



Liver Transplant Education Class

Updated 4/20/2020

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 not a Cure

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

Surgical Risks

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

Current SRTR Data

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

United Network for Organ Sharing (UNOS)

- 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

When Will I Get A Transplant?

- 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)

Waiting List Issues

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.

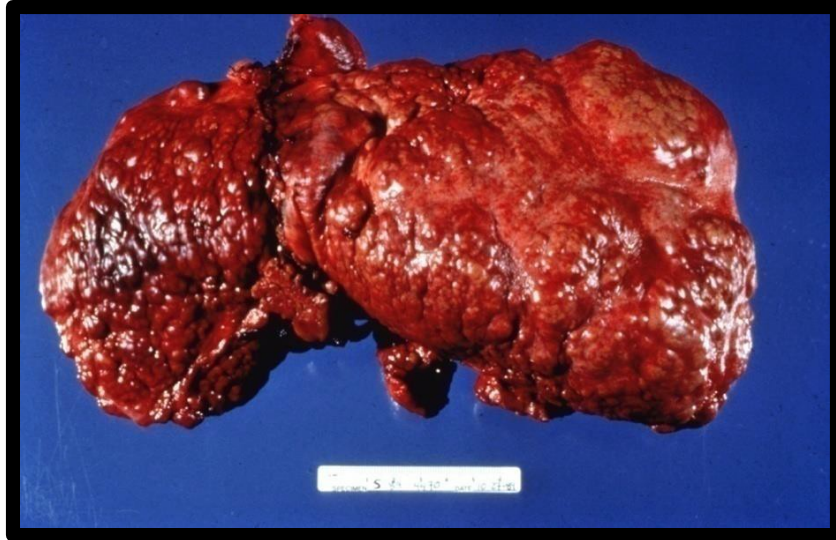
Possible Donor Risk Factors

- 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

Public Health Service (PHS) Increased Risk Donor

- 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



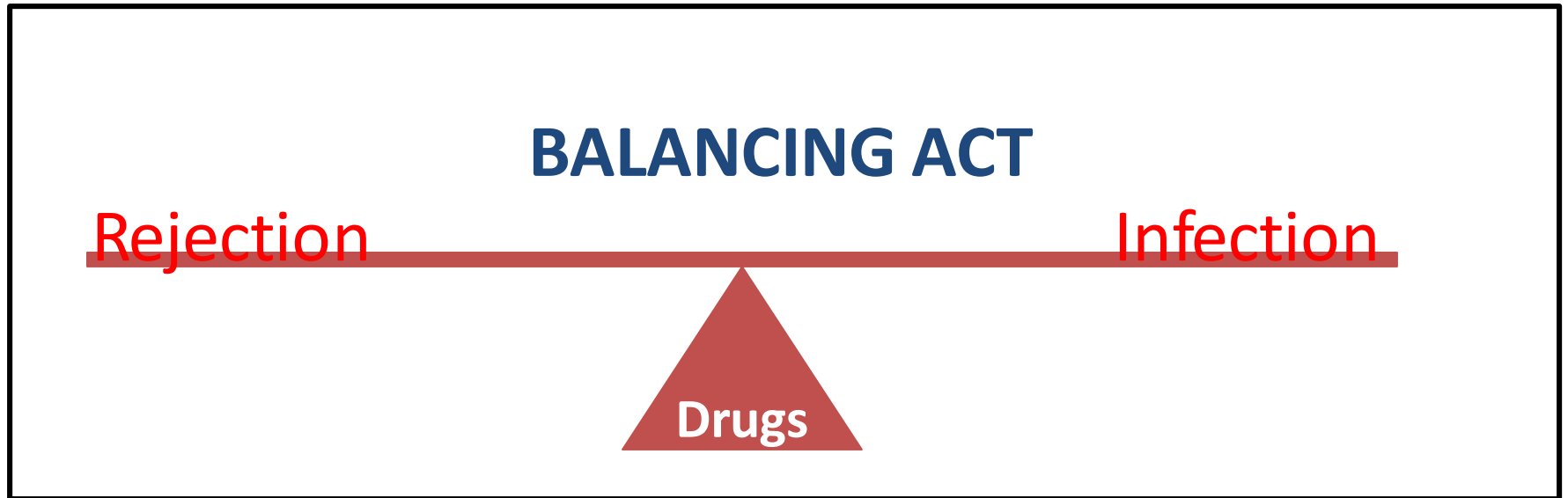
Hospital Course

- 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



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

Side Effects

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

Routine screening:

- Pap/Mammogram/BSE
- Colonoscopy
- PSA

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>