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P388 -Belimumab treatment offers a new steroid avoiding opportunity for non renal lupus activity in patients with lupus nephritis.

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Background:
Management of extra-renal systemic lupus erythematous(SLE), often undertaken by renal physicians, can be challenging. Most available therapies are associated with systemic toxicities and some (e.g. methotrexate) cannot be used with impaired renal function. Belimumab is a human recombinant monoclonal antibody directed against B Lymphocyte stimulator (BLyS). Its effectiveness in reducing disease activity scores when used as add-on therapy for non-renal SLE was proven in 2 randomised controlled trials. Patients with active lupus nephritis(LN) and cerebritis were excluded from these trials.
Belimumab was approved by NICE in 2016 for patients with active, dsDNA antibody positive hypocomplementaemic systemic disease despite conventional therapy and a SLEDAI-SELENA score of ≥ 10. Treatment is given for 6 months and may continue if there is a proven benefit with reduction in the SLEDAI score.
In our joint Renal-Rheumatology Lupus clinic, we frequently encounter patients with well-controlled LN who develop systemic disease flares, in whom we are keen to avoid steroids. In 2016 , we began using belimumab in this group of patients, where clinically indicated.
Aim
To evaluate the efficacy of belimumab in a cohort of patients with quiescent LN experiencing extra-renal flares.
Methods
All patients treated with belimumab at our institution between October 2016 and January 2019 were identified. Demographic and clinical data as well as baseline and 6-month SLEDAI scores were extracted from the electronic patient record.
Results
A total of 13 patients (11 female, mean age 44 ± 11.3 years) received belimumab, all through the NHSE funding programme. Ethnicity was as follows: white 5, black 3, Asian 2 and other 2.
The treatment indication in all cases was active extra-renal disease. All patients had received treatment for SLE previously-all had prior or concurrent LN. The majority had estimated glomerular filtration ratio (eGFR) >60. Two had chronic kidney disease (CKD) stage 3, one had CKD 4 and one was on haemodialysis. 5 had a urinary protein:creatinine ratio(uPCR) > 30 at baseline.
The mean follow-up was 12.0± 7.9 months (range 1.6-30.2). One patient discontinued belimumab at 4 months (ineffective), 3 stopped at 6 months, and 6 continued past 6 months. Three recent (<6 months) starters remain on treatment.
In patients who completed at least 6 months of treatment, the mean SLEDAI score s fell from 25.3 ± 9.2 at baseline to 11± 8.0 at 6 months ($p < 0.01$) . Mean dsDNA levels fell from 661.8 ± 573.4 IU/ml to 302.2 ± 320.2 IU/ml over the same period ($p<0.05$). There were no significant changes in c3, c4, eGFR or uPCR .Mean prednisolone dose was reduced from 9.5 ± 6.5 to 3.3 ± 3.5 ($p<0.05$) One patient had a nephrotic flare (not biopsied) on belimumab. Belimumab was continued, cyclophosphamide was added and proteinuria resolved.
Belimumab was well tolerated and effective in our patients with CKD4 and on haemodialysis.

Conclusion

Our experience confirms that belimumab is a safe, effective alternative treatment option for non-renal SLE flares in patients with renal disease, where it may well allow significant steroid sparing, especially in those with advanced kidney disease.