Liver Transplantation

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What Does The Liver Do?
- Synthesis & Storage of: Proteins, Vitamins, Fat
- Detoxification of Drugs & Alcohol
- Bile Synthesis and Drainage
- Blood Glucose Regulation

What Are Reasons For Liver Failure?
- Cholestatic Liver Disease
- Fatty Liver
- Alcohol
- Acute Liver Failure
- Metabolic Liver Disease
- Hepatitis C

How To Be Listed For Liver Transplant?
- A transplant team meets with potential recipients to review their candidacy for transplantation
- The multidisciplinary team includes transplant surgeons, hepatologists (liver specialists), psychiatrists, dieticians, social workers, case managers and transplant coordinators
- Each center has its own set of guidelines for listing patients
- If approved by the committee, the patient is placed on a national waitlist to obtain an organ from a deceased donor
- The Organ Procurement and Transplantation Network (OPTN) links all the transplant centers with donors and coordinates availability of organs within a geographic region

How Does The List Work?
- A patient may be on the list for several days or even years
- When an organ becomes available, factors determining allocation include blood type, body size and then severity of illness; i.e. the sickest patients have highest priority
- Severity of illness is calculated by a scoring system called: Model for End-Stage Liver Disease (MELD)
- MELD score is determined by several factors from routine blood tests that are associated with the function of the liver
- A higher MELD scores correlates to shorter wait list time

Life After Liver Transplant

<table>
<thead>
<tr>
<th>Time Since Transplant</th>
<th>Organ Survival</th>
<th>Patient Survival</th>
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</thead>
<tbody>
<tr>
<td>1 Year</td>
<td>90%</td>
<td>92%</td>
</tr>
<tr>
<td>3 Years</td>
<td>81%</td>
<td>84%</td>
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<tr>
<td>5 Years</td>
<td>73%</td>
<td>76%</td>
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Advances In Liver Transplant At NW
- Increasing access to liver transplant among select patients with recent alcohol use who were previously "high risk" candidates (Dr. Priya Maddur)
- Reducing post-transplant complications by limiting immunosuppression medications and the associated long-term complications related to their use (Drs. Lisa VanWagner and Josh Levitsky)
- Development of tissue scaffold/matrix technologies allowing for organogenesis (Dr. Jason Wertheim)
- Improvements in transplant surgical safety among liver donors (Dr. Daniela Ladner)

References:
- https://www.unos.org
- https://optn.transplant.hrsa.gov/
- www.niddk.nih.gov/health-information/liver-disease/liver-transplant