

Supplementary Table 1 Preoperative recipient characteristics according the presence of portal vein thrombosis

Basic characteristics	Overall	%	No portal vein thrombosis	%	Portal vein thrombosis	%	P value
n	25	100,0%	9	36,00%	16	64,0%	
Sex (male)	13	52,0%	5	55,56%	8	50,0%	1,000
Age by the time of transplant (years)	53,72 [10,00-78,00;15,54]**		48,33 [10,00-78,00;22,32]**		56,75 [43,00-72,00;9,68]**		0,308
Body composition							0,326
Underweight	2	8,0%	1	11,11%	1	6,3%	
Normal	12	48,0%	6	66,67%	6	37,5%	
Overweight	8	32,0%	1	11,11%	7	43,8%	
Obesity	3	12,0%	1	11,11%	2	12,5%	
Liver disease							
Transplant Indication							0,041
Biliary atresia	1	4,0%	1	11,11%	0	0,0%	
Non-alcoholic steatohepatitis	5	20,0%	1	11,11%	4	25,0%	
Alcoholic	5	20,0%	0	0,00%	5	31,3%	
Primary biliary cirrhosis	2	8,0%	0	0,00%	2	12,5%	
Autoimmune hepatitis	1	4,0%	0	0,00%	1	6,3%	
Overlap syndrome	4	16,0%	3	33,33%	1	6,3%	
Hepatitis C	2	8,0%	0	0,00%	2	12,5%	
Hepatocellular carcinoma	1	4,0%	1	11,11%	0	0,0%	
Hemochromatosis	2	8,0%	1	11,11%	1	6,3%	

Cryptogenic	1	4,0%	1	11,11%	0	0,0%
Secondary biliary cirrhosis	1	4,0%	1	11,11%	0	0,0%
Previous Graft Dysfunction	3	12,0%	0	0,00%	3	18,8% 0,280
Child Pugh Score B/C	22	88,0%	6	66,67%	16	100,0% 0,037
	17,24	[7,00-37,00;		20,00 [12,12-24,01;		13,00 [11,43-20,95;
MELD Score	8,12]**		11,50]*		9,00]*	0,169
MELD Score >= 20 points	9	36,0%	5	55,56%	4	25,0% 0,200
Primary hepatic neoplasia	6	24,0%	4	44,44%	2	12,5% 0,142
Hepatic encephalopathy	13	52,0%	5	55,56%	8	50,0% 1,000
Ascites	19	76,0%	5	55,56%	14	87,5% 0,142
Sepsis	4	16,0%	2	22,22%	2	12,5% 0,602
Primary bacterial						
peritonitis	3	12,0%	0	0,00%	3	18,8% 0,280
Hypertensive gastropathy	13	52,0%	6	66,67%	7	43,8% 0,411
Esophageal varices	23	92,0%	7	77,78%	16	100,0% 0,120
Upper gastrointestinal						
bleeding	10	40,0%	1	11,11%	9	56,3% 0,040
Hepatorenal syndrome	3	12,0%	1	11,11%	2	12,5% 1,000
Collateral Portal						
Circulation	20	80,0%	6	24%	14	56,0% 0,312
Splenomegaly	18	72,0%	4	16,0%	14	52,0% 0,058
Perigastric/Periesophagic varices	12	48,0%	3	12,0%	9	36,0% 0,411

Umbilical vein									
recanalization	8		32,0%	3		12,0%	5		20,0% 1,000
Paracaval portosystemic shunt	1		4,0%	1		4,0%	0		0,0% 0,360
Epiploic shunts	3		12,0%	2		8,0%	1		4,0% 0,530
Mesenteric varices	3		12,0%	1		4,0%	2		8,0% 1,000
Splenorenal shunts	6		24,0%	2		8,0%	4		16,0% 1,000
Comorbidities									
Diabetes mellitus	7		28,0%	0		0,00%	7		43,8% 0,027
Dyslipidemia	4		16,0%	3		33,33%	1		6,3% 0,116
Arterial hypertension	6		24,0%	1		11,11%	5		31,3% 0,364
Cardiac failure	2		8,0%	1		11,11%	1		6,3% 1,000
Hemodynamic support	3		12,0%	1		11,11%	2		12,5% 1,000
Chronic renal insufficiency	1		4,0%	0		0,00%	1		6,3% 1,000
Acute kidney injury	4		16,0%	1		11,11%	3		18,8% 1,000
Malnourishment	8		32,0%	4		44,44%	4		25,0% 0,580
Decreased bone minerality	12		48,0%	4		44,44%	8		50,0% 0,152
Pulmonary disease/Impairment	9		36,0%	1		11,11%	8		50,0% 0,442
Hypothyroidism	5		20,0%	1		11,11%	4		25,0% 0,753

