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binding to immobilized heparin-albumin, but not with albumin, likely via MASP-1/2 – heparin interaction.

Conclusions: Our data identifies small heparin-derived oligosaccharide inhibitors specific for the LP. We show that the LP inhibitory effect of GAGs is via blocking the enzymatic activity of the MASP enzymes. Binding of the MBL-MASP complex to immobilized heparin indicates that heparan sulfate/heparin structures on cells and in extracellular matrix in vivo might act as docking platforms for the MBL-MASP complex. These results might be important for renal diseases with LP involvement.

P06

OFATUMUMAB FOR B CELL DEPLETION THERAPY IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS WHO ARE INTOLERANT OF RITUXIMAB

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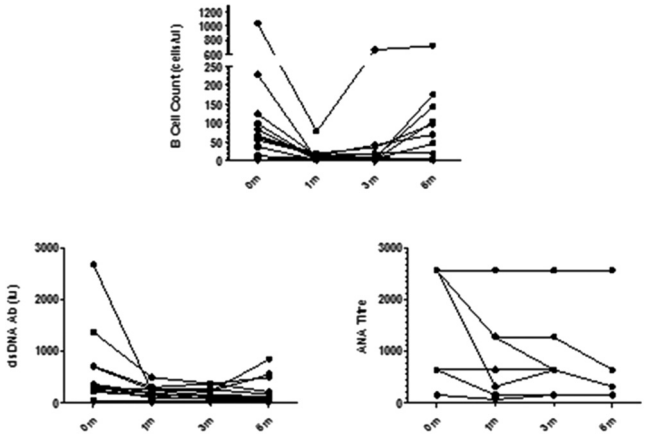
Introduction: B cell depletion, most commonly with rituximab (RTX), has emerged as a potential therapeutic strategy in SLE, particularly in patients who are unresponsive to, or intolerant of, standard therapy. Ofatumumab is a fully humanised anti-CD20 monoclonal antibody directed against distinct extra-cellular epitope on CD20, which has shown efficacy in the treatment of haematological malignancy. Since 2012, we have been using ofatumumab on compassionate grounds in patients with SLE for whom B cell depletion is deemed a desirable therapeutic approach, but who are allergic to RTX.

Methods: This is a retrospective report of SLE cases treated with ofatumumab at our centre between 2012-2015. Data are reported as medians +/- IQR, and comparisons are by non-parametric testing, unless otherwise stated.

Results: In total, 15 patients received ofatumumab: all female, mean age 33 years, median duration of SLE 7.5 years (range 1-18). 46% had previously been treated with cyclophosphamide and all had previously received RTX (median time since last treatment 4.5 months). All had severe infusion reactions to RTX previously. Two patients demonstrated infusions reactions to ofatumumab, such that they did not receive full dosing and have therefore been excluded from subsequent analysis.

Of the remaining 13 cases, ten were treated for disease flares complicated by lupus nephritis (LN); three patients were treated for extra-renal disease. Our standard treatment protocol is ofatumumab 2x700mg iv doses, with MMF maintenance and minimal steroids. Following treatment, two patients did not achieve B cell depletion (BCC<20). In those who did deplete, the median time to depletion was 16 days, and to subsequent reconstitution (BCC>20) 4.8 months (see Figure). Treatment was associated with significant improvements in serological markers of disease activity at 6 months (see Figure & Table).



	At 0 months	At 6 months	p value
ANA, titre (median+/-IQR)	2560 (240-2560)	320 (200-2080)	0.012
dsDNA, iu (median+/-IQR)	331 (234-717)	132 (73-429)	0.001
C3, g/L (median+/-IQR)	0.69 (0.52-0.99)	0.83 (0.65-1.10)	0.022
C4, g/L (median+/-IQR)	0.12 (0.08-0.18)	0.14 (0.07-0.25)	ns

Three patients with LN did not respond to treatment (>1.5x rise in serum creatinine at 6 months). The remaining patients had stable renal function (<10% increase or improved serum creatinine) with improved proteinuria (median uPCR 424 to 99 mg/mmol) at 6 months. At last followup (median duration 32months), no opportunistic infections, malignancies, new episodes of hypogammaglobulinaemia, or deaths have been observed. Three patients had further severe disease flares requiring hospitalisation and escalation of treatment.

Conclusions: In this heavily pre-treated cohort, with longstanding SLE refractory to conventional treatment, ofatumumab was effective for B cell depletion in patients who were intolerant of rituximab. Treatment was associated with serological and clinical response, although a proportion of patients had progressive disease. No unexpected safety signals were seen. Larger controlled studies are desirable to further define the role of ofatumumab in the treatment of SLE. Pending these studies, ofatumumab may be considered for patients who are intolerant of RTX, and for whom B cell depletion is still a desirable treatment strategy.

P07

SHOULD PATIENTS UNDERGOING RENAL TRANSPLANT WITHOUT INDUCTION WITH BIOLOGIC AGENTS, RECEIVE CYTOMEGALOVIRUS CHEMOPROPHYLAXIS?

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Introduction: Cytomegalovirus (CMV) is a frequently encountered opportunistic pathogen in renal transplant recipients (RTR). Spectrum of CMV infection ranges from latent infection to life-threatening multisystem disease. Current KDIGO guidelines recommend RTR to receive a biologic induction agent and all RTR (except in D-/R- CMV serology) to receive chemoprophylaxis for CMV infection with oral ganciclovir or valganciclovir for at least 3 months post transplantation. Currently no guidelines exist for use of CMV prophylaxis in patients transplanted without a biologic induction.

