Background: Ankylosing Spondylitis (AS), a chronic inflammatory disease with an unknown etiology influences mainly the axial skeleton, as well as peripheral joints, enthesis and extra-articular systems. Clinical characteristics of antitumor necrosis factor (TNF)-agents-related tuberculosis (TB) in AS are not well described. The aim of this study was to present the follow-up results of a single center from Turkey, a country with a high rate of active and latent tuberculosis infection (LTBI), for INH chemoprophylaxis in patients receiving anti-TNF-α therapy for AS infection.

Methods & Materials: In this study, patients who received an anti-TNF agent for AS were evaluated for the presence of active infection or LTBI by a chest X-ray and a tuberculin skin test. Patients with LTBI were given chemoprophylaxis 1 month prior to commencement of anti-TNF treatment. All patients were followed-up bimonthly for any signs of pulmonary or extrapulmonary TB. New cases of TB were identified by reviewing the medical records of 164 patients with AS treated with TNF-α blockers; adalimumab (n = 68), infliximab (n = 39), or etanercept (n = 53) between 2003 and 2012. Demographics data, the presence of HLA-B27 positivity, chemoprophylaxis were recorded.

Results: A total of 164 patients, 57 female (34.5%) and 107 male (65.5%), with a mean age of 41.0 ± 13.1 years (18-78) were enrolled in the study. The presence of HLA-B27 was positive in 72 patients (43.6%); negative in 29 patients (17.6%); undefined in 64 patients (38.8%). LTBI was identified overall 99 patients all of whom received chemoprophylaxis those of 76 (46.1%) for 9 months, 9 (5.5%) for 6 months. Only 6 patients (3.6%) received chemoprophylaxis for 3 months due to INH hepatotoxicity. Only 2 patients received chemoprophylaxis for 9 months developed urinary tract tuberculosis at 21 (Adalimumab) and 24 (Etanercept) months, (PPD with 12 mm; PPD with 13 mm) respectively. Urine culture for mycobacterium tuberculosis was positive in both patients.

Conclusion: Our results suggest that urinary tract tuberculosis in both patients was a new tuberculosis infection rather than a reactivation of latent tuberculosis.

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