



Sociedad Española
de Reumatología -
Colegio Mexicano
de Reumatología

Reumatología Clínica

www.reumatologiaclinica.org



Letter to the Editor

Switch from intravenous to subcutaneous abatacept: Our experience[☆]



Cambio de abatacept intravenoso a subcutáneo: experiencia de nuestro centro

Dear Editor,

Since the administration of subcutaneous abatacept (ABA)^{1,2} has been approved many patients with rheumatoid arthritis (RA) have had their administration route changed.³ The switch from intravenous to subcutaneous administration route may imply a risk of disease outbreak, which in our centre we decided to control clinically at the time of change, after 3 months and after 12 months. Musculoskeletal ultrasound (MSU) provides more precise information than clinical examination in the assessment of joints and tendons, and we therefore also undertook both baseline ultrasound scans and scans after 3 months.

The clinical activity data in [Table 1](#) showed no differences between the baseline moment and after follow-up at 3 and 12 months. Of the 23 patients with RA, 21 (91.3%) continued in treatment with subcutaneous ABA a year after the switch.

The characteristics of our patients are representative of those attending any rheumatology outpatients department, with a mean age of 63.5 years and mean disease duration of 15.5 years. 65.2% had had other previous treatment with biologics, with a mean of 2.3 biologics. 39.1% had received an additional DMAID and 34.8% a corticoid (mean dose of 3.6 mg/day of prednisone).

The administration route of a drug is obviously relevant when choosing treatment, particularly in young patients since they are unable to periodically attend hospital appointments due to their

employment. Despite the fact that clinical trials support the safety of ABA administration route changes, clinical practice has reported different results. In fact, results published by other researchers, with 27% of patients who reverted to the intravenous route 3 months after changing, suggest that the risk of clinical worsening of the patient is high. However, only one of our patients changed treatment after 3 months, which tends to confirm that change is not associated with an assumable risk of outbreak.⁴

The change in administration route affects patients treated with ABA and also those treated with other biologics such as tocilizumab. Current trends in the use of biologics are for the use of more subcutaneous than intravenous treatments and there are many patients who have been undergoing intravenous treatment with these drugs for years and who are requesting a more convenient administration route. Our results support the change of administration route as safe, but also highlight the need for strict control when this change is carried out.

Although there were no significant differences in the baseline and 3-month control scans, the use of MSU in our patients enabled us to detect subclinical synovitis in one patient and to change treatment after 3 months, which according to the usual activity markers (DAS-28), may not have happened. We believe that this provides another piece of evidence in favour of using routine MSU in the follow-up of RA patients, and supports the fact that the change of administration route is not associated with an exacerbation of inflammatory activity.

To conclude, the change of administration route of intravenous to subcutaneous ABA maintains efficacy in clinical practice. The application of MSU in monitoring of inflammatory RA activity is a useful tool when taking treatment decisions.

Table 1

Evolution of the activity data and the acute phase reactants after changing administration route.

	Baseline (n = 22)	Three months (n = 22)	Twelve months (n = 21)	P value
DAS-28 PCR (median; RI)	2.87 (2.24; 4.12)	2.28 (1.59; 3.1)	2.36 (1.96; 3.79)	.84
ESR, mm/1st h (median; RI)	15 (9; 27)	9.5 (6; 16.3)	11 (3.5; 17.3)	.935
CRP, mg/dl (median; RI)	.46 (.26; .74)	.3 (.2; .6)	.4 (.2; .6)	.45
NJP (median; RI)	1 (0; 5)	.5 (0; 2)	0 (0; 7.5)	.124
NIJ (median; RI)	1 (0; 1)	0 (0; 1)	0 (0; 1)	.167

DAS-28 PCR: Disease Activity Score of 28 joints; NJP: number of painful joints; NIJ: number of inflamed joints; CRP: C-reactive protein; IR: interquartile range; ESR: erythrocyte sedimentation rate.

[☆] Please cite this article as: Nieto-González JC, Ovalles-Bonilla JG, Estrada E, Monteagudo I. Cambio de abatacept intravenoso a subcutáneo: experiencia de nuestro centro. Reumatol Clin. 2020;16:187–188.

References

- Schiff M, Weinblatt ME, Valente R, van der Heijde D, Citera G, Elegbe A, et al. Head-to-head comparison of subcutaneous abatacept versus adalimumab for rheumatoid arthritis: two-year efficacy and safety findings from AMPLE trial. *Ann Rheum Dis.* 2014;73:86–94.
- Genovese MC, Tena CP, Covarrubias A, Leon G, Mysler E, Keiserman M, et al. Subcutaneous abatacept for the treatment of rheumatoid arthritis: longterm data from the ACQUIRE trial. *J Rheumatol.* 2014;41:629–39.
- Keystone EC, Kremer JM, Russell A, Box J, Abud-Mendoza C, Elizondo MG, et al. Abatacept in subjects who switch from intravenous to subcutaneous therapy: results from the phase IIIb ATTUNE study. *Ann Rheum Dis.* 2012;71:857–61.
- Reggia R, Franceschini F, Tincani A, Cavazzana I. Switching from intravenous to subcutaneous formulation of abatacept: a single-center Italian experience on efficacy and safety. *J Rheumatol.* 2015;42:193–5.

Juan Carlos Nieto-González,^{a,*} Juan G. Ovalles-Bonilla,^a
Eduardo Estrada,^b Indalecio Monteagudo^a

^a Servicio de Reumatología, Hospital General Universitario Gregorio Marañón, Madrid, Spain

^b Departamento de Psicología, Universidad Camilo José Cela, Madrid, Spain

* Corresponding author.

