

Utilizing Livers from Donors Older Than 65: A Single Center Experience

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Background

- Current organ donor shortage has compelled many transplant centers to use liver grafts from older donors
- Studies have shown that liver donor age over 60 years was a strong risk factor for graft failure

Objectives

- To assess outcomes following liver transplantation using older donors (≥ 65 years old)

Methods

- Retrospective study of 227 consecutive orthotopic liver transplant (OLT) recipients, who received 235 OLTs from January 2004-October 2010 at TJU
- Recipients divided into 2 groups based on donor age:
 - Group 1: donors ≥ 65 years old
 - Group 2: donors < 65 years old
- Variables compared: recipient age & gender, MELD scores, length of hospitalization, CIT, WIT, and patient and graft survival

Results

Variables (Mean)	Group 1 (n=22)	Group 2 (n=205)	p-value
Recipient Age	56	52	NS
Recipient Gender			
Male	16	144	NS
Female	6	161	NS
MELD score	26	28	NS
CIT (min)	399	429	NS
WIT (min)	58	61	NS
Length of Stay (days)	33	20	0.005
Retransplantation (n=8)			
HAT	0%	2.5%	NS
Primary non-function	9%	0.5%	0.025
Patient Survival (n=227)			
1 month	95%	99%	NS
3 months	95%	97%	NS
1 year	91%	90%	NS
3 years	82%	83%	NS
Graft Survival (n=235)			
1 month	91%	97%	NS
3 months	91%	96%	NS
1 year	91%	93%	NS
3 years	91%	92%	NS

- Incidence of primary graft non-function was significantly higher in Group 1 vs. Group 2 (9% vs. 0.5%; $p=0.025$)
- Mean hospital length of stay was significantly longer in Group 1 vs. Group 2 (33 days vs. 20 days; $p=0.005$)
- Patient and graft survival rates were similar in both groups

Conclusions

- Use of liver grafts from older donors presents similar survival outcomes as grafts from younger donor age. Therefore, it offers a viable option to expand the donor pool and increase number of OLTs
- However, there is higher incidence of retransplantation due to primary graft non-function, and longer hospital length of stay observed in the older donor age group
- Further studies using larger patient populations are needed to validate our results

References

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