OUTCOMES AND SAFETY OF RITUXIMAB USE IN SYSTEMIC LUPUS ERYTHEMATOSUS – A SINGLE-CENTRE ANALYSIS

Daniel G Oliveira, Raquel Faria, Flávia Pereira, Luciana Faria, Ana Campar, Mariana Brandão, Isabel Almeida, António Matioho, Fátima Faria, Carlos Vasconcelos.

Dept. of Internal Medicine, Centro Hospitalar Universitário do Porto (CHUP), Unidade de Imunologia Clínica, CHUP, UMB – ICBAS-UP, Unidade de Imunologia Clínica Resident, CHUP, Portugal

Background/Purpose Rituximab (RTX) has been used worldwide in moderate to severe Systemic Lupus Erythematous (SLE), despite failure in clinical trials. We reviewed our centre’s experience in efficacy, tolerability and safety of RTX in SLE patients.

Methods Retrospective single-centre (35 year long, 700 SLE patient cohort) review of records of all SLE adults treated with RTX from 2009 until September 2019. Outcomes were based on physician’s assessment, SLEDAI variation, drug reactions, infections, neutrophil count, immunoglobulin and B-cell count.

Results 45 patients (6,4% of total) were treated with RTX, 38 had sufficient data for analysis. Thirty (93,8%) female, mean diagnosis age 30,5 years, mean disease duration at first RTX of 123,1 months (± 119). Five patients had more than one induction and 11 patients had maintenance doses - total 63 administrations of RTX. Induction regimen was mainly 1 g 15 days apart. The main indications for treatment were lupus nephritis (n=12), arthritis (n=7) and skin involvement (n=6). Mean pre-treatment SLEDAI was 9,86 ± 6,4 points. Most patients had a favorable response (84,2%, n=32) with a mean SLEDAI reduction of 7,2 points (± 5,2). B-cell depletion at 3 or 6 months (52,9%) was more frequent in responders (p=0,003), but 8 non-depleters also responded. Non-responders had lower C3 and hemoglobin pre-RTX (p<0,05). Hypersensitivity reactions occurred 3 times (during the first cycle), 1 inducing adrenaline. One patient had a late-onset allergic reaction. Other adverse outcomes included infection requiring hospitalization (7,9%, n=5), non-serious infection (6,4%, n=4), non-serious neutropenia (3,2%, n=2), acute heart failure (1,6%, n=1) and death due to serious infection (1,6%, n=1). There were 2 cases (3,2%) of IgG hypogammaglobulinemia.

Conclusion Our centre has a higher use of RTX than that reported in the literature. Success rate for RTX is high in our cohort with very few serious adverse events.

RITUXIMAB THERAPY FOR PRIMARY SJÖGREN’S SYNDROME – A RETROSPECTIVE SINGLE-CENTRE STUDY

1Mariana Figueiras, 1Filipa Sousa, 2,3Mariana Brandão, 1Daniel Oliveira, 2,3Raquel Faria, 1Ana Campar, 1Isabel Almeida, 2,3António Marinho, 2Fátima Faria, 2,3Carlos Vasconcelos. Unidade de Imunologia Clínica resident, Centro Hospitalar Universitário do Porto, Porto; 2Unidade de Imunologia Clínica, Centro Hospitalar Universitário do Porto, Porto; 3UMB-ICBAS-Universidade do Porto, Porto; 4Internal Medicine, Centro Hospitalar Universitário do Porto, Porto, Portugal

10.1136/lupus-2020-eurolupus.161

Background The rationale for B cell depletion therapy with rituximab (RTX) in primary Sjögren’s syndrome (pSS) relies upon the well-established role of B cell hyperactivity in immunopathogenesis. We reviewed our centre’s experience in efficacy, tolerability and safety of RTX in pSS patients.

Methods Retrospective single-centre (35 years long, 115 pSS patients cohort) observational study of RTX use in pSS adults from 2006 until September 2019, based on medical records, with data concerning indication and duration of treatment. Outcomes were assessed by subjective physician’s perspective, ESSDAI variation, drug reactions, infections, neutrophil count, immunoglobulin and B-cell count. ESSDAI scores were calculated for pre and post whenever possible.

Results Ten female pSS patients were treated with RTX, with an average diagnosis age of 50,7 years and an average follow-up time of 5,6 years. Indications for RTX were: 3 peripheral nervous system (NS) manifestations, 3 central NS manifestations, 1 vasculitis, 1 vasculitis, central NS and macrophagic activation syndrome, 1 disabling musculoskeletal manifestations and 1 interstitial lung disease. Six patients became asymptomatic (4 of them with CD19 depletion), 2 did not experienced any benefit (1 with CD19 depletion) and 2 had symptomatic improvement (1 with CD19 depletion). Two patients had severe adverse reactions to rituximab (anaphylactic reaction and sweet syndrome). Although they needed hospital admission, they were able to recover completely. Three patients developed serum sickness. There were no cases of hypogammaglobulinemia or neutropenia after the treatment.

Conclusions Despite of the scarcity of studies validating its use, RTX can be considered for severe or refractory pSS involvement, with a reasonable safety profile.