E-mail address: juancarlos.nietog@gmail.com (J.C. Nieto-González).

<https://doi.org/10.1016/j.reumae.2018.02.006>

2173–5743/ © 2018 Elsevier España, S.L.U. and Sociedad Española de Reumatología y Colegio Mexicano de Reumatología. All rights reserved.

Belimumab in systemic lupus erythematosus: Experience in clinical practice settings in a regional hospital[☆]



Belimumab en lupus eritematoso sistémico: experiencia en práctica clínica en un hospital comarcal

Dear Editor,

Belimumab (BLM), a soluble human monoclonal antibody which inhibits the stimulator factor of lymphocyte B (BLYS), is the only biologic drug approved for the treatment of system lupus erythematosus (SLE). It is recommended in patients with active SLE (excluding patients with severe renal compromise or compromise of the central nervous system), with positive antibodies and high grade disease activity despite standard treatment.

We now present the clinical experience of BLM use in a regional hospital servicing a population of 165,000 inhabitants.

Eleven patients with SLE who had received BLM at some time were included. One hundred per cent were female, with a mean age at lupus diagnosis of 31.6 ± 9.7 years. Regarding clinical manifestations that presented during the course of the disease, joints were most commonly affected (100%), followed by cutaneous (81%), haematological (64%), renal (27%), pulmonary (9%) and cardiac (9%) manifestations. One hundred per cent of patients presented positivity for antinuclear antibodies, with 27% being positive for anti-DNA native antibodies, 45% for anti-SSA antibodies and 36% for anti-SSB antibodies. 45% of patients presented with positivity for antiphospholipid antibodies and over one third presented with hypocomplementemia.

Regarding treatments prior to the initiation of BLM, 100% of patients had received antimalarial drugs, over 80% methotrexate and 27% azathioprine. Twenty seven per cent had received anti-TNF drugs, 18% cyclophosphamide and 18% leflunomide. One of the patients had received treatment with tacrolimus and rituximab. The mean age of the patients at treatment initiation with BLM was 38.9 ± 9.6 years. The main manifestations for which treatment was prescribed were joint symptoms followed by cutaneous symptoms. Over 60% of patients underwent an improvement of cutaneous and joint symptoms, with no resolution of lymphopenia being observed in our patients. In 4 of them (37%), treatment

was suspended due to ineffectiveness after a median duration of 12.2 ± 7.3 months. Particular mention is of one patient who developed a type IV lupus nephritis during treatment. Treatment was not definitively suspended due to side effects in any cases but was temporarily suspended in one patient (9%) due to a respiratory infection. With regard to concomitant treatments, in 3 of them (27%) treatment with BLM led to reduced doses of concomitant treatment (methotrexate, mycophenolate) and it was not possible to assess the possible corticoid sparing effect given the retrospective nature of the study.

There have been several reports of patient cohorts in U.S.A., Canada and Germany^{1–3} treated with BLM with favourable results on the reduction of activity, improvements in lab tests and steroid sparing. However, few data on clinical practice is available in Mexico. The OBSERVE⁴ study which included 64 patients with SLE, showed an improvement of $\geq 20\%$, $\geq 50\%$, $\geq 80\%$ in 72%, 52% and 27% of cases, respectively. The BIOGEAS⁵ study which included 10 patients with SLE refractory to antimalarial drugs and at least one other immunosuppressant, where manifestations of BLM were mucocutaneous, reported a response rate to the drug of 80%, higher than that reported by our study and by the OBSERVE study.

To conclude, in clinical practice BLM has proven to be an alternative therapy to consider in patients with LES with cutaneous manifestations or joints refractory to standard immunosuppressants.

References

- Collins CE, Dall'Era M, Kan H, Macahilig C, Molta C, Koscielny V, et al. Response to belimumab among patients with systemic lupus erythematosus in clinical practice settings: 24-month results from the OBSERVE study in the USA. *Lupus Sci Med.* 2016;3:e000118.
- Touma Z, Sayani A, Pineau CA, Fortin I, Matsos M, Ecker GA, et al. Belimumab use, clinical outcomes and glucocorticoid reduction in patients with systemic lupus erythematosus receiving belimumab in clinical practice settings: results from the OBSERVE Canada Study. *Rheumatol Int.* 2017;37:865–73.
- Schwartz A, Schroeder JO, Alexander T, Schmalzing M, Fiehn C, Specker C, et al. First real-world insights into belimumab use and outcomes in routine clinical care of systemic lupus erythematosus in Germany: results from the OBSERVE Germany Study. *Rheumatol Ther.* 2016;3:271–90.
- Cortes J, Andreu JL, Calvo J, García-Aparicio AM, Coronell CG, Diaz-Cerezo S. Evaluation of use of belimumab in clinical practice settings (observe study) in Spain: health resource utilization and labour absenteeism. *Value Health.* 2014;17:A534.
- Brito Zeron P, Caminal-Montero L, Chamorro A, de la Hera Fernández A, Gato A, Marín-Ballvé, et al. AB0542 blocking the human B lymphocyte stimulator molecule (BLYS) using a monoclonal antibody (belimumab) in systemic lupus erythematosus: first results in real-life Spanish patients with refractory disease (Biogeeas-Semi Registry). *Ann Rheum Dis.* 2014;73:985.

[☆] Please cite this article as: Riancho-Zarrabeitia L, Villa Blanco I, Santos-Gómez M, Aurrecochea E. Belimumab en lupus eritematoso sistémico: experiencia en práctica clínica en un hospital comarcal. *Reumatol Clin.* 2020;16:188–189.