*Continuous variable without normal distribution (median [p5-95;IQR]); the comparison was done using Mann-Whitney' U test.

**Continuous variable with normal distribution (mean [min-max;SD]; the comparison was done using Student's T test. MELD: Model for End-Stage Liver Disease.

Supplementary Table 3 Surgical variables according to the intraoperative portal vein thrombosis, spontaneous portosystemic shunts ligation and primary graft dysfunction

Intraoperative events	No intraoperative PVT	%	Intraoperative PVT	%	Overall	%	P value
n	9	36,0%	16	64,0%	25	100,0%	
Surgical Time (h)	7,00 [4,80-11,20; 6,80]		7,50 [6,83-9,80; 4,53]		7,20 [6,80-9,50; 4,30]		0,522
Arterialization Technique							0,038
Supraceliac graft	0	0,0%	8	50,0%	8	32,0%	
Infrarenal graft	7	77,8%	5	31,3%	12	48,0%	
ARHA	0	0,0%	2	12,5%	2	8,0%	
Splenic Artery	1	11,1%	0	0,0%	1	4,0%	
AMA	1	11,1%	1	6,3%	2	8,0%	
Thrombectomy***	0	0,0%	9	56,3%	9	36,0%	0,005
CIT (h)	9,24 [4,90-13,70; 3,20]**		9,60 [4,00-13,80; 2,20]**		9,40 [4,00-13,80; 1,50]**		0,777
CIT > 10 h	3	33,3%	6	37,5%	9	36,0%	1,000

	36,6	[22,00-52,00;	45,4	[29,0-78,0;	42,20	[22,00-	
WIT (min)	10,80]**		13,10]**		78,00;12,80]**		0,801
WIT> 45 min)	2	22,2%	6	37,5 %	8	32,0%	0,661
PRBCs (Units)	12,10	[0,00-41,00;	9,40	[0,00-2,00;	10,00	[6,40-14,20;	
	15,7]**		6,9]**		12,00]*		0,499
Plasma (Units)	12,00	[7,70-29,20;	11,50	[10,58-2,42;	12,00	[12,2-22,1;	
	8,5]*		14,8]*		13,00]*		0,598
Cryoprecipitates (Units)	20,00	[9,80-35,90	20,00	[10,14-3,49;	20,00	[13,50-3,00;	
	5,0]*		28,3]*		17,50]*		0,978
Platelets (Units)	12,00	[1,50-4,60;	12,00	[2,20-4,80;	12,00	[7,60-3,10;	
	31,0]*		24,00]*		27,00]*		0,803
PVA after LT	3	33,3%	1	6,3%	4	16,0%	0,116
Intraoperative Events	No SPSS Ligation	%	SPSS Ligation	%	Overall	%	p
n	15	60%	10	40%	25	100,0 %	
Surgical Time (h)	8,3 [4,4-15,0; 3,3]**		8,12 [4,2-15,0; 3,5]**		7,2 [6,8-9,5; 4,30]**		0,904
Arterialization Technique							0,284
Supraceliac graft	5	33,3%	3	30,0 %	8	32,0%	
Infrarenal graft	7	46,7%	5	50,0 %	12	48,0%	
ARHA	0	0,0%	2	20,0 %	2	8,0%	
Splenic Artery	1	6,7%	0	0,0%	1	4,0%	

