chronic eye diseases. Our patient database was sorted by diagnosis to identify the cGvHD subgroup in this cohort. The characteristics of this sub-group were extracted by database analysis and retrospective chart review. Initial VFQ-25 scores in this subgroup, their scores at 6-month follow-up, and change in score for those fitted with the scleral lenses will be reported.

Results: There were 16 patients with ocular surface disease from cGvHD seen for scleral lens consultation from January through June 2006. Demographic breakdown reveals M:F = 12:4, with age distribution as follows: 21-30, n =2; 31-40, n = 3; 41-50, n =3; 51-60, n=6; 61-70, n=2. Prior conventional therapy is reported. Mean baseline composite score on the VFQ-25 was 62 (range 35-91, n=16); scale is 0 – 100, with 100 representing highest level of function. Of these 16 patients, 13 were fitted with scleral lenses. Mean score for patients not fitted was 74 (n=3), whereas mean score for patients fitted was 59 (n=13). Preliminary analysis of data on patients who have reached the 6-month follow-up (n=6) reveals that each patient fitted had improvement of function. Mean score at 6 months is 70.5 (n=6). Mean change in score for the 6 patients for whom there is 6-month follow-up is +20.6 (n=6), with range from +2 to + 45.

Conclusion: The fluid-ventilated gas permeable scleral lens prosthetic device improves visual function in patients with ocular cGvHD unresponsive to conventional therapy.

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INCIDENCE AND OUTCOME OF CHRONIC GRAFT-VERSUS-HOST DISEASE (CGVHD) AFTER ALLOGENEIC STEM CELL TRANSPLANT (SCT) USING NATIONAL INSTITUTE OF HEALTH (NIH) CONSENSUS CRITERIA

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cGVHD, defined as GVHD after day 100, is common, with an impact on morbidity and survival. The limited/extensive cGVHD classification is not reproducible or prognostic for late non-relapse mortality (NRM). Recently the NIH consensus criteria were proposed, but the ability of these criteria to predict outcome of various types of cGVHD is unknown.

Pts undergoing their 1st SCT from 1/01 to 12/03 were studied. 110 pts alive beyond day 100 met criteria for the study. GVHD after day 100 was classified using NIH criteria into: persistent acute GVHD (aGVHD) (assigned at day 100), recurrent aGVHD, delayed aGVHD, classic cGVHD, overlap GVHD (all assigned at time of onset). Severity scores were assigned to pts with classic and overlap GVHD at onset and clinical worsening. Overall survival (OS) both from time of transplant and time of GVHD onset were measured.

37 (34%) had no GVHD and 73 (66%) pts had GVHD. OS was 44% vs. 66% (no GVHD vs.GVHD, P=0.026). Of 73 pts with GVHD, 14 (19%) had limited and 59 (80%) had extensive cGVHD. Pts with limited GVHD were reclassified as persistent aGVHD (7%), recurrent aGVHD (29%), and classic CGVHD (64%). Pts with extensive cGVHD were reclassified as persistent (3%), delayed (3%), recurrent (31%), classic chronic (37%), and overlap GVHD (26%). 31 (42%) had no subsequent clinical worsening and 42 (58%) had subsequent clinical worsening of GVHD. 65% of pts with classic cGVHD (22/31) had worsening compared to other types (20/42, 47%) (P=0.046). Severity scores increased in 12/31 pts (39%) at time of subsequent clinical worsening. OS of pts with various types of GVHD were significantly different (P<0.0001). This was more apparent when pts with any acute features of GVHD were compared with classic cGVHD (3-yr OS 47% vs. 66%, P=0.0015). This effect persisted when survival was measured from onset of GVHD (P=0.0336). Severity at onset or clinical worsening in pts with classic or overlap GVHD did not impact survival. The 3-yr NRM (with relapse as a competing risk) for the cohort was 21% and was not affected by the presence or absence of GVHD, or subtypes of GVHD. Significant variables using Cox model with time dependent covariates were any aGVHD feature after day 100 (HHR 5.27, P=0.0004), and extensive cGVHD (HR 0.28, P=0.0041).

The OS with different NIH subtypes after day 100 from SCT varies and is superior for pts with classic cGVHD. Global severity score, within the limits of our study had no prognostic value with respect to survival.

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RITUXIMAB RESPONSIVE REFRACTORY ACUTE GRAFT VERSUS HOST DISEASE

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The prognosis of steroid refractory acute graft-versus-host disease (SR-aGVHD) is poor with suboptimal responses to currently available agents. The role of B- lymphocytes in the pathogenesis of GVHD is unclear, but recent reports of successful responses to Rituximab in patients with cGvHD support the hypothesis that a coordinated B and T cell response is instrumental in cGVHD. The contribution of B-cells to the pathogenesis of aGVHD, however, is unknown. We now report 3 patients who received Rituximab with complete response of severe acute GVHD. The first patient (table-1) was a 51 year old female who developed severe transplant-associated thrombotic thrombocytopenic purpura (TA-TTP), manifesting as seizure, encephalopathy, cerebral edema, renal failure, fever and thrombocytopenia, which failed to respond to methyl prednisone and 26 sessions of plasmapharesis. Rituximab for refractory TTP was initiated on day + 58, while plasma exchange was continued. Following 3 doses of weekly Rituximab, there was resolution of TTP. At the time of initiation of Rituximab, the patient also had active grade III aGVHD that was refractory to steroids. GVHD improvement was noted from day +79 with complete resolution of aGVHD on day +95. During the course of Rituximab, steroids were progressively tapered. Beyond 100 days she had limited cGVHD involving skin that was well controlled on oral prednisone at 10 mg/day. 100% donor chimerism was present. Two additional patients with refractory aGVHD (Table 1) were then treated. Complete resolution of aGVHD occurred in 2 weeks, but did not begin until several days after stopping previous infliximab/daclizumab therapy. This observation of complete aGVHD responses to Rituximab in 3 patients requires confirmation in larger trial but suggests that B cells contribute to the pathogenesis of both acute and chronic GvHD.

Table-1: *Patient and disease characteristics of 3 patients with steroid refractory aGVHD*

Patient Age/Sex	Diagnosis Stage	Allogeneic transplant	Organ involved aGVHD grade	Previous GVHD Therapy	Timing/doses of Rituximab	aGVHD response	Outcome
51 F	DLBCL	Mel-Flu-Alem MUD/PBSCT	Skin III, Gut III, Grade III	Steroids (6.4 gm)	day +58 3 doses	Complete residual limited cGVHD	Died of sepsis on day +160
39 F	CML BC	CY/TBI MRD/ PBSCT	Skin III, Liver II, Gut III, Grade III	Steroids (3.6 gm) Infliximab x6	day +61 2 doses	Complete resolution	Alive in mCr
39 M	AML M-7	CY/TBI/Alem MUD/PBSCT	Liver II, Gut IV, Grade IV	Steroids (7.2 gm) Infliximab x5 Daclizumab x4	day +49 4 doses	Complete resolution	Alive in CR

Abbreviation: GVHD= graft versus host disease, aGVHD= acute graft versus host disease, cGVHD= chronic graft versus host disease, F= female, M= male, DLBCL= diffuse large B cell lymphoma, Mel= melphalan, Flu= Fludarabine, Alem= alemtuzumab, MUD= matched unrelated donor, PBSCT= peripheral blood stem cell transplant, CML= chronic myeloid leukemia, BC= blast crisis, CY= cyclophosphamide, TBI= total body irradiation, MRD= matched related donor, MTX= methotrexate, CR= complete remission, mCR= molecular complete remission.