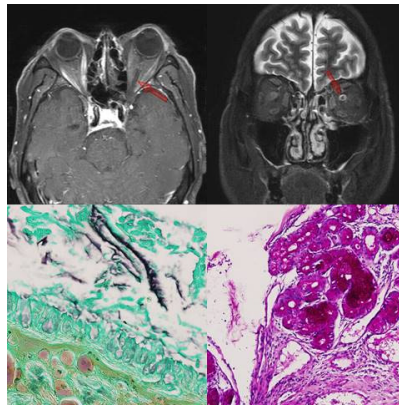


Life-threatening rhinocerebral mucormycosis in diabetes mellitus and Chronic kidney disease

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Introduction: Mucormycosis is one of the fungal infection that can almost only occurs in DM patient. This interesting case, who have DM and CKD finally diagnosed as mucormycosis and progress to rigorous course. 67-year-old man, who was diagnosed type 2 DM with CKD stage 5 and Hypertension 5 years ago. The patient came to ER, had general weakness, poor oral intake and gastrointestinal symptoms such as vomiting and nausea. He also had rhinorrhea, headache, blurred left eye vision two days ago. Baseline BUN, creatine was 83.0mg/dL, 8.98 mg/dL respectively. Severe metabolic acidosis was observed on ABGA. Diagnosed him as a uremic condition, and acute renal replacement therapy promptly, after hemodialysis he complaint about Lt. eye blindness. Consult to ophthalmologist, suggested as orbital apex syndrom. furthermore, Neurologist evaluate neurologic examination. Multiple cranial nerve dysfunction was diagnosed by neurologic examination (Cranial nerve II, III, IV, V 1, V 2, VI). **Method:** Imaging modality (Brain MRI+MRA), Orbit MRI, PNS CT CSF, biopsy of nasal cavity and pathologic special staining (DMS, PAS) used to diagnosis mucormycosis. **Treatment:** Endoscopic pansinus surgery and use amphotericin B immediately, when suspected mucormycosis. **Conclusion:** Rhinocerebral mucormycosis is rare disease but it is life-threatening and clinical presentation progress rapidly. Therefore, early diagnosis and promptly initiation treatment is important against the disease.



Estimating Donor Organ Quality with Baseline Histology and Kidney Donor Risk Index in Cadaveric KT

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Background: Donor organ quality is a key determinant of graft outcomes in deceased donor kidney transplantation (DDKT). The effect of baseline histology at the time of transplantation and several donor quality scoring systems on long-term graft outcome has been evaluated but these results were debated. **Methods:** To investigate the predictive values of baseline histology and kidney donor risk index (KDRI) for graft outcome, we screened 167 patients who received DDKTs at Ulsan University Hospital from April 2003 to June 2016. Among them, 66 DDKTs who underwent baseline kidney biopsies and whose KDRI were available were included in this analysis. All baseline biopsy was rescored according to the updated Banff classification. **Results:** Median follow-up was 22 months. Mean age of recipients and donors are 51.4 and 44.7 years, respectively. Mean kidney donor risk index (KDRI) was 1.40±0.44. During follow up, delayed graft function (DGF) and biopsy-proven acute rejection (BPAR) developed for 7 and 11 patients, respectively. Graft failure occurred to 2 patient and one of them showed 50% glomerulosclerosis (3/6), severe (>50%) interstitial fibrosis and severe (>50%) tubular atrophy who had failed graft at 8 days after DDKT for acute antibody-mediated rejection. In Cox-regression analysis, interstitial fibrosis/tubular atrophy (IFTA, HR=3.59, $p=0.049$) was a significant risk factor for BPAR. In multivariate linear regression, age (standardized beta[SB]=-0.282, $p=0.002$), BPAR (SB=-0.406, $p<0.001$), KDRI (SB=-0.277, $p=0.003$) and IFTA (SB=-0.298, $p=0.001$) were significant predictors of last-visit estimated glomerular filtration rate (eGFR). **Conclusion:** Several clinical and pathologic parameters such as KDRI and IFTA may be helpful for predicting allograft outcomes, including BPAR and last-visit eGFR in DDKTs.

Table. Summary of multiple linear regression model for final eGFR of deceased kidney transplantation.

	Coefficient	Standard error	Beta	P		Coefficient	Standard error	Beta	P
Intercept	139.762	11.356		< 0.001	Induction with ATG vs. IL2RA	5.248	4.974	0.093	0.296
Age at transplantation, per 1 year	-0.682	0.215	-0.282	0.002	Transplant duration, per months	0.162	0.163	0.087	0.325
Sex, male	-1.542	4.309	-0.030	0.722	Delayed graft function	-1.057	8.987	-0.013	0.907
Diabetes	5.983	4.520	0.110	0.191	Biopsy-proven acute rejection	-27.870	5.665	-0.406	< 0.001
PRA class I, > 0%	-2.903	5.666	-0.050	0.611	Donor sex, male vs. female	1.080	7.353	0.014	0.884
PRA class II, > 0%	-1.417	7.146	-0.018	0.844	KDRI	-16.333	5.223	-0.277	0.003
HLA mismatches, total	0.757	1.843	0.036	0.683	glomerulosclerosis, > 10% vs. < 10%	-2.358	7.569	-0.036	0.757
HLA mismatches, DR	-3.459	5.084	-0.085	0.499	interstitial inflammation, > 10% vs. < 10%	-4.369	10.234	-0.049	0.671
Second transplantation	15.198	10.319	0.124	0.146	IFTA, presence vs. absence	-19.179	5.751	-0.298	0.001
Cold ischemia time, per quartile	-1.797	1.880	-0.078	0.343	arteriolar hyalinosis, presence vs. absence	-11.039	7.386	-0.133	0.140