	2	13,3%	0	0,0%	2	8,0%
Thrombectomy***	4	26,7%	5	50,0%	9	36,0%
CIT (h)	9,2 [4,9-13,8; 2,6]**		9,8 [4,0-13,7; 2,5]**		9,4 [4,0-13,8; 1,5]**	0,559
CIT > 10 h	4	26,7%	5	50,0%	9	36,0%
WIT (min)	39,9	[22,0-78,0;	45,7	[32,0-65,0;	42,2	[22,0-
	14,3]**		9,3]**		78,0;12,8]**	0,276
WIT > 45 min)	3	20,0%	5	50,0%	8	32,0%
PRBCs (Units)	10,00	[5,4-16,9;	8,0	[3,2-14,9; 13,0]*	10,0	[6,4-14,2; 12,0]*
	12,0]*					0,807
Plasma (Units)	12,0	[10,24-23,4;	15,0	[8,4-26,9; 17,8]*	12,0	[12,2-22,1;
	13,0]*				13,0]*	0,935
Cryoprecipitates (Units)	20,0	[11,4-3,4; 9,0]*	20,5	[7,6-34,0; 30,5]*	20,0	[13,5-3,0; 17,5]*
Platelets (Units)	12,0	[1,0-38,9; 24,0]*	12,0	[3,4-35,8; 32,0]*	12,0	[7,6-3,1; 27,0]*
PVA after LT	3	20,0%	1	10,0%	4	16,0%
Intraoperative Events	No PGD	%	PGD	%	Overall	%
n	16	64,0%	9	36,0%	25	100,0%
Surgical Time (h)	7,50 [6,40-9,20; 3,50]		7,00	[5,80-12,20;	7,20 [6,80-9,50; 4,30]	0,803
Arterialization Technique			8,40]			0,198

Supraceliac graft	7	43,8%	1	11,1 %	8	32,0%	
Infrarenal graft	6	37,5%	6	66,7 %	12	48,0%	
ARHA	1	6,3%	1	11,1 %	2	8,0%	
Splenic Artery	0	0,0%	1	11,1 %	1	4,0%	
AMA	2	12,5%	0	0,0%	2	8,0%	
Thrombectomy***	7	43,8%	2	22,2 %	9	36,0%	0,401
CIT (h)	9,90	[4,00-13,80;	10,40	[5,40-13,70;	9,40	[4,00-13,80;	
	2,60]**		2,30]**		1,50]**		0,171
CIT > 10 h	4	25,0%	5	55,6 %	9	36,0%	0,200
WIT (min)	44,00	[25,00-78,00;	39,00	[22,00-	42,20	[22,00-	
	14,00]**		52,00;10,40]**		78,00;12,80]**		0,362
WIT> 45 min)	5	31,3%	3	33,3 %	8	32,0%	1,000
PRBCs (Units)	10,00	[5,50-12,90;	10,00	[2,40-22,50;	10,00	[6,40-14,20;	
	11,80]*		17,00]*		12,00]*		0,718
Plasma (Units)	12,00	[10,60-27,40;	12,00	[7,40-31,10;	12,00	[12,2-22,1;	
	12,50]*		18,00]*		13,00]*		0,803
Cryoprecipitates (Units)	20,00	[10,80-26,60;	21,00	[8,40-4,80;	20,00	[13,50-3,00;	
	20,00]*		23,00]*		17,50]*		0,452

	12,00	[1,00-36,50;	12,00	[3,60-39,60;	12,00	[7,60-3,10;	
Platelets (Units)	22,50]*		31,00]*		27,00]*		0,487
PVA after LT	2	12,5%	2	22,2%	4	16,0%	0,602

*Continuous variables without normal distribution (median [p5-95;IQR]). They were compared using Mann-Whitney's U test.

Continuous variables with normal distribution (mean [min-max;SD]. They were compared using Student's T test. *Whether mechanical thrombectomy or thromboendovenectomy. PVT: Portal Vein Thrombosis, PGD: Primary Graft Dysfunction, ARHA: Accessory Right Hepatic Artery, AMA: Accesory Mesenteric Artery, CIT: Cold Ischemia Time, WIT: Warm Ischemia time, PVA: Portal Vein Arterialization, LT: Liver transplant, SPSS: Spontaneous Portosystemic Shunts, PRBC: Packed Red Blood Cells.

Supplementary Table 3 30-d postoperative outcome according to preoperative portal vein thrombosis and SPSS ligation.

