at 678 IU and ACPA at 191 IU. The radiological assessment revealed a structural impairment with an aspect of periostitis in juxta-articular spicule, periosteal affixing; with an aspect of «pencil in cup». The diagnosis of psoriatic rheumatism with ACPA positive was retained in this patient. This patient was offered a weekly treatment with etanercep (Enbrel) 50mg subcutaneously. The pencil in cup and spicule aspects were the most important radiographic feature to distinguish psoriatic rheumatism from immunopositive rheumatoid arthritis. This clinical case has shown the usefulness of simple x-rays for the diagnosis of psoriatic rheumatism.

Keywords: rheumatoid arthritis, psoriatic rheumatism, chronic arthritis, ACPA positive.

PRESENTATION

It is about a 72-year-old patient with 40-year asthma, ethyl and chronic tobacco withdrawal 20 years ago, who had pleural tuberculosis treated and cured 40 years ago. He had no personal history of psoriasis or in the family.

He has been suffering from a symmetrical and additive bilateral chronic polyarthritis for 20 years, interesting the large, medium and small joints, predominant at the wrists, metacarpophalangian joints (MCP) and metatarsophalangiennes (MTP) evolving in spurts interspersed with remissions.

Currently, the patient was admitted for a polyarticular thrust of his chronic inflammatory rheumatism, without the notion of talalgia neither fessalgies nor low back pain.

ASSESSMENT

The osteoarticular examination found a patient in polyarticular thrust (AI= 12, IS= 6, EVA pain= 7/10) with peripheral joint syndrome:

- 2nd, 3rd, 4th bilateral MCP synovites
- Hand deformations with bilateral Z-thumb type, 4th bilateral finger gooseneck with 5th right mallet finger.
- Valgus hallux deformations of both feet.

In addition, the examination of the sacroiliac, dorso-lumbar spine and enthesis is without particularity.

The extra-articular examination did not objectivize any abnormalities, in particular no skin psoriasis or ungual.

The biological assessment noted the presence of:

- Moderate biological inflammatory syndrome with sedimentation rate
- (VS) at 37 mm (the first hour) and a protein reactive C (PRC) at 69 mg/l.
- Rheumatoid factor positive at 678 IU.
- Citrullinated anti-peptid autoantibodies (ACPA) are positive at 191 IU.

The radiological balance showed a structural damage to the feet with a type of erosion and geodes of the MTP 1,2,3 on the left, the MTP2,3,4,5 and the IPD1 on the right, with an aspect of periosteitis in spicule juxta-MTP5 joint on the left and periosteal affixing at

the lateral edge of the first phalanx of the large right toe.

At the hands, there is a bilateral radiocarpal pinch, a fusing carpite with erosions of the carpal bones bilaterally, a pinch of all MCP, geodes of the MCP1,5 on the right, of the MCP1, 4 on the left with a pencil in cup aspect 4th left MCP, a pinch of IPP3 ,4.5 bilaterally with a start of ankylosis of IPP5 on the right and IPP4 and 5 on the left and erosion of IPP4 on the right and IPP3 on the left.

The face pelvis X-ray objectivizes a left sacro illite. Radiography of the dorso-lumbar spine objectivized a syndesmophyte of the L2 vertebra.

DIAGNOSIS

The diagnosis of psoriatic rheumatism with positive ACPA was retained in this patient. The activity of the disease remains high (Das28vs=5.80; BASDAI= 5.22).

The radiological aspects in pencil in cup and spicule comfort the diagnosis of psoriatic rheumatism in our case, although specific ACPA rheumatoid arthritis, can be positive during psoriatic rheumatism especially when the involvement is polyarticular [1, 2], which can make the differential diagnosis between PR and RP even more delicate.

The coexistence of erosive lesions,ankylosing and the presence of left sacro-iliac syndesmophyte,ankylosis but also the periosteal attachment of the big toe leads us to the diagnosis of RP which is observed in our case.

Several works have reported the achievement of the periostitis juxta-articular spicule but predominant at the hand, in our case the spicule aspect is present at the level of the left MTP5 [3, 4]. Ichikawa N et al., conducted a comparative study of radiological hand involvement between a group of patients with psoriatic rheumatism (85 patients) and a group of patients with rheumatoid arthritis (135 patients); what emerges is that the spiculated appearance in the hands was very significant in psoriatic rheumatism as in rheumatoid arthritis [5].

Joints reached in order of frequency: hands, wrists, feet, ankles, knees and shoulders. The reach of these distal joints, phalangettes, of the same radius have an often asymmetrical distribution; this is the case for our patient [6].

Rosive lesions are present in PR beginners (< 5 years) but with potential evolutionary less at 1 or 2 years than in the RP [5].

Steoarticular ultrasound and MRI of the hands and forefeet can help in the differential diagnosis between PR and RP.

The identification of marginal bone erosions at ultrasound or MRI is an important argument in favor of PR diagnosis. The hyperostosant character of these marginal erosions, the extension of lesions far beyond the capsulosynovial structures with evidence of ultrasound or MRI of periosteitis and/or enthesia fingers or toes plead for psoriatic rheumatism.

The distribution of lesions in imaging, apart from atypical cases like ours, is also important to differentiate rheumatoid arthritis from psoriatic rheumatism.

MANAGEMENT

Our patient was put on sulfasalazine 2g/d and corticosteroid therapy 5mg/d due to sequellary pulmonary involvement against indicating methotrexate. Although sulfasalazine is commonly prescribed, particularly for patients with peripheral arthritis, its role in the management of axial spondylitis is less clear.

A 2014 Cochrane review reported evidence to support any benefits of sulfasalazine in the reduction of pain, disease activity and radiography progression or improvement of the physical function and mobility of the spine in the treatment of ankylosing spondylitis [7].

In the face of poor symptom resolution, other pharmacological options include biologics. Because of the clinical failure to improve, the patient was put on treatment by etanercept (Enbrel) 50mg subcutaneous, once a week. After that, a good clinical evolution was observed on the patient.

Fig-1 : X-ray of the 2 feet face objectifying erosions and geodes of the MTP1, 2, 3 on the left and the MTP2, 3, 4, 5 and the IPD1 on the right, with a spicule periosteitis appearance juxta-joint of the left MTP5 and periosteal attachment at the lateral edge of the first phalanx of the right big toe

Fig-2: X-ray of the 2 front hands with bilateral radiocarpal pinch, fusing carpite with bilateral carpal bone erosions, pinch of all MCP, geodes of MCP1.5 on the right, of MCP1, 4 on the left with an aspect of « pencil in cup » of 4th left MCP, a pinch of IPP3 ,4.5 bilaterally with a start of ankylosis of IPP5 on the right and IPP4 and 5 on the left and erosion of IPP4 on the right and IPP3 on the left

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