Psoriatic Temporomandibular Joint Arthritis Treated with Multidisciplinary Clinical Treatment : A case study

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Psoriatic arthritis is a chronic inflammatory form of arthritis that is associated with psoriasis. A 54-yr-old male with chronic psoriatic temporomandibular joint arthritis and myofascial pain was treated using methotrexate and a myofascial pain protocol. Jaw pain improved after 3 weeks, however, tenderness to palpation of muscles remained. Comprehensive evaluation and multidisciplinary clinical treatment is required for the treatment of patients with psoriatic temporomandibular joint arthritis.

Key words: Multidiciplinary clinical treatment, Psoriatic arthritis, Temporomandibular joint arthritis

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INTRODUCION

Psoriasis is a chronic genetic papulosquamous skin disorder that affects 1% to 3% of the world's population.[1] Until the early 1980s psoriasis was thought of as a disorder that primarily involved epidermal keratinocyte differentiation and proliferation, however, it is now recognized as a cell-mediated adaptive immune response. Psoriatic arthritis (PsA) is a chronic, progressive inflammatory disease with association of psoriasis in the peripheral joints, spine and connective tissue. Recently, studies have shown that the prevalence of PsA has been underestimated due to under recognition and misdiagnosis, and that it may actually be present in as many as 25% of patients who suffer from psoriasis.[2] Important features that can be used to help distinguish PsA from rheumatoid arthritis and osteoarthritis include enthesitis, iritis, arthritis, spondylitis, dactylitis and the infrequency of rheumatoid factor.[2-4] In addition, patients with PsA have distinct radiographic features such as increasing osteolysis, the prominent "pencil-in-cup" deformity and paramarginal erosions.[4,5]

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CASE

A 54-year-old white male diagnosed with PsA 25 years ago presented with bilateral dull aching pain in the preauricular area that was exacerbated by chewing hard food. The patient had suffered from jaw pain and temporomandibular joint (TMJ) crepitation for over 10 years, and he also had a history of hernia, tonsillectomy, gastritis, and poly arthritis on both hands and feet. In addition, his eye (retina) had been damaged during ultraviolet therapy for psoriasis. Methotrexate, vioxx and folic acid therapy had previously been administered and a stabilization splint was made to alleviate his jaw pain 5 years ago. Radiographs (Fig. 1.) showed reduced joint spaces, osteophytes and the flattening of both condylar heads.

Upon stomatognathic examination, the patient was

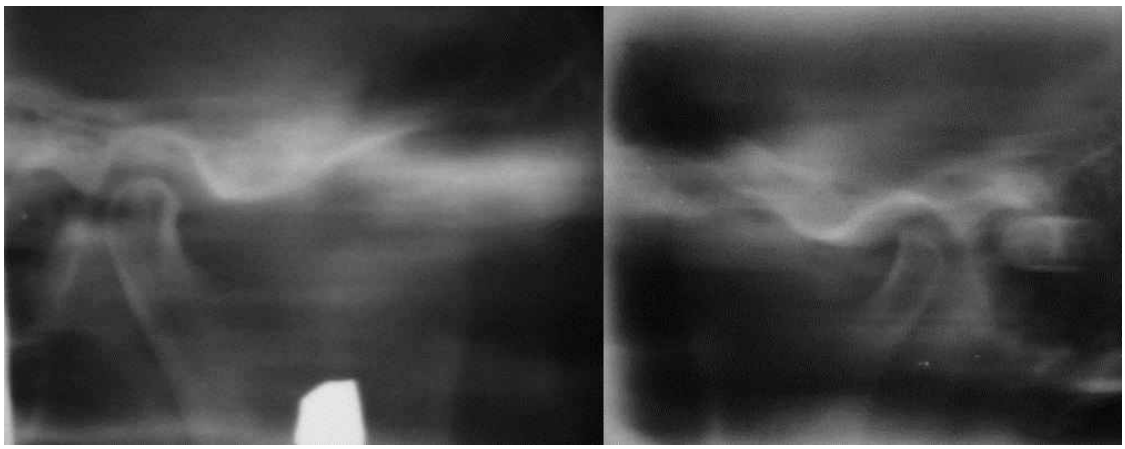

Fig. 1. Radiographs showing osteophytes and the flattening of both condylar heads



Fig. 2. Arthritic deformities on hands and feet

found to have bilateral pain in the masseter muscles with a maximum opening of 54mm. In addition, both TMJs and the masseter muscles were tender to palpation. Upon dermatologic examination, he had psoriatic plaques and arthritic deformities on his hands and neck(Fig. 2.).

