

## TREATMENT OF ADULT JUVENILE IDIOPATHIC ARTHRITIS PATIENTS WITH TNF BLOCKERS AND EFFECT OF SWITCHING TO A SECOND ANTI-TNF AGENT

Jarosova K, \*Chroust K, \*Buresova L, Vencovsky J.

Institute of Rheumatology Prague \*Institute of Biostatistics and Analyses, Brno, Czech Republic

To analyze the efficacy and safety of TNF blocking therapy in adult patients with juvenile idiopathic arthritis (JIA)

Methods: ATTRA is a Czech national registry of patients with chronic arthritis who are treated with biologics. We have analysed adult JIA patients, who switched from one TNF antagonists to another anti-TNF treatment. Patients were treated in recommended doses for RA and the first drug was either infliximab (65%), or etanercept (23%), or adalimumab (14%). Those patients, who lost the response during the treatment, or who had to be discontinued due to adverse event, were switched to alternative anti-TNF. Survival on therapy for individual TNF blockers after 1 and 2 years was calculated.

Results: 105 adult JIA patients were treated with anti-TNF agents. Mean age of patients was 25.2 years, duration of disease was 15.4 years and 62.9 % were women. Twenty five (23.8 %) patients received more than one TNF antagonist. DAS28 showed excellent and persistent improvement for those patients, who remained on the first drug. DAS28 at week 0 was  $6.38 \pm 0.71$  and decreased significantly to  $2.87 \pm 1.46$  at week 54 and  $2.55 \pm 1.31$  at week 108: Response to second anti-TNF was also significant, although with smaller differences to baseline DAS28; weeks 0, 54 and 108 were  $5.97 \pm 0.9$ ,  $3.18 \pm 1.97$ , and  $3.94 \pm 0.61$ , respectively. Survival on the treatment was not statistically different in the first users in comparison with switched patients ( $p = 0.501$ ).

Adverse events that lead to treatment discontinuation were observed during 1st and 2nd year of treatment with the first anti-TNF in 6% and 10% and in 4% and 12% with the second agent. Treatment discontinuation due to inefficacy was observed with the 1st anti-TNF in 1% and 4 %, and in 5% and 0% with the 2nd anti-TNF during treatment years 1 and 2.

Conclusion: Anti-TNF treatment in adult patients with JIA is effective and safe. It is possible to regain efficacy after switching to second anti-TNF blocker in a majority of patients, although with somewhat lower difference between entry and 2 years DA28 evaluation. Good adherence to therapy was observed for both first and second TNF antagonists.

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