



Arthritis Robustus: Still Alive and going Strong!

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Abstract

Arthritis Robustus, first described by Haas, et al. in 1973 as “Rheumatoid arthritis, typus robustus,” is an atypical presentation of rheumatoid arthritis (RA) wherein the patient can work and complete activities of daily living despite possessing severe disease. There is little current literature on arthritis robustus, with the most recent description being from 2014, describing an Indian telephone wire worker whose disease was discovered incidentally during the management of myocardial infarction. This article expands the current literature on arthritis robustus as an atypical presentation of rheumatoid arthritis using a case-revelation from a rural rheumatology clinic in the United States.

Keywords: Arthritis Robustus; Rheumatoid Arthritis; Polymyalgia Rheumatica

Abbreviations: RA: Rheumatoid Arthritis; LORA: Later-Onset Rheumatoid Arthritis; PMR: Polymyalgia Rheumatica; CCP: Cyclic Citrullinated Protein; RF: Rheumatoid Factor.

Background

With RA having such a large age distribution and an overlapping constellation of symptoms, being able to distinguish the different varieties is exceedingly important. The diagnosis of later-onset rheumatoid arthritis (LORA) has shown to be somewhat difficult because of the overlapping clinical features of different types of RA. In addition, LORA also has similar presentations to diseases such as polymyalgia rheumatica (PMR), making laboratory work-up essential when clinical suspicion is high [1-3]. Early RA has been defined as patients with symptom/disease duration of less than 2 years, preferentially less than 12 months. Early diagnosis and treatment can affect the disease outcome, and

even lead to a state of remission, as suspected in the case below [4]. Cyclic citrullinated protein antibodies (CCP) have a specificity of about 96% and a positive likelihood ratio of about 14, hence assisting with the diagnosis of RA. They are present in 23% of patients with early-stage RA, in about 50% of patients at diagnosis, and in about 53% to 70% of patients 2 years after diagnosis. They can also predict aggressive disease and subsequent joint erosion [5].

Case

An elderly Caucasian gentleman presented at age 73 with an explosive onset of pectoral and pelvic girdle pain and stiffness, as well as, a symmetrical inflammatory polyarthropathy involving both the small and large joints of all 4 extremities. He was seen at the local urgent care clinic and the labs drawn showed a significantly elevated level of C-reactive protein and erythrocyte sedimentation

rate, as well as a positive rheumatoid factor (RF) and CCP results. Rheumatology consult was subsequently requested. On the initial examination in the rheumatology clinic, there was active synovitis in multiple peripheral joints with a significant limitation of range of motion in these joints. A detailed rheumatologic work-up was ordered and with a working diagnosis of PMR-like onset of later-onset yet early seropositive RA, the patient was started on hydroxychloroquine 200 mg orally twice a day as DMARD (disease-modifying antirheumatic drug) therapy, pending results of further work up. As laboratory results began to trickle in, CCP was found to be strongly positive at 206. RF was equivocally positive at 14, and 14.3.3 Eta was negative at <0.2. During the visit to review the lab results, a shared decision was made to add methotrexate to hydroxychloroquine for double DMARD therapy given the strongly seropositive nature of the RA, which confers a potentially severe nature to the disease. Prednisone was used as a bridge until the DMARD combination became therapeutically effective. At his follow-up visit, he was noted to have had a miraculous response. Pain, stiffness, and swelling in all the affected joints abated rather quickly. He himself discontinued the hydroxychloroquine after 3 months of use. He decreased the dose of prednisone to 1.25 mg twice a day and will continue to taper off until it is no longer required. He decreased the dose of methotrexate from 15 mg orally once a week to just 2.5 mg orally once a week on his own. His acute phase reactants ESR and CRP normalized. He is back to performing all the instrumental activities of living including rigorous physical exercise which he has done all his life. Despite being later-onset disease, which typically has a less-favorable prognosis, his disease was caught early (Early-onset Rheumatoid arthritis), hence the disease was not allowed to progress to a deformative stage. At the most recent visit, the patient spoke about working in his yard and “using a 12 pound sledgehammer to break up rocks,” speaking to the patient’s astonishing recovery, resilience and robustness.

Discussion & Conclusion

RA remains a significant burden on healthcare resources worldwide affecting 0.24-1% of the global population [6]. Lifetime risk for RA increases significantly in patients greater than 50-years-old [7]. Disease onset is typically insidious and progressive over time, thus patients may present with varying degrees of articular damage and loss of function [8]. It is critically important to recognize late/later onset RA,

especially of the robustus variety early, and offer full attention to its management because of the similar impact on the quality of life. Late onset RA has been associated with worse outcomes including increased joint erosions, disease activity, all associated with poor outcomes [9]. Earlier detection of the rather rare arthritis robustus variant of PMR-like onset of LORA and subsequent mindful therapeutic intervention, respecting patient-autonomy as a shared informed decision, in this subset may improve outcomes.

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