EDITORIAL

Early Diagnoses of Rheumatoid Arthritis is Important. It should be Clinical not Lab Dependent

Asim Zulfiqar

One of the most difficult task in clinical medicine is to evaluate a patient who presents with joint pain. If you were to open the index of a rheumatology text you would find a list of over hundred different types of arthritides (Table I). Fortunately the more commonly seen musculoskeletal conditions can be divided into five different groups. If approached logically a working diagnosis can usually be easily obtained.

Table I: Simple classification of Arthritic and Rheumatic Disorders[1]

Disorders	Examples
Inflammatory polyarthritis	RheumatoidArthritis, spondyloarthropathies
Degenerative arthritis	Osteoarthritis, spondylosis
Soft tissue rheumatism	Tennis elbow, bursitis
Acute monoarthritis or oligoarthritis	Crystal arthropathy, infectious arthritis
Diffuse connective tissue disease	SLE, scleroderma

One of the most common and devastating disease that has been encountered in clinical medicine practice is rheumatoid arthritis (RA). RA is a chronic inflammatory disease characterized by joint swelling, joint tenderness and destruction of synovial joints leading to severe disability and premature mortality.[2] RA affects between 0.5-1% of the general population, mainly during their working age affecting thus the functional capacity, with great economic burden to the individual and the society. In the last decades there was a clear evolution in knowledge about pathophysiology of the disease resulting in its approach and treatment. The association between symptom duration and RA persistence is not linear suggesting the presence of a confined period in which RA is most susceptible to treatment. Early RA (ERA) is defined as the diagnosis given in the first weeks or months of joint symptoms or signs. The concept of ERA and existence of a window of therapeutic opportunity (a time span in which the institution of effective therapeutic strategy in the form of DMARDs and biologicals) is important to modify the course of disease significantly, decelerating the progression of disease and minimizing joint damage and disability. Early diagnosis of RA is important as early therapeutic intervention reduces the accrual of joint damage and disability.[3]

In the first decade of current century the classification criteria set that was in widespread international use to define RA were the 1987 ACR (American college of rheumatology) criteria.[4] Those criteria gave emphasis to serological tests, rheumatoid nodules and joint erosions which are actually late features of disease. In fact these late features of disease which are pathognomonic for the diagnosis of RA can be prevented if effective therapy is given in early phase of the disease. Keeping in view the problems in diagnosing ERA the working group developed ACR/EULAR classification criteria for RA in 2010.[5] These classification criteria were introduced to select amongst the newly presenting patients with undifferentiated inflammatory synovitis, the subset of patients who are at sufficiently high risk of persistent and/or erosive disease (this being the appropriate current paradigm underlying the disease construct RA).

These classification criteria can be applied to any patient or otherwise healthy individual as long as two mandatory requirements are met. First there must be evidence of currently active synovitis in at least one joint. Secondly the criteria must be applied to those patients in whom the observed synovitis is not better explained by another diagnosis. Four additional criteria (Table II) can then be applied to eligible patients to identify definite RA. Application of these criteria provides a score from 0 to 10 with score of 6 or >6 being indicative of RA. A patient with a score<6 cannot be classified as having definitive RA at the moment but might fulfill the criteria at a later time point. To classify a patient as having definite RA or not a history of symptom duration, a thorough joint evaluation of both small and large joints and at least one serological test (RF or ACPA) and one acute phase response measure (ESR/CRP) must be obtained. It is acknowledged that an individual

Correspondence:
Prof. Dr. Asim Zulfiqar
Professor of Medicine
Islamic International Medical College
Riphah International University Islamabad
E-mail: asimzulfiqar786@gmail.com

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patient may meet the definition of RA without requiring lab test or even if the serological tests are negative (seronegative RA) e.g. patients with a sufficient number of joints and longer duration (> 6 weeks) of symptoms will achieve 6 points regardless of their serological or acute phase response status.

In conclusion RA is entirely a clinical diagnosis. Presence of positive serology (RF/ACPA) may potentiate your clinical diagnosis of RA but the presence of characteristic pattern of joint involvement of greater than six weeks duration almost makes certain the diagnosis of ERA. A due consideration of early aggressive treatment should be made in such patients to arrest the progressive disease at an earlier stage.

Criteria	Score
Joints Affected	
1 large joint	0
2 to 10 large joints	1
1 to 3 small joint	2
4 to 10 small joints	5
Serology	
Negative RF and APCA	0
Low positive RF or ACPA	2
High positive RF or ACPA	3
Duration of Symptoms	
< 6 weeks	0
>6 weeks	1
Acute Phase Reactants	
Normal CRP/ESR	0
Abnormal CRP/ESR	1

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