

Introduction

Recent literature suggests that the course of RA has become milder over time, possibly due to more aggressive treatment strategies.

We studied trends of disease activity in a large single-center cohort of RA patients over two years

Data Collection

- Patients enrolled in Brigham Rheumatoid Arthritis Sequential Study (BRASS), a large single center cohort of RA patients in which demographic, genetic and functional status data is collected (2003-present).
- Baseline and annual data collected:
 - » tender joint count (TJC)
 - » swollen joint count (SJC)
 - » patient global assessment (PGA)
 - » evaluator global assessment (EGA)
 - » physical function
 - » comorbidities
 - » inflammatory markers: ESR and CRP
 - » medication use
- Every six months, subjects queried by mail regarding medication changes, physical function and comorbidities.

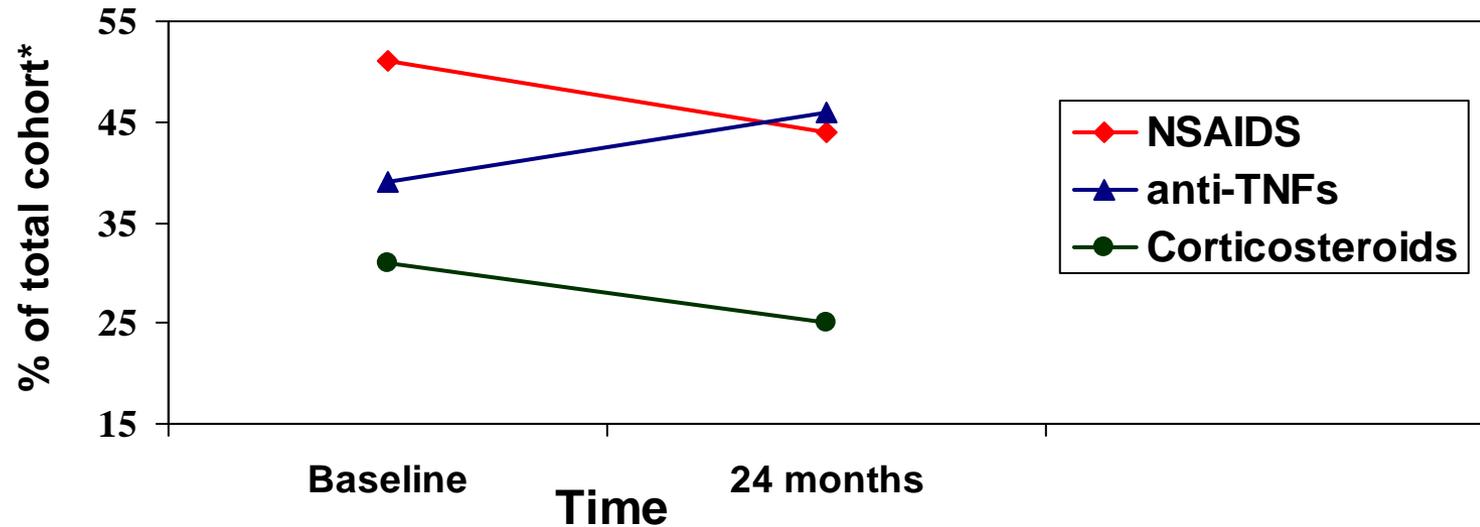
Methods - Statistical Analysis

- Differences in medication use from baseline to 24 months analyzed using McNemar's Test
- Trends in DAS28-CRP over 24 months analyzed using mixed model, adjusting for age, gender, and disease duration.

