SDC, MATERIALS AND METHODS 1

LIVE LIVER DONOR SELECTION – GLOBAL SURVEY QUESTIONNAIRE

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Please encircle correct answer/state number/make comments as appropriate

1. Are you a: Transplant surgeon, b. Hepatologist, c. Other - Specify

2. Type of LDLT performed at your center: a. Adult, b. Pediatric, c. Both adult and pediatric

3. Type of center: a. University, b. Private, affiliated with university, c. Private hospital, d. Military

4. ACCEPTABLE LIVER REMNANT: (for right lobe graft) _____

5. ACCEPTABLE GRWR / % SLV: a. Right lobe graft , b. Left lobe graft , c. Left lateral sector graft

LIVE DONOR LIVER STEATOSIS

6. Which noninvasive modality do you use for evaluation of donor steatosis? a. CT Scan – Specify, b. MRI – Specify , c. Others - Specify
7. Do you consider microvesicular steatosis in assessing graft quality/acceptance? a. Yes – Specify acceptable upper limit ____, b. No

8. To assess graft suitability, do you sum up the amount of microvesicular and macrovesicular steatosis? a. Yes – Specify acceptable upper limit ____ , b. No

9. Acceptable upper limit for macrovesicular steatosis? a. Right lobe graft ___ , b. Left lobe graft ____

10. Indications of donor liver biopsy at your center? a. Done for all donors, b. Metabolic syndrome, c. Low HDL, d. Raised triglycerides, e. Increased waist circumference, f. Diabetes mellitus, impaired glucose tolerance, g. Presence of any one metabolic risk factor, h. Low GRWR: Specify __ , i. Low remnant: Specify __ , j. Donor age: Specify __ , k. Any steatosis on ultrasound abdomen, l. Any steatosis on CT scan, m. Any

steatosis on MRI, n. Noncontrast CT scan- Liver attenuation index or Liver/spleen ratio : Specify __ , o. Donor BMI: Specify __ , p. Transaminasemia: Specify ___ , q. Combination of above: Specify ___ , r. Other: Specify ____

11. Do you take first degree relative as donor in case of the following? a. Wilson's Disease: yes/no, b. Hemachromatosis : yes/no, c. Hemophilia yes/no, d. Autoimmune disease: yes/no, e. PBC: yes/no, f. PSC: yes/no, g. Maple syrup urine disease (MSUD): yes/no, h. Others: Specify __

12. Limits of BMI for selection as donor: a. Upper limit : Specify ___ , b. Lower limit : Specify ____

13. Does age influence your decision of upper limit of steatosis in donor? a. Yes: Specify ___ , b. No
14. Do you subtract steatosis % from GRWR / remnant to calculate corrected GRWR / remnant respectively? yes/no
15. Do you treat steatotic donors to reduce their steatosis so they can be accepted as donors? a. Yes : Specify protocol ___ , b. No

BEYOND STEATOSIS:

16. Would you reject a donor in case of the following biopsy findings? a. Mild Inflammation : yes/no, b. Nonspecific Granuloma: yes/no, c. Early Fibrosis (F1): yes/no

17. Acceptable limit for: a. AST __ , (Lab range __), b. ALT __ , (Lab range __)

DILEMMAS IN SELECTION:

18. Age limit for live donor selection a. Lower limit __ , b. Upper limit ___

19. Do you routinely perform any procoagulant workup in donor evaluation? Yes/no

20. Encircle the ones that would exclude donation: a. Any of the iver function tests beyond nornmal values of your lab, b. HB coreAb detection, c. Mild mental subnormality but competent to give informed consent, d. Upper extremity disability, e. Lower extremity disability, f. H/O psychiatric illness which is in

remission/controlled, g. Beta thalasemia minor, h. History of Alcohol abuse, i. History of drug abuse, j. Coronary artery disease – previously treated with coronay angioplasty, k. Previously treated mailignancy (i. nonmelanoma skin cancer, ii. other than brain or skin primary), l. H/O recovered cerebro-vascular accident, m. Previous upper abdominal surgery: If yes, please select the ones which you would accept: (Laparoscopic Cholecystectomy / Other laparoscopic upper abdominal surgery / Open upper abdominal surgery)

