# A Case of Rheumatoid Arthritis Treated with Biologic Therapy

## Kedar Ahuja

Department of Orthopedics and Joint Replacement Surgery, Shivneri Hospital, Ulhasnagar, Maharashtra, India

#### **ABSTRACT**

The autoimmune disease rheumatoid arthritis (RA) damages the joints and causes pain, swelling, and stiffness. Numerous people have found biologic treatments, such as tumor necrosis factor (TNF) inhibitors, to be successful in treating their RA symptoms. In this case report, we present the instance of a RA for A 45-year-old female presented with a 3-year history of joint pain and swelling, along with morning stiffness lasting more than 1 h patient who responded favorably to TNF inhibitor therapy. This case report highlights the successful treatment of a patient with RA using a TNF inhibitor.

Key words: Rheumatoid arthritis, tumour necrosis factor inhibitor, biologic therapy

### INTRODUCTION

Rheumatoid arthritis (RA) is a chronic autoimmune disease that affects the joints, causing pain, swelling, and stiffness. Biologic therapies, such as tumour necrosis factor (TNF) inhibitors, have been shown to be effective in managing RA symptoms in many patients. In this case report, we describe a patient with RA who was successfully treated with a TNF inhibitor.

#### **CASE REPORT**

A 45-year-old female presented with a 3-year history of joint pain and swelling, along with morning stiffness lasting more than 1 h. She had a family history of RA and was found to have elevated levels of rheumatoid factor and anticyclic citrullinated peptide (anti-CCP) antibodies. She was diagnosed with seropositive RA and started on methotrexate and non-steroidal anti-inflammatory drugs (NSAIDs).

Despite treatment, her symptoms persisted and she developed joint deformities in her hands and feet. A decision was made to add a biologic therapy, specifically a TNF inhibitor, to

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her treatment regimen. After 6 months of treatment, her symptoms improved significantly. She reported less pain and stiffness, and her joint deformities stabilized. Her rheumatoid factor and anti-CCP antibody levels also decreased.

#### DISCUSSION

Biologic therapies, such as TNF inhibitors, have revolutionized the treatment of RA by targeting specific immune system proteins that contribute to inflammation and joint damage. Several randomized and controlled trials have demonstrated the efficacy of TNF inhibitors in improving RA symptoms and slowing joint damage progression. [1,2] However, these therapies may not work for all patients and can be associated with side effects, including infections and allergic reactions.

In this case, the patient's RA symptoms improved significantly with the addition of a TNF inhibitor to her treatment regimen. This underscores the importance of considering biologic therapies for patients with RA who do not respond to conventional treatments such as methotrexate and NSAIDs.

#### Address for the correspondence:

Kedar Ahuja, Department of Orthopedics and Joint Replacement Surgery, Shivneri Hospital, Ulhasnagar, Maharashtra, India. E-mail: drkedarahuja@gmail.com

# **CONCLUSION**

This case report highlights the successful treatment of a patient with RA using a TNF inhibitor. Biologic therapies have revolutionized the management of RA and offer hope for patients who do not respond to conventional treatments. However, these therapies should be used judiciously and with caution, as they can be associated with serious side effects.

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