Aim: Primary: To study the incidence and mortality of CMV disease (CMVD) in patients receivingno induction, before and after universal prophylaxis.

Secondary: To study the clinical profile of Early Versus Late CMVD

Methods: Retrospective observational study. CMVD diagnosed based on CMV DNA PCR/tissue histopathology in combination with typical signs and symptoms.

Exclusion criteria: Age <18 years and patients who received biologic agents as induction or in post-transplant period.

Study period: September 2013 – August 2015. All were ABO compatible live renal transplant (RTx).

For analysis of Primary outcome, patients who received no induction were divided into two groups: (I) All patients transplanted after September 2014 received oral valganciclovir at a dose of 450mg O.D. for 100 days (UNIVERSAL PROPHYLAXIS GROUP)

(II) Patients transplanted before September 2014 received no CMV chemoprophylaxis if they had not received induction with a biologic agent.

All patients diagnosed with post RTx CMVD from September 2013 to August 2015 were included and divided into two groups for analysis of Secondary outcome (A) Late CMV disease (>1yr post RTx) (B) Early CMV disease (<1yr post RTx).

Results: 28 patients were included in the study (No induction group). All had D+ / R+ CMV serology status pretransplant. Out of 12 patients in group (II), 5 developed CMVD (41.6%). 4 out of 5 patients with CMVD had expired (80%). Out of 16 patients in group (I), no cases of CMVD were diagnosed and 1 patient out of 16 died due to gram negative sepsis at the end of study period. A total of 8 patients were diagnosed with CMVD during the study period and were included for secondary outcome analysis. 5 belonged to group A and 3 to group B. The clinical profile and outcomes are represented in Table 1.

Table 1.

	Early CMVD	Late CMVD
No. of patients	5	3
Immunosuppression	TAC/MMF/Steroids	CSA/AZA/Steroids
Mean duration to develop CMVD	72 days post-transplant	8 years
Disease Manifestations	Leucopenia and opportunistic infections (Disseminated Strongyloidiasis and Nocardiosis)	Tissue invasive disease (CMV hepatitis, Gastritis and retinitis)
Mean CNI Levels	Tac trough levels10.3ng/ml	C2 levels 708µmol/L
Mean CMV copies	70,000 IU/ml	1054 IU/ml
Outcomes	4/5 (80%) expired	Responded well to antivirals with good patient outcome

Conclusions: Incidence of CMVD was 41.6% with a high mortality(80%) in patients without universal CMV prophylaxis. Prophylaxis with oral valganciclovir irrespective of induction/no induction should be universalized to improve patient outcomes. Early CMVD had a high incidence of life threatening opportunistic infections resulting in poor patient outcomes versus patients with late CMVD who had milder non-leucopenic tissue invasive CMVD with better outcomes.

P08

BASOPHIL DYSFUNCTION IN CHRONIC KIDNEY DISEASE PATIENTS

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Introduction: Chronic kidney disease (CKD) is one major medical condition worldwide, which leads to significant morbidity and mortality. CKD patients have a significant alteration in innate and adaptive immune responses. Disturbance in innate immune responses in CKD patients has for example been represented by dysfunction of neutrophil granulocytes as a consequence of chronic activation leading to high levels of inflammatory cytokine. Given the vital role of basophil cells in the pathogenesis of CKD; we aimed to study the potential inflammatory response of basophils in chronic kidney disease patients on hemodialysis.

Methods: The hemodialysis patients were recruited from the Department of Nephrology at the Karolinska University Hospital in Stockholm, Sweden. The estimated Glomerular Filtration Rate for the patients was (eGFR) of <20 ml/min/1.73 m2 with a residual GFR from 6-11. Patients were undergoing hemodialysis with polysulfone high flux dialyzers, three times per week for four to four and a half hours per dialysis before the study (n=10). Peripheral blood samples were drawn from patients before start of hemodialysis session. The basophil surface expression of different activation markers CD203c (basophil selection marker), CD63 (degranulation marker), CD11b, active CD11b, CD62L (adhesive markers) and CD300a (inhibitory marker of degranulation) were investigated, after stimulation of different activation pathways in basophils with Lipopolysaccharide (LPS), peptidoglycan (PGN), formyl-methyinoyl-leucyl-phenylalanine (fMLP), and anti- Fc RI antibody.

Results: The basophil expression of CD63 following activation by fMLP was significantly higher in the patient group compared to healthy controls, but no differences were noted after activation by anti-FcÉ)RI-ab. CD300a expression was significantly higher in patients following activation by fMLP and anti-FcÉ)RI and the active epitope CD11b expression was significantly higher in patients after LPS activation. In addition, we found that CD62L, in contrast with that in neutrophils, was not shed from basophil surface after activation with LPS and fMLP but a significant downregulation was observed after activation with anti-FcÉ)RI-ab in healthy controls.

Conclusions: In conclusion, these data show that basophil functions related to adhesion and degranulation are altered in CKD patients which indicate a potential role for the basophil in the pathogenesis of CKD.

P09

CYTOGENETIC CHANGES IN PERIPHERAL BLOOD LYMPHOCYTES OF PATIENTS ON HEMODIALYSIS INFECTED WITH HEPATITIS C

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Introduction: Persistent viral hepatitis C (HCV) is the main reason for chronic liver diseases in patients on hemodialysis (HD). The flow of infectious process in this patients' category has important distinctions. With chronic infections, the virus has a true mutagenic effect.

The object of the present research was to study the level of mutation variability in peripheral blood lymphocytes of patients