Postoperative Events	No PVT	%	PVT	%	Overall	%	P value
n	9	36,0%	16	64,0%	25	100,0%	
ICU stay (d)	3,00 [0,74-7,20; 4,50]*		3,00 [0,00-14,50; 3,70]*		3,0 [1,00- 10,60;4,00]*		0,890
LOS (d)	6,00 [3,60-17,90 11,50]*		11,50 [0,00-46,00; 12,70]*		10,00 [3,80- 33,00;13,50]*		0,419
Hemoperitoneum	1	11,1%	1	6,3%	2	8,0%	1,000
Bowel resection	0	0,0%	3	18,8%	3	12,0%	0,280
Upper Gastrointestinal Bleeding	4	44,4%	2	12,5%	6	24,0%	0,142
Infections	6	66,7%	8	50,0%	14	56,0%	0,677
Ascites	2	22,2%	4	25,0%	6	24,0%	1,000
Pleural effusion	1	11,1%	4	25,0%	5	20,0%	0,621
Pulmonary complications	2	22,2%	6	37,5%	8	32,0%	0,661

Encephalopathy	4	44,4%	6	37,5%	10	40,0%	1,000
Postoperative fibrillation	atrial 1	11,1%	1	6,3%	2	8,0%	1,000
Congestive Failure	cardiac 1	11,1%	1	6,3%	2	8,0%	1,000
Acute Kidney Injury	5	55,6%	8	50,0%	13	52,0%	1,000
Hemodialysis requirement	4	44,4%	2	12,5%	6	24,0%	0,142
Reintervention	3	33,3%	4	25,0%	7	28,0%	0,673
PGD	6	66,7%	3	18,8%	9	36,0%	0,031
PNF	4	44,4%	1	6,3%	5	20,0%	0,040
Retransplantation	2	22,2%	1	6,3%	3	12,0%	0,530
30-day mortality	6	66,7%	3	18,8%	9	36,0%	0,031
Postoperative Events	No SPSS Ligation	%	SPSS Ligation	%	Overall	%	p
n	15	60,0%	10	40,0%	25	100,0%	
ICU LOS (d)	3,00 4,00]*	[0,00-15,50;	3,00 6,00;5,00]*	[1,10- 10,60;4,00]*	3,00 10,00	[1,00- 33,00;13,50]*	0,765
LOS (d)	10,00 47,40;14,00]*	[0,00-	11,50 13,20]*	[5,90-19,20; 33,00;13,50]*	10,00 33,00	[3,80- 13,50]*	0,892
Hemoperitoneum	1	6,7%	1	10,0%	2	8,0%	1,000
Bowel resection	2	13,3%	1	10,0%	3	12,0%	1,000
Upper Bleeding	Gastrointestinal 4	26,7%	2	20,0%	6	24,0%	1,000
Infection	8	53,3%	6	60,0%	14	56,0%	1,000

Ascites	4	26,7%	2	20,0%	6	24,0%	1,000
Pleural effusion	2	13,3%	3	30,0%	5	20,0%	0,358
Pulmonary complications	3	20,0%	5	50,0%	8	32,0%	0,194
Encephalopathy	3	20,0%	7	70,0%	10	40,0%	0,037
Postoperative atrial fibrillation	1	6,7%	1	10,0%	2	8,0%	1,000
Congestive cardiac Failure	1	6,7%	1	10,0%	2	8,0%	1,000
Acute Kidney Injury	4	26,7%	9	90,0%	13	52,0%	0,004
Hemodialysis requirement	3	20,0%	3	30,0%	6	24,0%	0,653
Reintervention	3	20,0%	4	40,0%	7	28,0%	0,378
PGD	3	20,0%	6	60,0%	9	36,0%	0,041
PNF	1	6,7%	4	40,0%	5	20,0%	0,121
Retransplantation	0	0,0%	3	30,0%	3	12,0%	0,052
30-day mortality	6	40,0%	3	30,0%	9	26,0%	0,691

*Continuous variable without normal distribution (median [p5-95;IQR]); the comparison between groups was done using U-Mann-Whitney test. PVT: Portal Vein Thrombosis, ICU: Intensive Care Unit; PVA: Portal Vein Arterialization, LOS: Length of Stay, PGD: Primary Graft Dysfunction, PNF: Primary Non-Functioning, SPSS: Spontaneous Portosystemic Shunt.