

FCP Case Study: Identifying RA in Primary Care

Presenting Problem

In a remote First Contact Physiotherapy (FCP) consultation, the patient was a 42-year-old female who reported a history of bilateral knee pain and swelling lasting over a year, which had worsened over the past three months. She mentioned no obvious trauma or triggering mechanism and denied any changes in her activity or behaviour.

She reported that, in the past, her knees can flare up with pain and swelling which normally settles with ibuprofen and time. She has had previous physiotherapy input in the past which somewhat helped symptoms in the short-term.

The pain was aggravated by sitting or laying for long periods and eased with movement and walking short distances. The patient denied any locking, giving way or clicking in the knees. On review of the notes, it appeared that the patient had sought advice from her GP previously who advised the symptoms are likely due to osteoarthritis (OA), although no imaging had been requested.

On further questioning, the patient reported to have regular morning stiffness in both knees and hands which lasted for around 30 minutes. The patient also mentioned that both hands can be swollen and 'puffy' at times with no obvious reason. She did report some mild swelling of both hands at the time of the consultation, although this was hard to clarify due to the appointment being conducted via telephone.

Regarding systemic health, the patient reported no unexplained weight loss but mentioned experiencing recent night sweats, which were new, and feeling generally fatigued over the past few weeks. Their past medical history consisted of IBS, Eczema and there was a family history of RA on their mother's side. Objective assessment demonstrated full range of movement (ROM) in both knees and hips although stiffness was reported throughout the range.



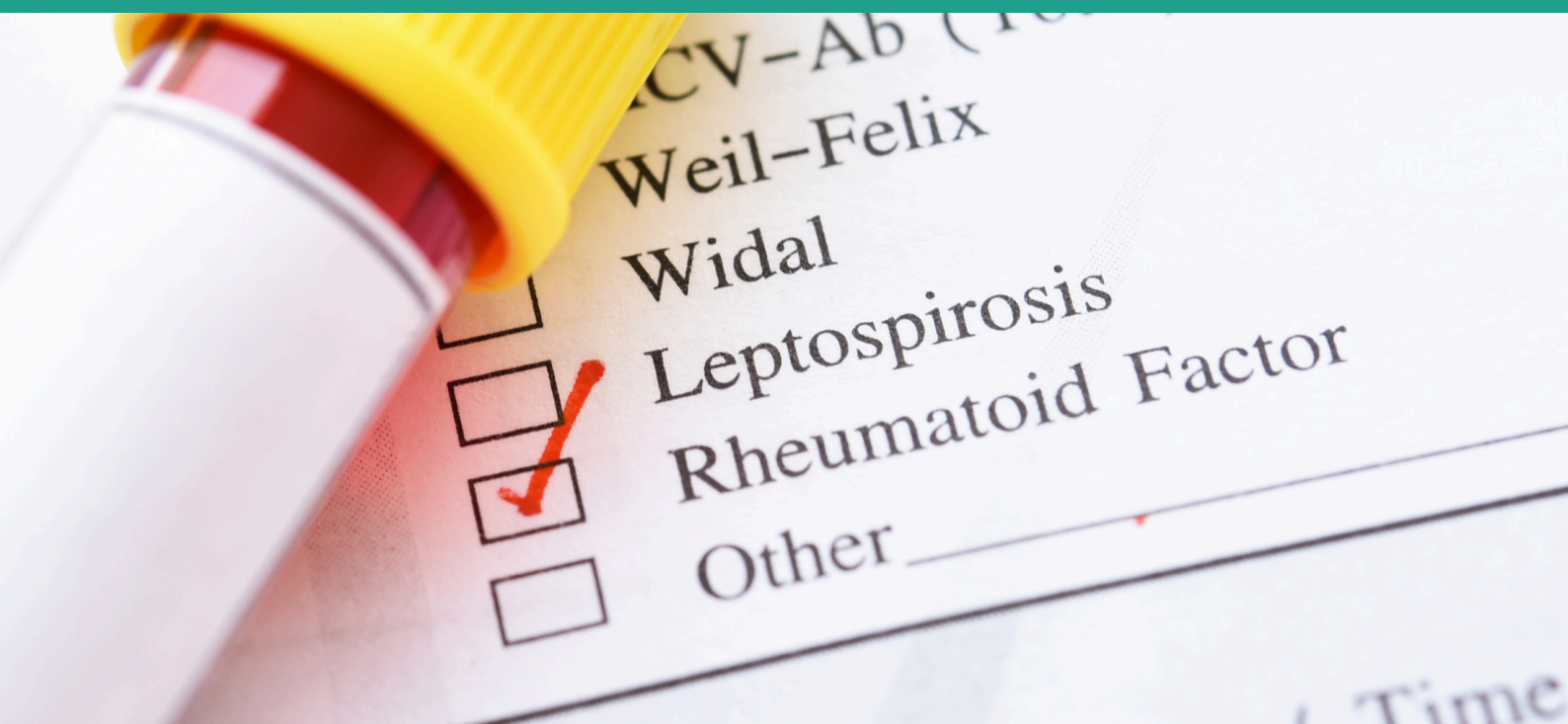
Differential Diagnoses and Clinical Reasoning

Initially, the primary hypothesis was RA. There were many factors that could indicate this such as family history, morning stiffness, bilateral swelling, and the involvement of both hands. There may be an OA element to symptoms, however, as the symptoms were aggravated at rest and eased with movement and walking, this put less weight on the symptoms being consistent with this.

