

DIRECT COMPARISON OF THE EFFECTS OF ANTI-TNF BIOLOGICAL AGENTS IN PATIENTS WITH ANKYLOSING SPONDYLITIS

Essafi F, Saidane O, Mahmoud I, Ben Tekaya A, Tekaya R, Abdelmoula L
Department of Rheumatology, Charles Nicolle hospital

Objectives : The aim of the present study was to compare the efficacy of three anti-TNF agents (adalimumab, infliximab and etanercept) in patients with ankylosing spondylitis (AS) at 24 weeks .

Methods : We achieved a retrospective descriptive and comparative monocentric study, on 23 patients, with AS (according to Amor criteria, ASAS 2009) who were handled during 12 years (2004-2015). The patients were treated with at least one anti-TNF, during at least 6 months. Disease activity was assessed by the BASDAI, ASDAS, ESR and CRP. To compare mean differences between time points (week 0 versus week 24), a Wilcoxon test was applied. To compare efficacy between the 3 anti-TNF, a Mann-Whitney test was applied.

Results:

Patients	23
Mean age (years)	40,7 ±9,6
Median age at disease onset (years)	28,52±11,36
Mean disease duration (years)	9,6 (±7,17)

Table 1 :Baseline characteristics of patients starting TNF inhibitor

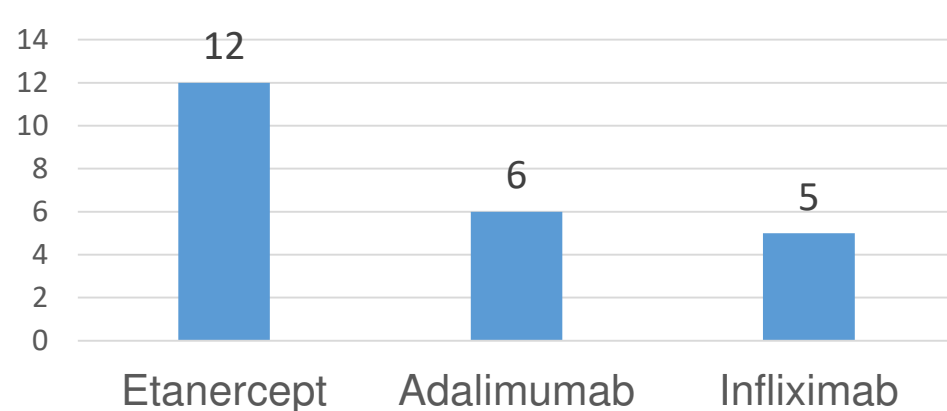


Figure 1: Anti-TNF alpha

	Week 0	Week 24	p
BASDAI	6,13±2,2	2.36 ±2,2	<0,0001
ASDAS CRP	4,03 ±0,97	2,06±1,18	<0,0001
CRP (mg/l)	29,77±24,14	9,1±10,09	0,001
ESR (mm)	53,5 ±34,8	23,15±15,36	0,002

Table 2: Summary of median change from baseline to week 24 in clinical outcomes

- Seventy percent of the patients have reached BASDAI 50 response at 6 months.
- At week 24, patients on ETN achieved more frequently a significant reduction of ASDAS (-2,5 vs. -1,17; p < 0.04) and ESR (-44,5 vs. -13,3; p=0,01) than IFX.

The “Face to Face” comparison ADA vs IFX and ADA vs ETN had shown no significant efficacy differences.

Discussion : According to the DANBIO registry, 63% of patients achieved a clinical response (BASDAI 50) at least once during the first 6 months [1]. Improvement in both ESR [mean improvement 27.3 mm/h (95% CI 23.4, 31.3)] and CRP level [mean improvement 25.3 mg/l (95% CI 18.2, 32.5)] was also observed at 6 months [2]. The Finnish study among 543 patients with AS had shown no significant efficacy differences [3]. However, Giardina et al [4] compared ETN and IFX in 50 patients with AS. At week 12 more IFX than ETN treated patients achieved a significantly reduction of BASDAI (4.8 vs. 5.9; p < 0.005 and 3.5 vs. 5.6; p < 0.005).

Conclusion: Our results showed a BASDAI 50 response in 70 % of patients. The comparison between the three biologics was consistent with a better efficacy of the ETN.

1] Glinborg B, Ostergaard M, Krogh NS, Dreyer L, Kristensen HL, Hetland ML. Predictors of treatment response and drug continuation in 842 patients with ankylosing spondylitis treated with anti-tumour necrosis factor: results from 8 years' surveillance in the Danish nationwide DANBIO registry. Ann Rheum Dis. 2010;69(11):2002-8.

[2] Lord PAC, Farragher TM, Lunt M, Watson KD, Symmons DPM, Hyrich KL. Predictors of response to anti-TNF therapy in ankylosing spondylitis: results from the British Society for Rheumatology Biologics Register. Rheumatology. 2010;49(3):563-70.

[3]-Heinonen AV, Aaltonen KJ, Joensuu JT, Lähteenmäki JP, Pertovaara MI, Romu MK, et al. Effectiveness and drug survival of TNF inhibitors in the treatment of ankylosing spondylitis: a prospective cohort study. J Rheumatol. 2015;42(12):2339-46.

[4]Giardina AR, Ferrante A, Ciccio F, Impastato R, Miceli MC, Principato A, et al. A 2-year comparative open label randomized study of efficacy and safety of etanercept and infliximab in patients with ankylosing spondylitis. Rheumatol Int. 2010;30(11):1437-40.