Risk Factors for Surgical Site Infections and Other Complications in Elective Surgery in Patients with Rheumatoid Arthritis with Special Attention for Anti-Tumor Necrosis Factor: A Large Retrospective Study

Reference:

Scientific Literature Review

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Podiatric Relevance:
This study compares outcomes of pre-operative Anti-tumor necrosis (anti-TNF) medication management of rheumatoid arthritis patients and the incidence of surgical site infections (SSI).

Methods:
1219 elective surgeries were retrospectively reviewed. 1023 procedures were performed on patients without rheumatoid arthritis, who served as the control group. 104 were procedures performed on patients with rheumatoid arthritis who stopped their anti-TNF treatment and 92 procedures were performed on patients with rheumatoid arthritis who did not stop their anti-TNF treatment. Anti-TNF treatment was halted 39 days for infliximab, 12 days for etanercept and 56 days for adalimumab (4 half-lives). Incidences of SSI’s were measured in each of the categories.

Results:
There were no significant differences in regards to the prevalence of SSI’s seen between the three different groups. The percentage of SSI in the control group was 4.0%, 5.8% in the halted anti-TNF group and 8.7% in the continued anti-TNF group (p>0.10). The two strongest predictors for an increase in possible surgical site infections were extremity surgery (hand and foot) and history of prior SSI’s. Mean follow-up was 1 year for assessing possible SSI.

Conclusions:
On the basis of this retrospective meta-analysis, there is no evidence to discontinue anti-TNF medications for elective surgery in patients with rheumatoid arthritis.