RELATIONSHIP BETWEEN FOREFOOT SYNOVITIS IN RHEUMATOID ARTHRITIS AND WORSENING FOREFOOT DEFORMITY

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Background: While the number of rheumatoid arthritis (RA) surgeries has been declining due to advances in pharmacotherapies for RA, forefoot surgeries are on the rise. In recent years, the common use of joint ultrasonography in RA consultations has led to the early detection of synovitis. Little is known about how much foot deformities such as hallux valgus and metatarsophalangeal (MTP) joint dislocation are affected by synovitis in the forefoot of RA patients.

Objectives: The present study examined factors involved in forefoot deformity among patients with foot synovitis identified on joint ultrasonography.

Methods: Subjects (71 patients, 91 feet) were RA patients who had undergone joint ultrasonography more than 2 years earlier and underwent standing X-rays of the feet before and after ultrasonography. Surgery cases were excluded. Mean age was 64.9 years (range, 15-90 years). Disease stage was Stage 1 in 14 patients, Stage 2 in 14 patients, Stage 3 in 16 patients, and Stage 4 in 27 patients. According to the Steinbrocker functional classification, RA was Class 1 in 45 patients, Class 2 in 19 patients, Class 3 in 6 patients and Class 4 in 1 patient. Twenty-five patients had been administered biological drugs. At the time of joint ultrasonography, patients were questioned regarding whether they had any complaints involving the forefoot, midfoot or hindfoot (noted separately). The following scans were performed: forefoot (MTP joints 1-5); midfoot (calcaneocuboid, calcaneocuboid and cuneonavicular joints) and hindfoot (peroneal muscle tendon, talocalcaneal joint and posterior tibial muscle tendon). Foot deformity score (FDS) (hallux valgus angle + first-second intermetatarsal angle [M1M2 angle] + first-fifth intermetatarsal angle [M3M5 angle]) was used as the benchmark for forefoot deformity, and an increase >5° was considered to indicate worsening deformity.

Results: Forefoot deformity had progressed in 25 patients. Mid- and hindfoot synovitis and the presence of complaints were not associated with deformity. However, significant worsening of FDS was observed in patients with forefoot synovitis or forefoot complaints. While no difference in age, disease activity, biologic disease-modifying antirheumatic drug usage or health assessment questionnaire results were seen in the advanced deformity group, duration of disease was significantly shorter in this group.

Conclusion: Mid- and hindfoot synovitis was unrelated to forefoot deformity. MTP joint synovitis in the forefoot was related to forefoot deformity. Continuous synovitis in the forefoot muscle damage the articular capsule and ligament structure, leading to progression of deformity. As shown by the short duration of the disease in the advanced deformity group, deformity may progress in the early stages among patients with forefoot deformity.

Disclosure of Interests: None declared


DEPRESSION AND ANXIETY IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Background: Heart failure (HF) is a major cause of premature mortality, but there is little information regarding its prevalence and associated risk factors in patients with early rheumatoid arthritis (RA).

Objectives: To study the frequency, clinical manifestations and risk factors associated with the development of HF in pts with early RA prior to therapy with basic anti-inflammatory drugs.

Methods: A total of 74 pts with early RA (ACR/EULAR criteria, 2010) were included in the study: 78% of women, median (Me) age - 56 years [47; 61], Me of disease duration - 7 [4; 8] months; Me DAS28 5.3 [5.0; 6.2], IgM RF seropositive (87%) and/or ACPA (100%), without any experience of administration of disease-modifying antirheumatic drugs and glucocorticoids. All pts underwent blood pressure monitoring, echocardiography, tissue Doppler imaging, NT-proBNP. The normal range for NT-proBNP was less than 125 pg/ml. HF was diagnosed according to the recommendations of the European Society of Cardiology (2012).

Results: HF was diagnosed in 24 (33%) pts: in 23 pts - HF with preserved ejection function (EF), in 1 pt - HF with reduced EF. Dyspnea was detected in 21 (87%) RA pts with HF (positive predictive value (PPV)-33%), in 6 (25%) - ankle edema (PPV-35%), in 24 (100%) - fatigue (PPV-38%). In 5 (21%) pts dyspnea NYHA=1 was observed, 15 (63%) - NYHA=2, in 1 (4%) - NYHA=3. Diastolic dysfunction of the left ventricle was detected in all pts with HF (PPV-69%). Elevated NT-proBNP level wasn't highly indicative for HF in early RA (PPV-41%). All pts with early RA were divided into two groups: 1 - with HF, 2 - without HF. Pts with RA and HF were older (61 [58;65] vs 51 [56;65] years), had higher BMI (28 [25;32] vs 24 [22;29] kg/m², p<0.05), NT-proBNP level (192.0 [154.9;255.7] vs 77.0 [41.1;191.2] pg/ml, p<0.05), more likely had higher BMI (28 [25;32] vs 24 [22;29] kg/m², p<0.05), NT-proBNP level wasn't highly indicative for HF in early RA (PPV-41%).

Conclusion: Depression and anxiety are common in patients with RA. Patients' perception of their current health is significantly related to mood disorders. Therefore, mental health status, especially mood disturbances, should be addressed in routine practice to improve quality of life in RA.

Disclosure of Interests: None declared


CLINICAL FEATURES AND RISK FACTORS OF CHRONIC HEART FAILURE IN PATIENTS WITH EARLY RHEUMATOID ARTHRITIS PRIOR TO THERAPY WITH BASIC ANTI-INFLAMMATORY DRUGS

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