

Supplement

Standard immunosuppressive regime:

- All patients one dose prednisolone during transplantation (300mg/square meter body surface)
- All patients Basiliximab on day 0 and 4 after pLT
- All patients long-term treatment with tacrolimus only (modigraf® from day 1)
 - o except:
 - Patients with hepatoblastoma or below 6 kg bodyweight received Cyclosporine and Prednisolone as long term treatment
 - Patient with combined lung-liver transplant: Tacrolimus, Prednisolone and Mycophenolate Mofetil.

Calculation of diuresis score:

diuresis score = hourly diuresis [ml/kg/h] / 1 + (furosemide[mg/kg/d] x 0.4 + etacrynic acid[mg/kg/d] x 0.1 + hydrochlorothiazide[mg/kg/d] x 0.04 + spironolactone[mg/kg/d] x 0.01 + mannitol[g/kg/d] x 0.13 + theophylline[mg/kg/d] x 0.01 + acetazolamide [mg/kg/d] x 0.005).

Supplement Table S1

Supplement Table 1: Graft and Transplant characteristics				
	No IAH	IAH	ACS	Total
Patients (n=)	4	6	17	27
Type of LT: Living donor (LD) versus deceased donor	75% LD	17% LD	18% LD	26%
Size of transplant: whole organ versus sized-reduced whole organ versus split	1 : 0 : 3(75%)	4 : 0 : 2(33%)	4 : 2 : 11(65%)	9 : 2 : 16(59%)
Weight of explanted liver (g) *	549.15 [±199.79]	1064.90 [±565.30]	743.61 [±765.70]	787.84 [±670.28]
Weight of transplanted liver (g) *	457.35 [±405.66]	758.95 [±504.08]	576 [±468.03]	593.41 [±460.74]
Graft to-Recipient Weight Ratio *	0.03 [±0.005]	0.02 [±0.007]	0.03 [±0.012]	0.03 [±0.01]
Large for size transplantation	1 (25%)	0	5 (29%)	6 (22%)
Duration of cold ischemia (min)*	292.75 [±112.11]	527.67 [±194.36]	554.06 [±185.12]	509.48 [±195.97]
Type of abdominal wall closure: primary versus sequential/staged	1:3(75%)	4:2(33%)	2:15(88%)	7:20(74%)
Aortic anastomosis of Arteria hepatica: yes versus no	0:4(100%)	2:4(66%)	5:12(71%)	7:20(0.74)
*Mean [± standard deviation]				

Supplement Table S2

		NoIAH*				IAH *				ACS*				p-value Kruskal Wallis	
Parameter	Unit	Median [Min-Max]	Mean [Standard deviation]	Lower CI 95%	Upper CI 95%	Median [Min-Max]	Mean [Standard deviation]	Lower CI 95%	Upper CI 95%	Median [Min-Max]	Mean [Standard deviation]	Lower CI 95%	Upper CI 95%		
Heart frequency	per minute	100 [85-111]	99 [± 11]	82	116	99 [90-128]	103 [± 15]	88	117	110 [83-129]	110 [± 15]	103	119	0.25	
Mean arterial pressure (MAP)	mmHg	66[62-98]	73[± 17]	46	100	92[63-96]	81[± 15]	68	99	73[60-89]	76[± 11]	70	80	0.34	
Near infrared spectroscopy (NIRS)	%	59 [56-64]	59 [± 6]	6.6	112.1	75[71-89]	79[± 9]	64.6	90.3	72[52-89]	72[± 11]	65.8	78.3	0.14	
Dynamic Tissue Perfusion Measurement	Liver	cm/sec	0.42[0.12-0.83]	0.445[± 0.363]	-0.13	1.02	0.30[0.09-0.45]	0.310[± 0.131]	0.14	0.48	0.21[0.13-2.05]	0.434[± 0.509]	0.13	0.76	0.96
	Kidney	cm/sec	0.17[0.9-0.42]	0.211[± 0.145]	-0.02	0.44	0.15[0.07-0.32]	0.197[± 0.126]	-0.01	0.35	0.27[0.1-2.05]	0.394[± 0.492]	0.11	0.72	0.19
	Spleen	cm/sec	0.32[0.19-0.57]	0.353[± 0.181]	0.07	0.64	0.42[0.26-0.55]	0.376[± 0.156]	0.18	0.65	0.46[0.04-0.99]	0.424[± 0.304]	0.23	0.61	0.96
	Intestines	cm/sec	0.07[0.04-0.36]	0.135[± 0.151]	-0.11	0.38	0.05[0.03-0.27]	0.115[± 0.138]	-0.08	0.29	0.10[0.01-0.29]	0.115[± 0.076]	0.07	0.17	0.73
Respiration frequency	per minute	28[26-31]	28[± 2]	25	32	20[16-34]	25[± 8]	16	32	24[14-46]	27[± 8]	23	31	0.39	
D-GFR Score		3.2[2.8-3.5]	3.1[± 0.3]	2.7	3.7	2.4[1.0-3.0]	2.1[± 0.8]	1.5	2.9	2.8[0.6-5.2]	2.9[± 1.2]	2.3	3.5	0.10	
Albumin blood level	g/dl	24[21-25]	23[± 2]	18	28.1	24[23-25]	24[± 1]	22.2	26	24[18-32]	25[± 4]	23	27.3	0.84	
Albumin substitution	g	3[2-10]	4.5[± 3.7]	-1.4	10.4	0[0-12]	2.8[± 5.2]	-2.7	7.4	0[0-18]	1.8[± 4.4]	-0.4	4.2	0.07	