21. What is the minimum acceptable hemoglobin prior to surgery? __

ANATOMY AND GRAFT CONSIDERATIONS:

22. Would you reject any donor based on arterial anatomy? a. Yes : Specify ___ , b. No
23. Would you reject any donor based on portal venous anatomy? a. Yes : Specify __ , b. No
24. Do you perform routine MRCP for all donors? a. Yes , b. No : Specify __
25. Do you perform routine intra operative cholangiogram for all donors? a. Yes, b. No : Specify ___
26. Would you reject any donor based on biliary anatomy? a. Yes : Specify __ , b. No
27. Would you reject any donor based on hepatic venous outflow anatomy? a. Yes : Specify __ , b. No
28. Would you accept a donor with a left sided gallbladder? a. Yes : Specify __ , b. No
29. What is your preference for graft selection in adults? Right lobe / Left lobe
30. If you are taking a right lobe graft, would you prefer to take: a. Standard (No reconstruction of anterior sector venous outflow), b. Modified graft (reconstruction of segment 5 & 8 veins), c. Extended (Partial or subtotal MHV), d. No preference, individualized
31. At your center, do you consider posterior sector grafts in selected cases? a. Yes : Specify ___ , b. No
32. Your criteria for considering a RPS graft : a. volumetry: specify __ , b. Anatomy: Specify___
33. Total no. of LDLTs performed so far at your center: ___

SDC, MATERIALS AND METHODS 2

No.	Center	LDLT	<500 / >500	Western / Eastern	Survey participant
1.	Asan Medical Center, Seoul, Korea	4090	0 / 1	0 / 1	SG Lee et al.
2.	Medanta Institute of Liver Transplantation, Gurgaon, India*	2234	0 / 1	0 / 1	AS Soin et al.
3.	Apollo Hospital, Delhi, India	1927	0 / 1	0 / 1	S Gupta et al.
4.	Samsung Medical Center, Seoul, Korea	1318	0 / 1	0 / 1	JW Joh et al.
5.	Kaohsiung Chang Gung Memorial Hospital, Taiwan	1291	0 / 1	0 / 1	CL Chen et al.
6.	Queen Mary Hospital, Hong Kong	1200	0 / 1	0 / 1	SC Chan et al.
7.	Seoul National University, Seoul, Korea	1200	0 / 1	0 / 1	KS Suh et al.
8.	Florence Nightingale Hospital, Istanbul, Turkey	912	0 / 1	0 / 1	Y Tokat et al.
9.	China Medical University Hospital, Taiwan	769	0 / 1	0 / 1	LB Jeng et al.
10.	Toronto General Hospital, Toronto, Canada	700	0 / 1	1 / 0	D Grant et al.