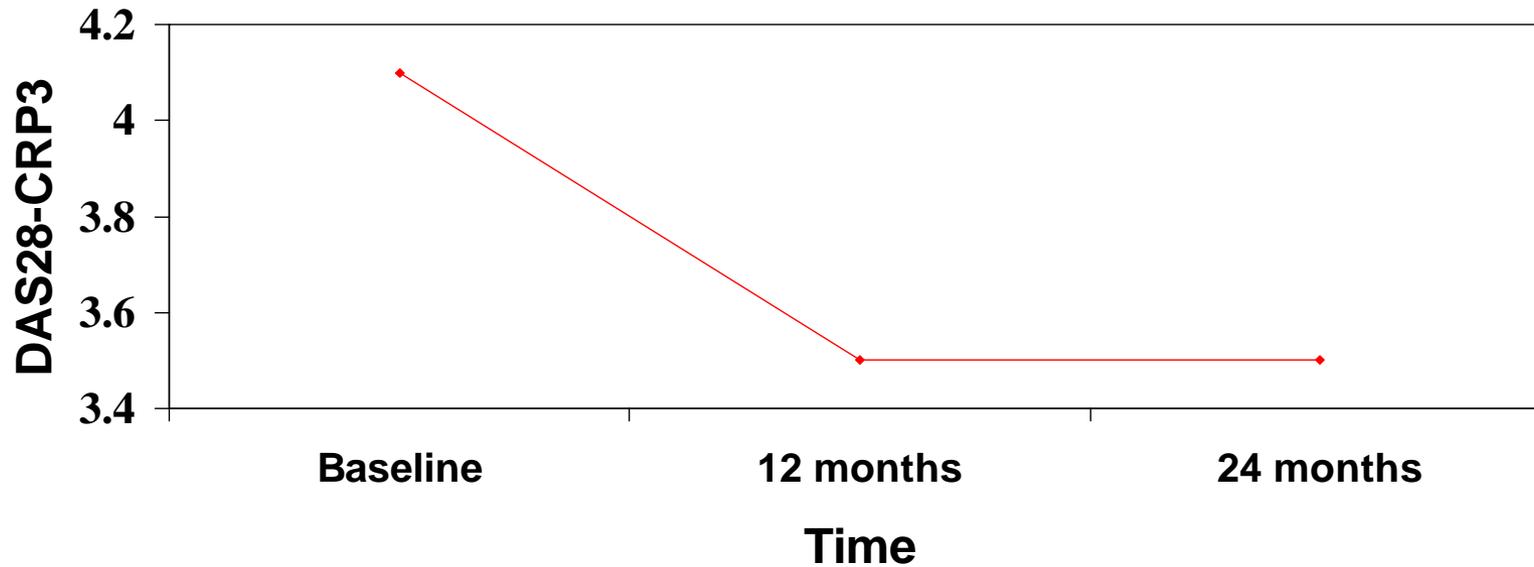
Baseline Characteristics of BRASS Cohort (N=961)

Female, n (%)	790 (82.2)
Age, mean years (SD)	57.05 (14.1)
Disease Duration, mean years (SD)	14.18 (12.4)
MDHAQ, median	0.6 (0.0-1.6)
DAS28-CRP3, mean (SD)	4.07 (1.5)
RF positive, n (%)	568 (65.6)
CCP positive, n (%)	596 (65.5)
Medications, n (%)	
None	41 (4.3)
Narcotics	99 (10.3)
NSAIDS	479 (49.8)
Corticosteroids	318 (33.1)
Plaquenil	168 (17.5)
Sulfasalazine	70 (7.3)
Leflunomide	100 (10.4)
Azathioprine	1 (0.1)
MTX without anti- TNF	286 (29.8)
MTX with anti-TNF	146 (15.2)
Anti-TNF without MTX	188 (19.6)

