



# 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 1<sup>st</sup> 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.**

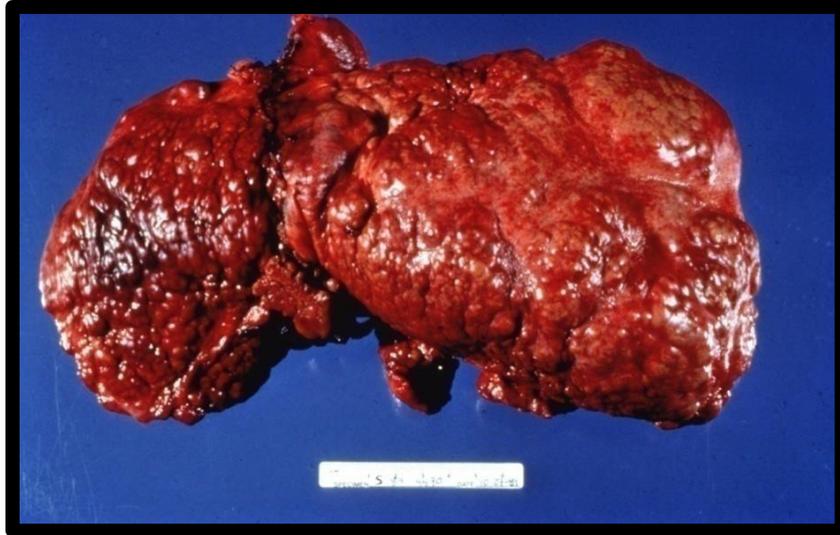
# Possible Donor Risk Factors

- 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



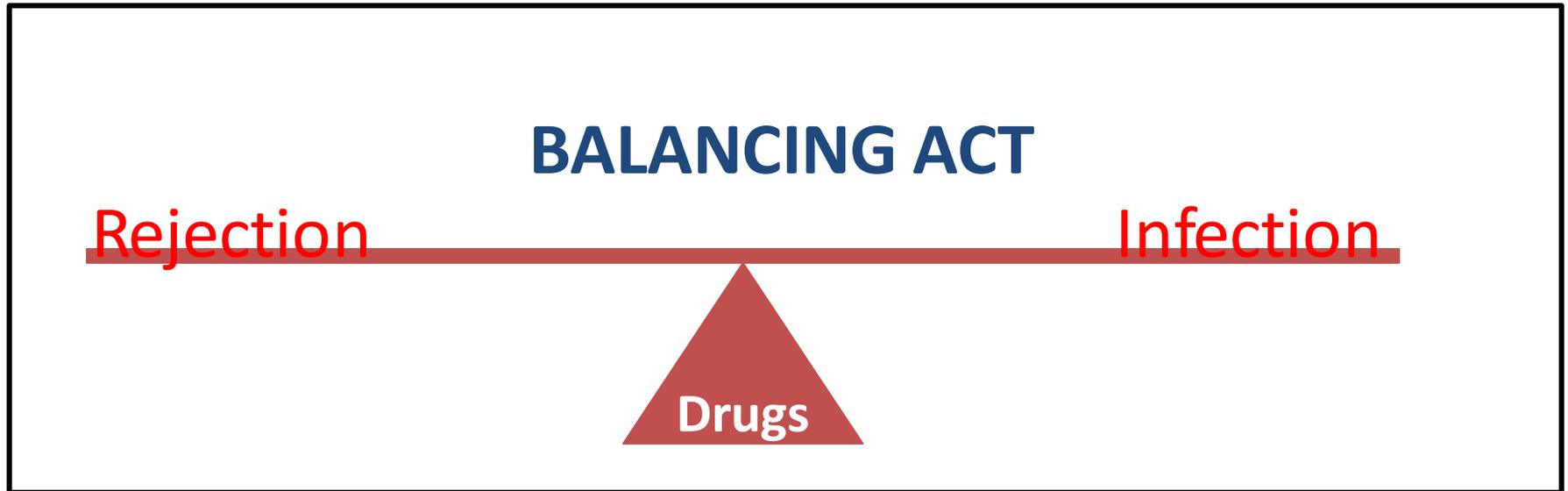
# Hospital Course

- 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>