ABSTRACT

INTRODUCTION: Rituximab is a chimeric human-mouse monoclonal antibody, which binds to the CD20 antigen on B and pre-B lymphocytes and causes depletion of CD20+ cells in the mechanism of complement-dependent and independent cytolysis, antibody-dependent cell cytotoxicity and the mechanism of apoptosis. Rituximab is currently registered for the treatment of non-Hodgkin's lymphoma, chronic lymphocytic leukaemia and rheumatoid arthritis. Rituximab has also demonstrated efficacy in a number of other autoimmune diseases, including systemic lupus erythematosus and Sjögren's syndrome. In severe or recalcitrant cases of pemphigus vulgaris and pemphigus foliaceus, rituximab was applied as an adjuvant drug. **OBJECTIVE:** To present the efficacy of rituximab monotherapy in patients with pemphigus foliaceus, who had contraindications to classic immunosuppression, and a review of the literature. **CASE REPORTS:** We present 2 patients with pemphigus foliaceus, a 66-year old male and a 61-year old female, treated with rituximab in monotherapy as a first-line treatment. In the first patient serological negativisation and improvement were observed 4 months after therapy initiation. After 8 months further, significant clinical improvement, with sparse residual lesions, was observed. In the second case similar results were achieved. **CONCLUSIONS:** In patients with pemphigus foliaceus significant improvement was observed after rituximab monotherapy. Serological negativisation was achieved prior to clinical remission. This unusual phenomenon may be explained by rapid depletion of CD20+ cells and inhibition of antibody production, while in vivo bound pathogenic pemphigus antibodies remained active.