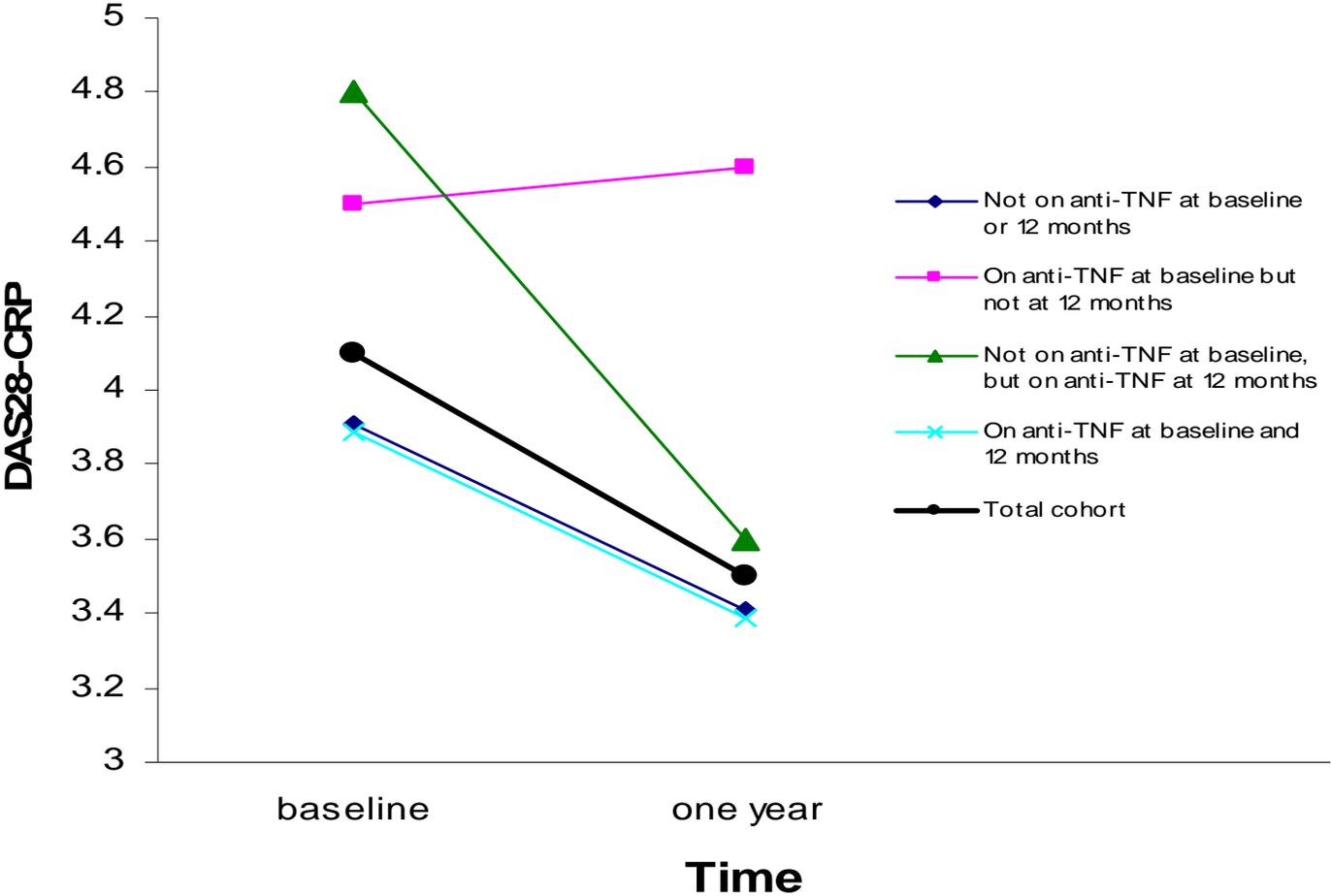
Anti-TNF Use Increases Over 24 Months



Mean DAS28-CRP Decreases Over 24 Months



Change in DAS28-CRP According to Anti-TNF Use at Baseline and 1 Year



Conclusion

- In this large single-center clinical cohort, there was a significant trend toward a decrease in average disease activity from baseline to 24 months of follow-up
- During this same time period, utilization of TNF inhibitors increased and NSAID and steroid use decreased.
- While it is difficult to correlate these observations in a non-trial setting, the trends are compelling, and consistent with findings in large clinical trials of biologic therapies.

Limitation

- Anti-TNFs associated with greatest improvement, but also administered to subjects with worst DAS28-CRP. (Possible confounding by indication)