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# Tips for recognising early rheumatoid arthritis

Rheumatoid arthritis (RA) is a common and potentially debilitating condition, characterised by inflammation in the peripheral joints. A growing trend towards earlier and more effective treatments for RA has led to an increasing emphasis on the early recognition of the disease. Any patient presenting with new-onset arthralgia should be assessed for features of inflammatory disease on history and examination, with particular focus on the wrist, MCP and MTP joints. Investigations can provide useful additional information, however negative serological and inflammatory markers may be found in early disease.

### Why recognise RA early?

In addition to reducing the duration of untreated symptoms, the early recognition and treatment of RA confers several compelling prognostic benefits. The inflammatory burden of RA is more responsive to treatment earlier in the disease course, with several studies supporting higher remission rates, more rapid treatment response and lesser numbers of anti-rheumatic agents required to achieve target outcomes, compared with more established disease. Further, structural joint damage, which is largely irreversible and potentially disabling, typically begins within the first two years of disease, and it is probably most amenable to prevention during this period.

## Presenting complaint

The majority of patients with early RA present with arthralgia, often with other features of inflammatory disease, such as stiffness, joint swelling, reduced grip strength and fatigue.

### Joint distribution

The three most common joint areas involved in early RA are the wrists, metacarpophalangeal (MCP) joints in the hands, and the metatarsophalangeal (MTP) joints in the feet. Any presentation with arthralgia in one or more of these regions should prompt further enquiry regarding the other two areas, in addition to the remaining peripheral joints. RA is typically a symmetrical polyarthritis, although early in the disease course it can present with a unilateral predominance.

### Inflammatory features

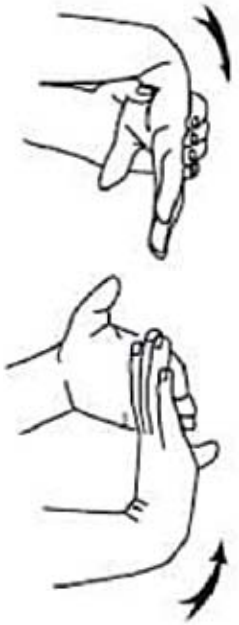
The hallmarks of inflammatory joint pain include morning predominance, morning stiffness, improvement with activity, improvement with anti-inflammatory medication, and worsening with rest. The duration of morning stiffness is often helpful in discerning inflammatory disease (usually > 30 minutes), from the short-lived stiffness which may be reported in osteoarthritis.

### Duration of symptoms

Most inflammatory joint disease is not considered persistent until it has continued for more than six weeks. This is primarily to avoid the over-treatment of self-limited post-viral arthritis, which will typically resolve within this period. A progressive worsening over the first six weeks, however, increases the likelihood of persistent arthritis.

### Polymyalgic presentation

Elderly patients with a typical presentation for polymyalgia rheumatica (morning-predominant pain and stiffness in the shoulder and/ or pelvic girdle, associated with an improvement on activity and a raised ESR), should be assessed for features of both RA and temporal arteritis, prior to commencing steroid therapy. Any patient with polymyalgia who also has features of disease in the hands, wrists or feet, is likely to have polymyalgic-onset RA, which is usually treated with disease-modifying anti-rheumatic therapy from the time of diagnosis.



■ *Demonstrating wrist irritability*

## Examination techniques

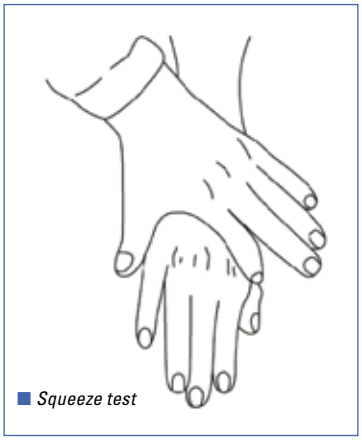
The MCP and MTP regions can be examined through direct pressure over the joints, to elicit tenderness, and to identify swelling if present. Alternatively, a "squeeze test" across these regions can provide a rapid and reproducible screening tool for inflammatory arthritis, a method which has been validated in the assessment of early RA (Figure 1). A report of pain on lateral compression of the MCP or MTP joint areas is considered a "positive" squeeze test, and early RA should be suspected.

Examination of the wrist will usually focus on direct pressure over the dorsum of the radiocarpal joint, to elicit signs of inflammation. An additional screen for wrist involvement is a demonstration of irritability, wherein pain is reported on attempting to passively flex and extend the joint to 90 degrees (Figure 2). Tenderness, swelling and/ or irritability in the remaining peripheral joints may also be demonstrable, and the involvement of three or more joints, should increase the suspicion of early RA.

## Investigations

Blood tests can provide diagnostic and prognostic information in patients suspected of having early inflammatory arthritis, however negative tests should not be used to exclude such conditions. Both rheumatoid factor (RF) and anti-cyclic citrullinated peptide (anti-CCP) antibodies are found in approximately 70% of patients with established RA. These markers may remain negative early in the disease course, however, resulting in a lower sensitivity, typically less than 50%. When detected in early RA, both the RF and anti-CCP are associated with more severe and more persistent disease.

Similarly, while active RA is typically associated with elevated inflammatory markers (ESR and CRP), these may be normal in early and small joint predominant disease. X-rays may show osteopaenia and erosions even in patients with a short duration of symptoms, although in early RA, the sensitivity of plain films is relatively low. ■



■ *Squeeze test*