Given the patient's presentation being consistent with RA it is important appropriate investigations are carried out to assist with diagnosis. Aletaha et al (2010) published classification criteria and within this criterion, the blood tests rheumatoid factor (RF), C-reactive protein (CRP) and erythrocyte sediment rate (ESR) are all advised to be carried out. NICE (2021) specifically recommend RF and if positive, anti-citrullinated protein antibodies (ACPA's) to be investigated in adults who are suspected with this condition.

Chang et al (2016) meta-analysis also compared the sensitivity and specificity of RF against ACPA in diagnosing RA. They found that the sensitivity of RF was 67% with a specificity of 79%. This is compared to ACPA where the test was found to be 79% sensitive and 98% specific, suggesting that both test undertaken together provide good clinical value. However, in most primary care settings ACPA is not easily accessible due to cost. As a result, the patient's GP was contacted to arrange ESR, CRP and RF as a first line investigation.

Joint involvement in early RA can be variable as it is only in later stages of the disease that bilateral symptoms occur (Burmester and Pope 2017). As a result, early recognition and assessment alongside appropriate onward referral is critical in achieving the best patient result. Due to this, the patient was referred to rheumatology for further assessment with a view to potential further investigations such as imaging and pharmacological management as deemed appropriate. This being said, in most pathways rheumatology departments will only accept referrals once blood tests support the notion of an inflammatory condition, so awareness of your local pathways is key to streamline patient care.



With regards to pharmacological management, it is integral in both the short and long term management. NICE (2021) recommend the use of disease-modifying antirheumatic drugs (DMARDs) as a first-line intervention. They also advise that they should be prescribed within 3 months of the onset of persistent symptoms, adding more weight to the importance of an early assessment process and timely referral.

Smolen et al (2020) created updated guidelines and recommendations on the use of both types of DMARDs in the management of RA following 2 systematic literature reviews. Within this review it is recommended that the sDMARD methotrexate (MTX) be used as a first line treatment. However, one limitation in this review is that more specific parameters in terms of dosages and timescale of use were not mentioned, impacting the overall transferability of these guidelines.

The goal of medical management involves a treat to target strategy whereby specific disease management targets are set and monitored every 1 to 3 months. This report also recommends targets are measured through blood tests and clinical examination and if the goals are not reached, medications and dosages must be adjusted accordingly. This further supports the notion of early referral to secondary care if suspicion of pathology is high.

Summary

One aspect of this experience was to have differentials in mind when assessing patients. As this patient had been advised their symptoms were due to OA, this could have influenced judgement and biased assessment.

A clear subjective history is important, as well as clarifying objective symptoms and involving the patient in the decision, especially with the added challenges of the consultation being remote.

Another aspect is the importance of communicating the management plan effectively alongside safety netting with patients. This was a particular challenge as the patient became slightly concerned that something serious was going on due to being sent for further investigations. Communicating this while being remote required clear explanations of the rationale for the investigations and the importance of ruling out or confirming specific conditions like RA to ensure optimal treatment.

Early referral, timely investigations, and awareness of local care pathways were instrumental in streamlining patient care and ensuring timely access to specialist input. Furthermore, understanding the role of pharmacological management in early disease intervention emphasised the critical importance of rapid identification and referral in RA cases.

This experience underscored the value of critical thinking, clear communication, and collaborative patient management in achieving effective outcomes, particularly in the complex landscape of remote healthcare delivery.

References

Aletaha, D., Neogi, T., Silman, A. J., Funovits, J., Felson, D. T., Bingham, C. O., Hawker, G. (2010). 2010 rheumatoid arthritis classification criteria: An american college of rheumatology/european league against rheumatism collaborative initiative. *Arthritis & Rheumatism*, 62(9), 2569-2581. doi: <https://doi.org/10.1002/art.27584>

Burmester, G. R., Prof, & Pope, J. E., Prof. (2017). Novel treatment strategies in rheumatoid arthritis. *The Lancet (British Edition)*, 389(10086), 2338-2348. doi:[10.1016/S0140-6736\(17\)31491-5](https://doi.org/10.1016/S0140-6736(17)31491-5)

Chang, P., Yang, C., Cheng, C., & Yu, K. (2016). Diagnostic performance of anti-cyclic citrullinated peptide and rheumatoid factor in patients with rheumatoid arthritis. *International Journal of Rheumatic Diseases*, 19(9), 880-886. doi:<https://doi.org/10.1111/1756-185X.12552>

NICE. (2021). Overview | rheumatoid arthritis in adults: Management | guidance | NICE. Retrieved from <https://www.nice.org.uk/guidance/ng100>

Smolen, J. S., Landewé, R. B. M., Bijlsma, J. W. J., Burmester, G. R., Dougados, M., Kerschbaumer, A., . . . Heijde, D. v. d. (2020). EULAR recommendations for the management of rheumatoid arthritis with synthetic and biological disease-modifying antirheumatic drugs: 2019 update. *Annals of the Rheumatic Diseases*, 79(6), 685-699. doi:[10.1136/annrheumdis-2019-216655](https://doi.org/10.1136/annrheumdis-2019-216655)