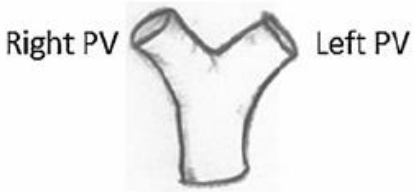
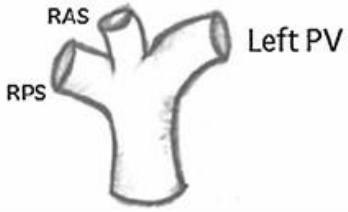
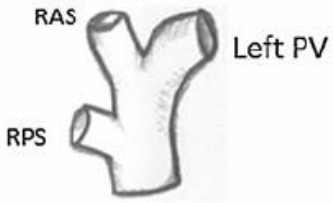
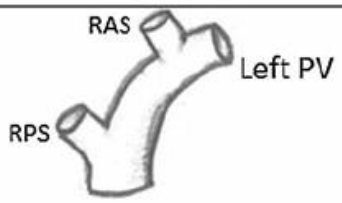
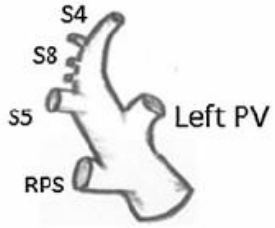
11.	Amrita Institute of Medical Sciences, Kochi, India	409	1 / 0	0 / 1	S Sudhindran et al.
12.	Global Hospital, Chennai, India	400	1 / 0	0 / 1	M Rela et al.
13.	Fortis Hospital, Noida, India	352	1 / 0	0 / 1	V Vij et al.
14.	Sir Ganga Ram Hospital, Delhi, India**	336	1 / 0	0 / 1	N Mehta et al.
15.	Lahey Clinic, Burlington, United States of America	300	1 / 0	1 / 0	E Pomfret et al.
16.	King's College Hospital, London, United Kingdom	280	1 / 0	1 / 0	N Heaton et al.
17.	Institute of Liver and Biliary Sciences, Delhi, India	270	1 / 0	0 / 1	V Pamecha et al.
18.	University of California San Franciso, USA	250	1 / 0	1 / 0	J Roberts et al.
19.	Hokkaido University, Japan	250	1 / 0	0 / 1	K Yamashita et al.
20.	Nagoya University, Japan	200	1 / 0	0 / 1	T Kiuchi et al.
21.	Kokilaben Dhirubhai Ambani Hospital, Mumbai, India	110	1 / 0	0 / 1	V. Kumaran et al.
22.	Hôpital Paul Brousse, Paris, France	107	1 / 0	1 / 0	D Azoulay et al.
23.	Université Catholique de Louvain, Brussels, Belgium	54	1 / 0	1 / 0	J Lerut et al.

24.	Tokyo Women's Medical University, Japan	50	1 / 0	0 / 1	H Egawa et al.
TOTAL:		19009	14 / 10	6 / 18	

*including 557 at SGRH until June 2010

**after June 2010

Figure S1A – Nakamura' classification of portal vein anatomy. [86,87]

Classifications		**Anatomical variants**
Nakamura et al. Type A Normal classical	Cheng et al. Type I	
Nakamura et al. Type B Trifurcation	Cheng et al. Type II	
Nakamura et al. Type C	Cheng et al. Type III	
Nakamura et al. Type D	Cheng et al. Type IV	
Nakamura et al. Type E	Cheng et al. Type IV (others)	

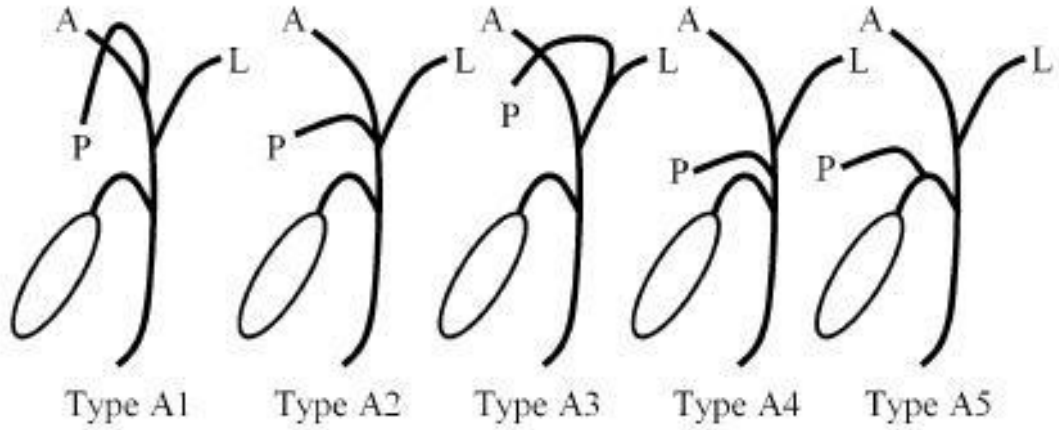



Figure S1B – Huang's classification of hepatic duct anatomy. (A – right anterior hepatic duct, P – right posterior hepatic duct, L – left hepatic duct) [95]