LONG-TERM REAL-WORLD COMPARISON OF IL-17A AND TNF-A INHIBITION IN ANKYLOSING SPONDYLITIS: SECUKINUMAB VS INFLIXIMAB

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Background:
Ankylosing spondylitis (AS) is a chronic inflammatory disease of the axial skeleton that leads to pain, stiffness, and progressive structural damage. Biologics targeting TNF-α and IL-17A have revolutionized treatment. While Infliximab remains a widely used TNF inhibitor, Secukinumab, an IL-17A inhibitor, is increasingly considered an alternative. Real-world head-to-head data remain limited.

Objectives:
To compare the long-term efficacy and safety of intravenous Secukinumab (150 mg) versus Infliximab in patients with AS over a 24-month follow-up period.

Methods:
A prospective observational cohort of 42 patients with AS fulfilling ASAS criteria was followed for 24 months. Patients received either Secukinumab 150 mg IV every 4 weeks (n=20) or Infliximab 5 mg/kg IV at weeks 0, 2, 6, then every 8 weeks (n=22). Clinical outcomes (BASDAI, ASDAS-CRP), functional status (BASFI), inflammatory markers (CRP, ESR), and radiographic progression (mSASSS) were assessed at baseline, 12, and 24 months. Safety and drug survival were recorded.

Results:
Baseline characteristics were comparable (mean age 34.9 ± 8.7 years; 70% male; mean disease duration 6.3 ± 3.0 years). At 24 months, both groups demonstrated significant within-group improvement ($p < 0.05$ for BASDAI, ASDAS-CRP, BASFI, and CRP). Between-group comparisons showed that BASDAI improved to 2.9 (Secukinumab) vs 3.3 (Infliximab), $p > 0.05$. ASDAS-CRP: 1.5 vs 1.7, $p > 0.05$. CRP: 6.2 vs 6.8 mg/L, $p > 0.05$. ΔmSASSS: 0.7 vs 1.1, significantly lower with Secukinumab ($p < 0.05$). Drug survival favored Secukinumab (95% vs 81%). Infusion reactions occurred in two Infliximab patients; none were reported with Secukinumab.

Conclusion:
Both intravenous Secukinumab and Infliximab were effective and safe in reducing disease activity in AS over 24 months. Clinical and inflammatory responses were comparable, but Secukinumab demonstrated higher drug survival, fewer infusion reactions, and less radiographic progression, supporting IL-17A inhibition as a viable alternative to TNF blockade in long-term AS management.

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