Association of Satisfaction with Subcutaneous Anti-TNF Therapy and Clinical Outcomes, Health Status, and Lost Work Productivity in Patients with Rheumatoid Arthritis

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Background
Patient perceptions of treatment success may differ from clinical measures. Therefore, it is important to better understand patient treatment satisfaction as it relates to other measures. Patients in a wide variety of therapeutic areas have demonstrated the association of greater patient satisfaction with better physical health status, less disability, greater quality of life, and a lesser degree of psychological distress. However, there is limited information in the literature about these associations within rheumatoid arthritis (RA).

In a large cross-sectional study of 6,000 RA patients using either biologic or non-biologic disease modifying anti-rheumatic drugs (DMARDs), 77.3% of patients were satisfied with current therapy. However, the association of satisfaction with disease activity and functional status was weak in this study.

Objective
To assess the association of patient satisfaction with subcutaneous (SQ) anti-tumor necrosis factor (TNF) therapy and clinical outcomes, health status, and work productivity less among patients with rheumatoid arthritis.

Methods
In 2009 and 2010, patients aged ≥18 and reporting an RA diagnosis completed a cross-sectional, self-administered, Internet-based questionnaire as part of the Rheumatoid Arthritis Patient Study.

Satisfaction with current SQ anti-TNF therapy (adalimumab, certolizumab, etanercept, and golimumab) was assessed on a five-point Likert scale from 1 = not at all satisfied to 5 = extremely satisfied. Patients who rated their satisfaction as 4 or 5 were classified as very satisfied, and those who rated satisfaction as 1 or 2 were classified as not very satisfied.

Clinical outcomes included the Health Assessment Questionnaire (HAQ) and severity of morning stiffness, fatigue, and pain, measured as -1 to 0 to 10, respectively. Health status was assessed using the SF-36, and work productivity loss was assessed using the Work Productivity and Activity Impairment questionnaire.

Unadjusted, bivariate analyses were evaluated with chi-square tests for categorical variables and t-tests for continuous variables.

Results

Figure 1. Patient Satisfaction with SQ Anti-TNF Therapy

Greater satisfaction was associated with less disability and symptom severity (Figure 2). After adjustment, greater satisfaction was associated with less functional disability (HAQ regression coefficient b = -0.21, p < 0.001), less severity of morning stiffness (b = -1.09, p < 0.001), less fatigue (b = -1.06, p < 0.001), and less pain (b = -2.00, p < 0.001).

Figure 2. Unadjusted Association of Patient Satisfaction with SQ Anti-TNF Therapy and Clinical Outcomes

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Figure 3. Unadjusted Association of Patient Satisfaction with SQ Anti-TNF Therapy and Health Status

Greater patient satisfaction with SQ anti-TNF therapy is associated with better physical health status (SF-36 physical component summary: b = 3.60, p < 0.001) and mental health status (SF-36 mental component summary: b = 2.84, p < 0.001).

Figure 4. Unadjusted Association of Patient Satisfaction with SQ Anti-TNF Therapy and Work Productivity Loss

Greater satisfaction was associated with less overall work impairment and presenteeism (Figure 4). After adjustment, employed patients who were very satisfied had less overall work impairment (event rate ratio = 0.71, p < 0.001) and less presenteeism (event ratio rate = 0.71, p < 0.001).

Conclusions
Greater patient satisfaction with SQ anti-TNF therapy is associated with better clinical outcomes and health status and increased work productivity. However, due to the cross-sectional nature of the study, causality cannot be determined.

Treatment attributes that improve patient satisfaction may have additional benefits.

Further research is needed to investigate the potential impact of treatment attributes on patient satisfaction and outcomes.

References

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