remission criteria when clinical SLEDAI was used compared to when BILAG was used. When serology (anti-DNA antibodies and complement) was taken into consideration (definitions 1b and 2b), less patients fulfilled remission. Very low numbers of patients (<1%) fulfilled remission off treatment.

Conclusions: Overall, few patients fulfilled remission according to these definitions. More patients fulfilled the definitions when serology was excluded and when a higher dose of GCs was allowed.

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HEMATOPOIETIC STEM CELL TRANSPLANTATION FOR AUTOIMMUNE DISEASES – A 20 YEARS SINGLE CENTRE EXPERIENCE

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Background: Over the past 20 years, hematopoietic stem cell transplantation (HSCT) has been emerging as a promising treatment option for severe cases of autoimmune diseases (ADs). Meanwhile, positive results have been obtained in 3 randomised clinical trials for systemic sclerosis. The goal of this therapy is to induce medication-free remissions by ablating the pathologic autoreactive memory and restoring of self-tolerance.

Objectives: Here, we summarise the clinical outcomes of AD patients receiving HSCT at the Charité – University Medicine.

Methods: In this prospective study, the outcome of 22 patients were analysed after receiving a CD34+-selected autologous HSCT after immunoablation with ATG and cyclophosphamide for different ADs (10 SLE, 4 SSc, 3 vasculitis, 2 multiple sclerosis, 1 polychondritis, 1 inflammatory polyneuropathy, 1 autoimmune haemolytic anaemia) between 1998 and 2015. Multiparameter flow cytometry was applied to characterise peripheral blood lymphocytes subsets including analysis of the TCR-Vbeta repertoire on CD4+ T cells, CD31 expression as marker for thymic output of CD4+ T cells, including Foxp3+ Tregs. In SLE, Siglec-1 on monocytes was investigated with ELISA.

Results: After receiving a CD34+-selected autologous HSCT after immunoablation with ATG and cyclophosphamide for different ADs (10 SLE, 4 SSc, 3 vasculitis, 2 multiple sclerosis, 1 polychondritis, 1 inflammatory polyneuropathy, 1 autoimmune haemolytic anaemia) between 1998 and 2015. Multiparameter flow cytometry was applied to characterise peripheral blood lymphocytes subsets including analysis of the TCR-Vbeta repertoire on CD4+ T cells, CD31 expression as marker for thymic output of CD4+ T cells, including Foxp3+ Tregs. In SLE, Siglec-1 on monocytes was investigated with ELISA.

Conclusions: HSCT could revert the chronic autoimmune state and induces long-term remission of host-adapted autoimmune diseases. This kind of therapy can potentially provide cure in AD. Although applied as salvage therapy in severely affected patients with poor outcomes, TRM gradually improved due to accumulating centre experience and better patient selection and supportive care. Based on positive results from RCT in the major indications, HSCT should be placed earlier in the treatment algorithm, especially in systemic sclerosis with rapid progress and lung involvement.

Disclosure of Interest: None declared.


BELIEF ABOUT MEDICINE QUESTIONNAIRE PREDICTS THERAPEUTIC ADHERENCE TO HYDROXYCHLOROQUINE DURING SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Therapeutic adherence is a key element of chronic disease management and one of the most difficult to assess. The Belief about Medicines Questionnaire (BMQ) evaluates patients’ own beliefs related to medication. It is available in two versions: the BMQ-General and the BMQ-Specific. The BMQ-specific focuses on the representations of medication prescribed for personal use. It was set up as a screening test for poor therapeutic adherence during chronic diseases. Early detection of lupus patients at risk of poor therapeutic adherence could lead to preventive actions.

Objectives: To assess the BMQ-Specific as a predictive test of adherence to hydroxychloroquine in SLE.

Methods: Case-control, retrospective and monocentric study. Cases were enrolled according to the following criteria: systemic lupus erythematosus (SLE) according to the ACR classification criteria and HCQ dosage <100 mg/ml after a minimum of 2 months of treatment. The matched control was a lupus patient, enlisted within the centre the same week, with a HCQ dosage ≥800 mg/ml. Each patient answered the BMQ-Specific through a telephone interview. The BMQ-Specific comprises 2-5-item factors assessing beliefs about the necessity of prescribed medication (Specific-Necessity) and concerns about the danger of dependence and long-term toxicity of medication (Specific-Concerns). Responses to each statement were scored on a five-point Likert scale (1=strongly disagree and 5=strongly agree). Scores obtained for the individual items within both scales were summed to give total scores for the Specific-Necessity and Concern scales range from 5 to 25. A Necessity (N)-Concerns (C) differential was calculated (range from −20 to +20). It expresses the cost-benefit perceived by the patient for taking the medication. Case and control characteristics were compared using usual tests. Diagnosis performance of each BMQ score and necessity-concern differential were studied by the mean of ROC curves.

Results: The BMQ-Specific questionnaire was submitted to 118 patients: 59 cases and 59 matched controls. The concern score was significantly higher in cases mean 18.4 vs 15, respectively, p<0.0001). The necessity score was significantly higher in control (mean 15.8 vs 12.7, p<0.0004). ROC curves show a better area under the curve (AUC) with the N-C differential compared to the AUC of separate scores (respectively 0.8 vs 0.7). The sensitivity and specificity are optimal for a N-C differential of 3.

Conclusions: During SLE, nonadherent patients are primarily concerned about the risks inherent to treatment, rather than its effectiveness. To date, we are the only study to show that specific BMQ is an efficient tool for detecting patients at risk of poor therapeutic adherence to HCQ during SLE. The necessity-concerns differential score must be preferred to the scores taken separately. Thus, targeted educational actions can be provided as soon as the patients are taken in charge, in order to improve their adherence to treatment.

Disclosure of Interest: None declared.


FACTORS ASSOCIATED WITH POOR THERAPEUTIC ADHERENCE TO HYDROXYCHLOROQUINE DURING SYSTEMIC LUPUS

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Background: Poor adherence to medication regimens is a major cause of relapse during systemic lupus erythematosus (SLE). Hydroxychloroquine (HCQ),