A diagnosis of PsA with TMJ involvement, myofascial pain and parafunctional habit (clenching) was made, and a systemic therapy for psoriasis and PsA that was comprised of a myofascial pain protocol including application of a moistened heat pack, stretching of muscles, and instruction of resting jaw posture was recommended by a physician (rheumatologist, dermatologist). In addition, stabilization splint therapy was conducted to treat parafunctional habit (clenching), and methtrexate, vioxx and folic acid were prescribed to treat PsA.

A follow-up examination conducted 3 weeks after the patient presented indicated that the jaw pain had improved, but that the tenderness to palpation of the TMJ, masseter, anterior temporalis and sternocleido-mastoid muscles remained. Therefore, the MFP protocol was reinforced and treatment with the same medications was continued. At the time of the 8-week follow-up examination the jaw pain and tenderness to palpation of muscles were found to be the same as at the time of the previous visit, therefore, bilateral trigger point injections of 1% Procaine were administered to the anterior temporal muscles.

DISCUSSION

Disease severity is the primary determinant of the therapy chosen for the treatment of PsA. Non-steroidal anti-inflammatory drugs (NSAIDs) and physical and occupational therapy are typically used for the treatment of mild cases of PsA.[4,5] However, because of the gastrointestinal side effects associated with NSAIDs, selective COX-2 inhibitors, such as celecoxib and rofecoxib, and relatively selective COX-2 inhibitors, such as meloxicam, are often used to reduce inflammation and relieve pain with less gastrointestinal side effects. PsA patients who are unresponsive to NSAIDs therapy, as well as patients with moderate to severe symptoms, require the use of systemic disease-modifying antirheumatic drugs, such as methotrexate, sulfasalazine, leflunomide and cyclosporine, to control disease symptoms and diminish disease progression.[6] When treating PsA, methotrexate is the commonly selected primary disease-modifying antirheumatic drugs for its evidence based clinical efficacy in skin and joint involvement.[7,8] Jones et al. accomplished a meta-analysis of randomized, placebo-controlled trials using the results reported in various publications and found that higher doses are more effective at improving the symptoms of PsA.[9] However, hepatic toxicity has been reported and monitoring of the liver in high-risk cases should be considered, in some cases needing a periodic liver biopsy.[10,11]

The patient described here was treated using conventional therapies, however, conducted to evaluate the active role of inflammatory cytokines, such as T-cells and tumor necrosis factor (TNF), in the pathophysiology of PsA have led to the development of targeted therapies for effective treatment of PsA.[11] Etanercept, a recombinant TNF-receptor fusion protein, has been studied in 2 placebo-controlled trials, and the results of both of these trials indicated that it was significantly more effective than placebo.[12,13] In addition, Antoni et al evaluated the results of a study conducted on 102 PsA patients who received either in fliximab, which is a TNF-neutralizing agent, or placebo, and found that in fliximab significantly improved the symptoms of PsA.[14,15]

RESULT

Because PsA can be irreversible and lead to long-term disability in joints and preauricular tissues, it is important for physicians, including dermatologists and rheumatologists, as well as dentists, to consider a diagnostic and multidisciplinary approach to the treatment of patients.[16,17] In this case, the patient was treated by both physicians and dentists, therefore, aggravating factors were treated by the use of a stabilization splint and a myofascial pain protocol.

CONCLUSION

Comprehensive evaluation and multidisciplinary clinical treatment is required for the treatment of patients with psoriatic temporomandibular joint arthritis.

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다학문적 임상 접근으로 치료된 건선 측두하악골관절염 증례

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조은애 · 안형준 · 박주현 · 김성택

건선 관절염은 건선과 관련된 만성 염증성 골관절염이다. 만성 건선 측두하악골관절염과 근막통증에 이환된 54세 남환이 메토트렉세이트와 근막통증 치료 프로토콜에 준한 치료를 적용했다. 3주후, 턱의 통증은 완화 되었으나 턱의 근육 촉진시 불편감은 잔존 하였다. 건선 측두하악골관절염의 경우, 종합적인 평가 및 다학문적 임상 치료가 필요하다.

주요어: 건선 관절염, 다학문적 임상 치료, 측두하악골관절염

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