Victorian Liver Transplant Unit

Annual Report 2012-2013
Preface

The Victorian Liver Transplant Unit (LTU) provides adult liver transplant services for all of Victoria, Tasmania and parts of New South Wales, and is currently the sole provider of intestinal transplant services in Australia. The LTU provides the surgical team and follow up for paediatric liver transplants performed at the Royal Children’s Hospital (RCH). The paediatric service is a Nationally Funded Centre, so paediatric patients are referred from a wider geographic area.

The LTU was established in 1988, performing 4 liver transplants in its first year. In 2012/13, a total of 65 liver transplants were performed.

The Austin LTU team consists of transplant surgeons, hepatologists, fellows and registrars, specialist nurses and allied health staff. The LTU accepts referrals and provides assessment and transplantation for patients with end stage liver disease.

The LTU can be contacted to provide clinical advice on acute and chronic liver failure. A 24 hour service is also provided for urgent support. To contact the LTU registrar in or out of hours, please call our switchboard on (03) 9496 5000, and page the Liver Transplant registrar.

Report purpose

This report has been developed to provide referring physicians with an update on 2012/13 activity and current outcome data.

2013/13 summary

- In 2012/13, the LTU performed its largest number of liver transplants. 56 adult transplants were performed at Austin Health, and 9 at RCH - a total of 65 transplants. This was 16% more than the number of transplants performed in 2011/12

- The LTU continues to achieve excellent patient survival results

- The number of transplants performed is limited by the number of suitable donor organs available
• An increasing number of Donation after Cardiac Death (DCD) donor livers are being referred and used for transplant.

• Split grafts continue to make a significant contribution to the numbers of paediatric transplants performed. In 2012/13, 44% of the children transplanted at RCH received a split liver graft.

• 1 adult patient was retransplanted for primary graft non-function.

**Total transplant activity**

**Liver transplants per financial year - Austin Health and RCH**
**2012/13 activity summary**

<table>
<thead>
<tr>
<th>Detail</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total transplants</td>
<td>65</td>
</tr>
<tr>
<td>Adult transplants</td>
<td>56</td>
</tr>
<tr>
<td>Paediatric transplants</td>
<td>9</td>
</tr>
<tr>
<td>Adult referrals</td>
<td>188</td>
</tr>
<tr>
<td>Paediatric referrals</td>
<td>41</td>
</tr>
</tbody>
</table>

**2012/13 transplant activity and patient demographics**

**Age of patients transplanted in 2012/13 (n=65)**

The mean age of adults transplanted in 2012/13 was 48.4 years, with a median age of 51. The mean age of children transplanted was 5.2 years, with a median age of 23 months.
Primary indication for transplant - adults (n=56)

- Acute Hepatic Necrosis, 7
- Alcoholic Cirrhosis, 4
- Autoimmune Cirrhosis, 3
- Hepatitis C Cirrhosis, 15
- Hepatoma, 7
- Metabolic disorders, 3
- NASH, 4
- Other, 5
- Primary Biliary Cirrhosis, 3
- Primary Sclerosing Cholangitis, 5

Primary indication for transplant - children (n=9)

- Biliary Atresia, 6
- Crigler- Najar Syndrome, 2
- Primary Sclerosing Cholangitis, 1
Primary referral diagnosis for adults and children referred in 2012/13 are as follows. Referral data includes patients referred for small bowel transplant, as many of these patients required a liver as part of their graft.

**Primary referral diagnosis - adults (n=188)**

- Acute Hepatic Necrosis, 14
- Alcoholic Cirrhosis, 18
- Autoimmune Cirrhosis, 12
- Cryptogenic Cirrhosis, 8
- Hepatitis C, 38
- Hepatoma, 35
- Primary Biliary Cirrhosis, 7
- Primary Sclerosing Cholangitis, 13
- Small Bowel Transplant, 10
- Other, 26
- NASH, 7

**Primary referral diagnosis - children (n=41)**

- Acute Hepatic Necrosis, 2
- Autoimmune Cirrhosis, 3
- Biliary Atresia, 8
- Metabolic Disorders- other, 3
- Other, 10
- Small Bowel Transplant, 5
- Tyrosanaemia, 3
- Retransplant, 1
- Primary Sclerosing Cholangitis, 2
- Hepatitis C, 4
Waiting list numbers

The following table lists the number of adults and children on the liver transplant waiting list at the end of the 2012/13 and 2011/12 financial years:

<table>
<thead>
<tr>
<th>Date</th>
<th>Adults waiting</th>
<th>Children waiting</th>
<th>Total waiting</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 June 2013</td>
<td>49</td>
<td>11</td>
<td>60</td>
</tr>
<tr>
<td>30 June 2012</td>
<td>51</td>
<td>7</td>
<td>58</td>
</tr>
</tbody>
</table>

2012/13 Waiting times

The waiting times in days for all patients transplanted (excluding those transplanted for fulminant liver failure) during 2012/13 were as follows:

<table>
<thead>
<tr>
<th>Waiting time (days)</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults &gt; 18 (n=47)</td>
<td>227</td>
<td>169</td>
</tr>
<tr>
<td>Children ≤ 18 (n=9)</td>
<td>483</td>
<td>83</td>
</tr>
</tbody>
</table>

Outcome data

The LTU achieves outstanding outcomes, which can be demonstrated by our patient survival rates. Of all patients transplanted since the program commenced in 1988, 73% of adults and 85% of children are alive.

<table>
<thead>
<tr>
<th>Patient survival</th>
<th>1 year</th>
<th>5 year</th>
<th>10 year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults &gt; 18 (n=672)</td>
<td>92%</td>
<td>85%</td>
<td>77%</td>
</tr>
<tr>
<td>Children ≤ 18 (n=146)</td>
<td>91%</td>
<td>87%</td>
<td>87%</td>
</tr>
</tbody>
</table>

Our re-transplant rates are as follows:

<table>
<thead>
<tr>
<th>Re-transplant rate</th>
<th>Number</th>
<th>% of patients transplanted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults &gt; 18 (n=672)</td>
<td>39</td>
<td>5.8%</td>
</tr>
<tr>
<td>Children ≤ 18 (n=146)</td>
<td>10</td>
<td>6.8%</td>
</tr>
</tbody>
</table>
Contact us

For more information, our contact details are as follows:

Austin Health
Liver Transplant Unit
(03)9496 5353
http://www.austin.org.au

Royal Children’s Hospital
Department of Gastroenterology
(03)9345 5060
http://www.rch.org.au