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MONITORING PATIENTS TREATED WITH INFLIXIMAB: ASSESSING ANTI-INFLIXIMAB ANTIBODIES

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Background: Anti-tumour necrosis factor alpha (TNF α) agents have a marked impact on treatment of inflammatory bowel disease (IBD). However, some patients receive no benefit, gradually lose the effect or experience adverse effects. We have examined possible role of antibodies against infliximab (ATI) in IBD patients treated with anti-TNF α agent infliximab (Remicade) in these processes.

Methods: 139 IBD patients treated with Remicade were examined for presence of ATI: 58 male and 81 female, age 10 to 71 (mean 34.5 years), 36 ulcerative colitis (UC) and 103 Crohn's disease (CD), treatment duration 1 to 12 months (median 6 months). Response to infliximab was classified as: 1. satisfactory effect, 2. initial no effect, 3. secondary loss of effect and 4. post-infusion reactions. Serum ATI were detected by enzyme immunoassay (**Matriks Biotek**). Mann-Whitney Utest with significance level of 5% was used for statistical analysis.

Results ATI were detected in 19/139 patients (13.7%), 6 (31.6%) male and 13(68.4%) female, 13(68.4%) CD and 6 (31.6%) UC. In group 1, ATI were detected in 2.6% of patients. In initial non-responders (group 2), no ATI positivity (0%) was detected. In group 3 with secondary loss of response, 50% of patients have developed ATI. In group 4 with post-infusion reactions, ATI were detected in 25% of patients. Mean values of ATI concentration were significantly higher in secondary non-responders compared to other groups ($p < 0.001$).

Conclusions: The formation of ATI may be responsible for non-responding to treatment and could be responsible for at least a part of infliximab-related infusion reactions. Supported by IGA MZdCR NR/9094-4/2006.