

Time to relapse in RA patients withdrawn from anti-TNF treatment because of remission

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Background

Today, the main objectives in the treatment of rheumatoid arthritis (RA) are to induce sustained remission, to prevent joint destruction and to enable the patient to lead a full life. By means of the data of the German biologics register RABBIT (rheumatoid arthritis – observation of biologic therapy) we were able to show that biologics increase the chance of remission in RA significantly (odds ratio=2.0). However, the overall remission rates remain low (< 20%; sustained remission >6 months < 10%).

In the following we used data of this German prospective cohort study RABBIT to determine the time to relapse in RA patients withdrawn from anti-TNF treatment because of remission.

Patients and methods

Patients

- enrolled into RABBIT between May 2001 and December 2005
- new prescription of etanercept (ETA), adalimumab (ADA) or infliximab (INF) at enrollment to this prospective cohort study of RA patients in routine care

Assessments

- start/end of treatment with biologics or DMARDs
- reasons for withdrawal of anti-TNF therapy
- clinical status including disease activity score DAS28

Outcome

- frequency of treatment termination because of remission
- time to new start of an anti-TNF treatment
- time to relapse (new start of anti-TNF or DMARD treatment, or to exceed DAS28 > 3.8, or to increase in the DAS28 > 1.2)

Statistical method

Kaplan Meier method

Results

Among 2651 patients enrolled, 1087 received ETA, 996 ADA and 568 received INF (Tab. 1).

	All patients
n	2651
Age	53.7 ± 12
Disease duration (years)	11.8 ± 9.3
Swollen joint count (0 – 28)	9.4 ± 6.1
ESR mm/hour	35.6 ± 24
Disease activity score (DAS28)	5.8 ± 1.2
FFbH (Percent of full function 0 - 100)	56.2 ± 23
Number of previous DMARDs	3.6 ± 1.4

Tab. 1: Patient's characteristics at baseline

The mean DAS28 improved from 5.8 at baseline to 4.1 (SD: 1.5) at 6 and 12 months respectively. 18% of the patients achieved a DAS28 < 2.6 (DAS28 remission) at 12 months.

However, treatment termination because of remission was rare. It was observed in 24 patients only, corresponding to a rate of 1.4% at 12 months. Six (9/24) patients had a disease duration ≤ 2 (≤ 5) years, seven a disease duration ≥ 10 years. At withdrawal, 17% did not receive any DMARD, 58.3% continued taking methotrexate (MTX), and 17% took other DMARD.

	At baseline	At withdrawal
mean ± SD		
DAS28	5.2 ± 1.3	2.5 ± 1.3
Swollen joint count (0-28)	8.8 ± 5.6	0.8 ± 1.2
ESR mm/hour	29.0 ± 19	13.0 ± 12
FFbH (Percent of full function 0-100)	70.7 ± 19	81.4 ± 18
Low disease activity (%)		
DAS28 < 2.6	4.2	62.5
No swollen joints	4.2	54.2
ESR < 20mm/h (m) < 30mm/h (f)	50	83.3

Tab.2: Characteristics of patients withdrawn because of remission (n=24)

The cumulative relapse rates at 3, 6 and 12 months were 30.2%, 57.7% (95%CI: 39% - 78%) and 67.1% (48%-85%) (Fig.1). All patients without relapse at 12 months (n = 6) had continued treatment with MTX or leflunomide. Only one of these 6 patients had a disease duration ≤ 2 years.

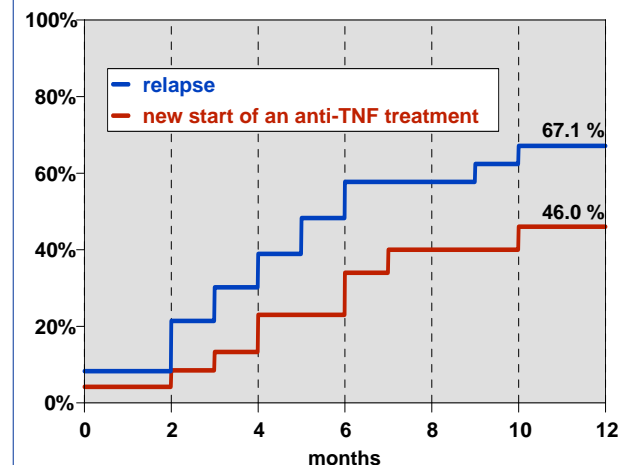


Fig. 1 Treatment continuation rates

Conclusion:

In this group of RA patients with severe, long-standing disease and a considerable number of previous DMARD failures, withdrawal of anti-TNF agents because of remission was rare. Nevertheless, our data suggest, there is an appreciable proportion of this small subgroup of patients who do rather well without any new anti-TNF treatment for at least 6 or 12 months of follow up.

(1) Listing J, Strangfeld A, Rau R, Kekow J, Gromnica-Ihle E, Kloppsch T, Demary W, Burmester GR, Zink A: Clinical and functional remission: even though biologics are superior to conventional DMARDs overall success rates remain low. Arthritis Research & Therapy 2006,8:R66

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