

Evaluation of Tuberculosis Prevention Strategies in Patients Under Biologics: A Rheumatology Department’s Experience

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Introduction

Biologics have revolutionized the management of inflammatory arthritis but increase infection risk, particularly tuberculosis (TB), in endemic areas. Screening for TB infection (LTBI) is essential prior to initiating biologics.

Objective: To assess the efficacy of LTBI screening and chemoprophylaxis in preventing active TB in patients receiving biologics for inflammatory arthritis.

Pre-biologic TB Screening:

- Chest X-ray: no active TB
- AFB testing (sputum/urine): negative
- TST (59.6%): 4% positive
- QuantiFERON (40.4%): 6% positive
- LTBI diagnosed: 10.6%
- Prophylaxis: Rifampicin + Isoniazid for 3 months

Patients and Methods

- Design:** Retrospective descriptive study (2012–2023)
- Setting:** Rheumatology Department, CHU Taher Sfar
- Patients:** rheumatoid arthritis (RA), spondyloarthritis (SpA) and juvenile idiopathic arthritis (JIA) under biologics.
- collected data:** Clinical, biological, and tuberculosis screening data, along with patient outcomes.

Biologic Therapies Used

- Certolizumab (46.4%)
 - Etanercept (19.1%)
 - Infliximab (14.6%)
 - Adalimumab (8.5%)
 - Golimumab (7.3%)
 - Secukinumab (6.4%)
 - Tocilizumab (4.3%)
 - Tofacitinib (2.1%)
- Mean duration of biologic use:** 3.7 ± 2.8 years

Results

Population

- 47 patients with:
- Rheumatoid arthritis (RA) – 53.2%
- Spondyloarthritis (SpA) – 42.6%
- Juvenile idiopathic arthritis (JIA) – 4.2%
- Mean age:** 50.8 ± 17.04 years
- Mean disease duration:** 13.1 ± 8.2 years

Results

- No cases of LTBI reactivation
- No primary TB infection during biologic treatment

Conclusion

LTBI screening and chemoprophylaxis prior to biologic therapy appear effective in preventing TB reactivation in this cohort. Continuous vigilance remains necessary due to the ongoing risk of active TB in immunosuppressed patients.