Celebrating 31 years
History of Liver Transplantation

• First successful adult deceased liver transplant in United States- March 1, 1963

• First liver transplant at OHSU/PVAMC –March 16, 1989

• Average Liver Transplants per year: 51
  (from 2014-2019)
Evaluation for Liver Transplant

- Hepatology and Surgical Consults
- Lab Work
- Cardiac testing
- Chest X-ray
- Dental Evaluation
- Dietary Evaluation
- Patient/Family Education
- Financial Evaluation
- Social Service Evaluation
- Immunizations
- Pap/Pelvic/Mammogram
- Colonoscopy
- Other testing as needed
After the Evaluation

• Transplant team discusses your case as a committee:
  • Approved, Deferred, or Declined

• Review transplant evaluation results
• Determine if you are a transplant candidate
• Determine your risks with transplant
• Create a “to do” list/recommendations
• Coordinator and/or Transplant MD communicates plan you, your doctor, and insurance company
Liver transplant is a treatment option.

- **Other treatment options**
  - Medical Management
  - Therapeutic Treatment such as TIPS, treatment of Hepatitis C, etc.
  - Palliative Care/Hospice

- **You have the right to refuse transplant at any time.**
Benefits of Liver Transplantation

• Quality of life
• Quantity of life
• More freedom to travel
• Return to work or school
Risks of Liver Transplantation

- Medications: life-long, many side effects, expensive
- Infections
- Rejection
- Cancer
- Surgical complications
- Financial concerns
All surgeries have risks

- Anesthesia reaction
- Bleeding
- Blood clot
- Infection
- Death
Acute Rejection

Usually seen within the first six months
- Often no symptoms
- Frequent liver biopsies in 1st year
- Self monitoring essential (labs, wt, BP, temp)
- Medication adherence a must

Treatment available
- May require admission to hospital, biopsy, and IV meds
- Most of the time reversible
When is Transplant Not Possible?

- Active infection
- Active or recent malignancy (cancer)
- High chance of dying with surgery
- Anatomy that makes transplant technically impossible
- Active drug or alcohol use
- Active nicotine use
- Medical noncompliance
- Inadequate social support
See handout in class packet - Handout includes current data for liver transplant on:

**Patient survival**
- OHSU 1 year actual patient survival
- OHSU 1 year expected patient survival
- National 1 year patient survival

**Graft survival**
- OHSU 1 year actual graft survival
- OHSU 1 year expected graft survival
- National 1 year graft survival
Medicare and Liver Transplant

For those patients that are on Medicare, if the transplant is not done in a Medicare-approved transplant center, it could affect your ability to have your immunosuppressive (anti-rejection) medications paid for under Medicare Part B.

OHSU is a Medicare-approved transplant center.
Planning Ahead For Transplant

- Support
  - Partner in care – your support people
- Driving restrictions/Transportation
- Housing/Distance from OHSU - must live within 90 minutes of OHSU after transplant for a minimum of 3 months (may be longer if medically necessary).
- Equipment needed - blood pressure cuff, thermometer, scale
- Finances
- Everyone must have a plan before transplant!
When Do I Go on the List?

- Complete “to do” list
- Insurance authorization
- Updated MELD labs and blood type
- UNOS paperwork completed and letter mailed to you
- Call from coordinator stating you are on the list
All solid organ transplant donors and recipients in the US are managed by UNOS

UNOS Options:
- Multiple listing,
- Transfer of waiting time to another center
Liver transplant is a life-saving procedure, so the sickest patients receive liver transplants.

MELD Score determines place on the waitlist.

Blood group can also affect timing.
Life On The Waiting List

• Lab work as determined by MELD score
• Imaging to monitor cancer
• Cardiac screening updates
• At any time a potential recipient may be put on temporary hold on the list (i.e. active infection, BMI too high, positive nicotine or drug screens)
Inform Coordinator for any of the following:

- Insurance changes
- Contact phone number changes
- Antibiotics, illness or infection
- Hospital admissions
- Other medical issues
Deceased Donor Organs

- Brain Death Vs. Cardiac Death (DCD)
- No known transmittable cancer
- No known communicable diseases
- Good liver function

Thoroughly screened, but not risk free.
Possible Donor Risk Factors

• Donor’s History
• Condition or age of organ
• Potential risk of contracting infectious diseases (Hep C, HIV) if the disease isn’t detected in an infected donor
• Risks can affect the success of the graft (organ) or my health
• Donors who are at higher risk for hepatitis B, Hepatitis C, and HIV
  – Newer testing methods have reduced risk further – **OHSU avoids donors who have risk factors who also may be in the exposure window period**

• Disease transmission risk
  – 46/100,000 high risk
  – 2.4/100,000 standard donor

• Comparison with other risks
  – 5000/100,000 risk of developing colon cancer in your lifetime
  – 1190/100,000 risk of dying in a car accident
  – 10/100,000 risk of dying in an airplane crash in your lifetime
  – 1.65/100,000 risk of dying from a shark attack

• Requires written consent
Liver Transplant
Hospital Course

- 8 to 12 hours in OR
- Incision along abdomen
- ICU stay 1 to 2 days
- Usual post-op activity: Foley catheter, wound drains, central line, arm IV
- Average hospital stay: 6 days
- Discharge education-pharmacy, dietician, and transplant coordinator
Your Responsibilities

- Follow lab/clinic
- Monitor own labs
- Monitor temp/BP/weight
- Take medications exactly as prescribed
- Be a proactive participant
Immunosuppressive Drugs

BALANCING ACT

Rejection  Infection

Drugs

Side effects of drugs are dose-dependent
Medication Guarantees

- You will have some medication side effects
- Alter your medications and you can damage your liver
- All medications can have drug-drug interactions
- Some side effects decrease as doses decrease
- Some side effects are life-long, even if the drug is stopped
- Doses are higher the first three months
All immunosuppression increases your risk of

- Cancer
- Infection
- Coronary artery disease

Common immunosuppression medications:

- Tacrolimus (Prograf/FK)
- Mycophenolate (CellCept/Myfortic)
- Prednisone
Lifestyle after Transplant - Infection

- USE COMMON SENSE!
- Wash your hands
- Take food precautions
- Don’t share food/utensils
- Use gloves when gardening
- Avoid people with contagious diseases
- Wear masks while in hospital/lab for 3 months after transplant
- Pet considerations
- Dental follow up
# Lifestyle after Transplant - Cancer

<table>
<thead>
<tr>
<th>Routine screening:</th>
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- Routine screening:
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- Skin care:
  - Sunscreen
  - Regular checks
  - Stay out of the sun
Lifestyle after Transplant - Cardiac

- Liver healthy diet
- Exercise
- Blood pressure & cholesterol control
- No smoking
- Healthy weight
- Testing as indicated
Additional Resources

OHSU website links for housing and what to bring to the hospital for your reference

Direct link to housing information
http://www.ohsu.edu/xd/health/for-patients-visitors/preparing-for-your-stay/lodging.cfm

Overall information about admissions, including what to bring and what to leave at home
http://www.ohsu.edu/xd/health/for-patients-visitors/preparing-for-your-stay/index.cfm