

The importance of being in remission: A BARFOT study on remission, joint destruction and disability.

Björn Svensson, Kristina Forslind, Kristina Albertsson, Monica Ahlmén, Ingjald Hafström

Objectives: To study in clinical practice the possible advantages of being in remission with regard to joint damage and function.

Patients and methods: 698 consecutive BARFOT patients with early RA were studied. X-rays were obtained at baseline, 2 and 5 years in 530, 525 and 409 patients, respectively, and van der Heijde modified Sharp scores (vdH-Sharp) were calculated. Remission was defined according to Prevoo et al (EULAR) (1) as a DAS28 below 2.6 and according to Mäkinen as a state with no swollen joints, no tender joints and normal ESR (2).

Radiological progress, i.e. change from baseline in vdH-Sharp after 24 or 60 months was assessed in patients in remission at 24 or 60 months (point remission) and change in vdH-Sharp after 60 months was also assessed in patients in remission at both these time points (sustained remission). Function was assessed by HAQ and SOFI.

Results: 64% were women, mean age was 58 years and disease duration 6, 2 months at inclusion. Mean DAS28, HAQ and SOFI scores were 5.27, 1.00 and 8.5, respectively. Mean Total vdH-Sharp at baseline, 2 and 5 years were 4.0, 11.8 and 20.2.

By the Prevoo criterion, 38% and 39% were in remission at 24 and 60 months and 26% on both these occasions. By the Mäkinen criteria the corresponding figures were 21%, 24% and 12%. Women were invariably significantly less often in remission than men.

As seen in the table, radiological progress was significantly reduced in the groups of patients in remission.

Table. Mean (SD) change in vdH-Sharp for patients in remission and not in remission*.

	EULAR criterion			Mäkinen's criteria		
	Rem ^{24mo}	Rem ^{60mo}	Rem ^{24+60mo}	Rem ^{24mo}	Rem ^{60mo}	Rem ^{24+60mo}
In remission	3.8 (6.0)	9.8 (15.1)	6.1 (7.8)	3.2 (5.6)	9.2 (12.7)	5.4 (9.5)
Not in remission	10.7 (14.6)	20.4 (25.1)	19.9 (24.6)	9.5 (13.5)	18.4 (24.0)	17.7 (23.0)
Δ, P- value	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005

* Change in vdH-Sharp regarding rem^{24+60mo}

Mean improvement in HAQ scores were significantly more pronounced in patients in remission by any criteria compared with patients not in remission.

Summary: Patients in remission – and especially in sustained remission - by the criteria applied in this study in clinical practice have a significantly slower radiological progression compared with patients not in remission. The clinical relevance of these findings was validated by the fact that function was significantly more improved in patients in remission.

Conclusion: Remission not only implies reduced disease activity for patients with early RA but also significantly diminishes the risk of structural joint damage and dysfunction and should beyond question be the treatment goal of choice. The EULAR remission criterion seems stringent enough for use in clinical practice. Since women achieve remission less often, special attention should be paid to bring female patients into remission.

1. Prevoo MLL, van Gestel A, van 'T Hof MA et al. Remission in a prospective study of patients with rheumatoid arthritis. American Rheumatism Association preliminary remission criteria in relation to the Disease Activity Score. Br J Rheumatol 1996;35:1101-5.

2. Mäkinen H, Kautiainen H, Hannonen P et al. Frequency of remissions in early rheumatoid arthritis defined by 3 sets of criteria. A 5-year follow-up study. J Rheumatol. 2005 May;32:796-800.