

Progression of Bone Destruction in Rheumatoid Arthritis (RA): Dependence on Different Doses of Rituximab

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Abstract:

Objective: Analysis of clinical and antidestructive effect of different Rituximab (RTX) doses in RA patients (pts)

Methods: Clinical and radiological study of 60 pts with RA (mean disease duration 9+7,3 years, mean DAS28 6,4+0,95, RF-positive 89%, ACCP-positive 92%) treated with different RTX doses (1000 mg x2 or 500 mg x2). Clinical effect was assessed by EULAR criteria; radiological progression by SVH method.

Results: Pronounced therapeutic effect of RTX was noted. By the 24-th week after the first course good results were registered in 23.5%; good and satisfactory results in 82.9%. After the 2-nd course of treatment the corresponding figures were 29.7% and 85.3%. Antidestructive effect of RTX was also significant. After 48 weeks of treatment progression of articular destruction was absent in all pts in clinical remission, in 83% of pts with low disease activity, and in 43% of pts with moderate activity. Noteworthy, clinical and antidestructive effects often did not coincide. Thus RTX treatment slowed joint damage in 54% of pts without clinical improvement. There were no significant correlations between clinical outcomes and doses of RTX (after both the 1-st and the 2-nd courses). The inhibition of radiological progression was more pronounced in pts treated with higher doses of RTX.

Conclusion: The therapeutic results of different doses of RTX (1000 mg x2 or 500 mg x2) were comparable but the antidestructive effect of higher doses was significantly greater. Clinical and antidestructive results did not always coincide in the same pt. It suggests different mechanisms of clinical and antidestructive effects of anti-B-cell therapy.

Key words: Progression of bone destruction, rheumatoid arthritis, rituximab, radiological progression, anti-B-cell therapy