

### **POSTER PRESENTATION**

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# Rituximab reduces anti-cardiolipin levels in patients with systemic lupus erythematosus

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From 5th European Workshop on Immune-Mediated Inflammatory Diseases Sitges-Barcelona, Spain. 1-3 December 2010

#### Introduction

Patients with systemic lupus erythematosus (SLE), can produce antibodies directed against the complex phospholipds- $\beta$ -glycoprotein 1. Rituximab is an antibody directed to most B-cells, except precursors and mature plasma cells. It can produce reductions in antibody titers.

We have treated SLE patients refractory to conventional immunosuppressive therapy, with Rituximab and we searched for a reduction in anticardiolipin autoantibodies.

#### Material and methods

We have performed an observational, retrospective and multicentric study from 3 Spanish hospitals. We analysed 46 patients with complex clinical index (SLEDAI, physician global assessment scale) and laboratory determinations, included anticardiolipin levels, at start, week 24 and final visit.

#### **Results**

We have treated 46 patients, 3 men and 43 women, 91.3% Caucasians. Antiphospholipid syndrome was present in 14 patients (30.4%). A Lupus Anticoagulant (LA) was detected in 42.9%.

40 patients received the dose for arthritis (2x1g) and 4x375mg/m2 in the others. The mean of cycles used was 2 (1-3).

After the Rituximab therapy the LA was positive in only 10% (p<0.05). Anticardiolipin levels were reduced too, IgG aCL showed a significant reduction from 8.57 UI (3.44, 53.20) to 5.93 UI (1.70, 40.50), p<0.002. A non significant reduction in IgM aCL was detected 4.61 UI (2, 19.6) to 2.75 (1.02, 6.3). We have not detected new thrombotic events after Rituximab therapy.

#### **Discussion**

We have observed a reduction in the anticardiolipin antibody titers and LA among SLE patients treated with Rituximab. No new thrombotic episodes were observed after treatment with a mean follow-up of 21.1 months. We think may be necessary a longer follow-up to decide a possible efficacy for Rituximab in the management or antiophospholipid syndrome.

In spite of the absence of significant improvement of patient in the EXPLORE study, an analysis by Tew, shows a reduction of anticardiolipin antibodies levels to near normal. A bibliographic search for similar studies has not yield other results.

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Published: 25 November 2010

doi:10.1186/1479-5876-8-S1-P69

Cite this article as: Martínez-Pérez et al.: Rituximab reduces anticardiolipin levels in patients with systemic lupus erythematosus. Journal of Translational Medicine 2010 8(Suppl 1):P69.

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