

Ask the Experts Patient Education Program

Understanding the Progression of Liver Disease: Fibrosis

J. Clint Stanfill, MD April 24, 2018

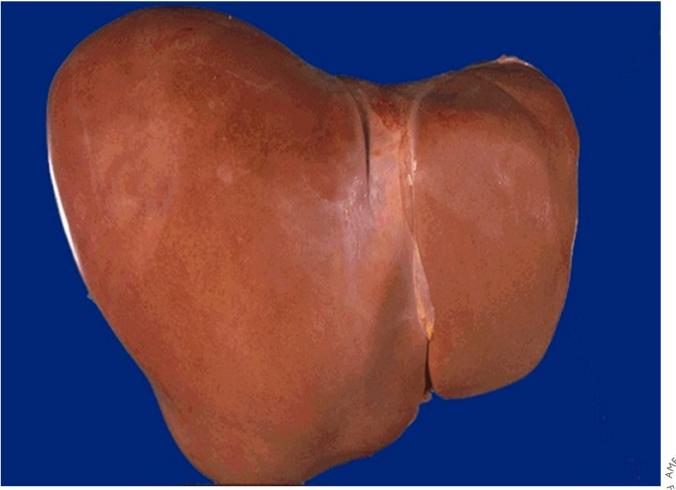


Fibrosis

- -replacement of normal liver
- -reactive phenomenon
- -"stronger"
- -has NO function of normal liver cells

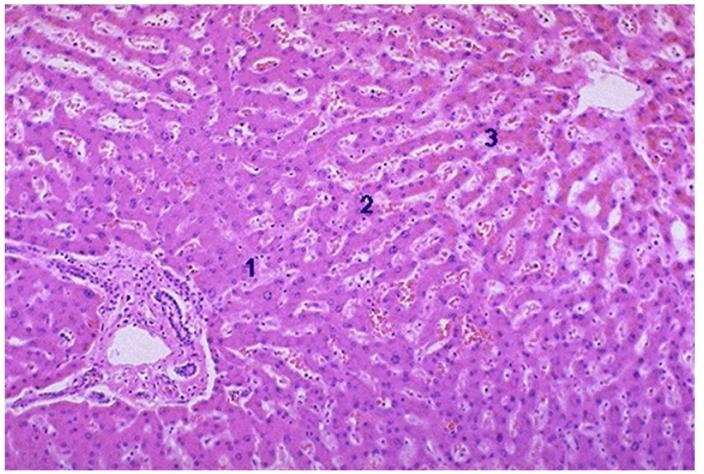


Normal liver





Normal Liver Histology



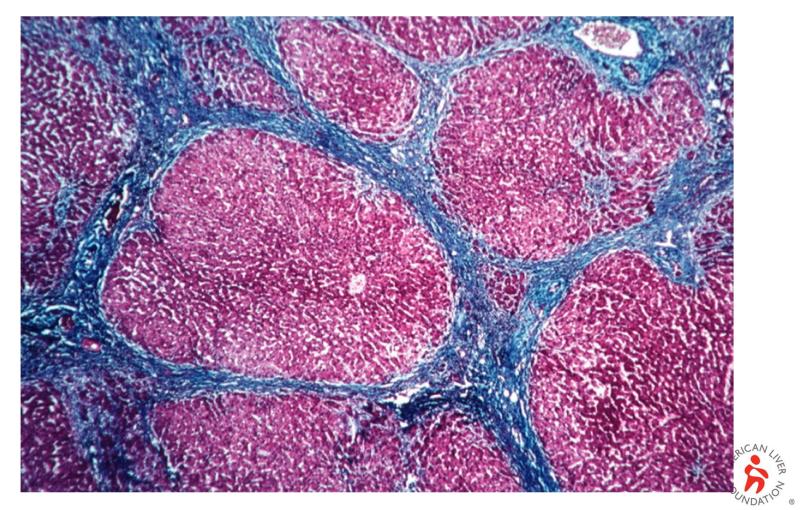


Cirrhosis





Cirrhosis Histology



Your Liver. Your Life.

Causes of fibrosis

- . Alcohol related liver disease
- Viral hepatitis
 - Hepatitis B, C, D
- Nonalcoholic fatty liver disease
- Autoimmune hepatitis
- Bile duct disease/damage
 - Gallstones
 - Primary sclerosing cholangitis/Primary biliary cirrhosis
- Drug induced liver injury



Factors that may hasten fibrosis

- Presence of two or more of the previous factors
- Alcohol or illicit drugs
- . Tobacco smoking
- Elevated body mass index (BMI)
- High fat diet



Fibrosis is forever

- . NO
- Conventional wisdom has been fibrosis/cirrhosis is irreversible
- Multiple animal models/clinical trials show improvement
- Regression of fibrosis may be MARKED
- Never COMPLETELY normal, small changes remain



Improvement in fibrosis following clinical cure of Hepatitis C

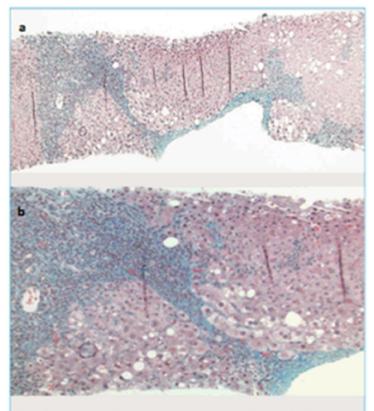


Fig. 1 Pre-treatment liver biopsy shows bridging fibrosis with focal nodular regeneration (<u>Batts-Lugwig</u> Stage 3-4) a, Trichrome special stain X S0. b, higher magnification showing focal sinusoidal fibrosis (Trichrome x100)

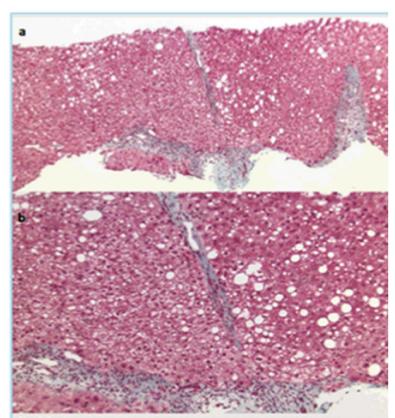


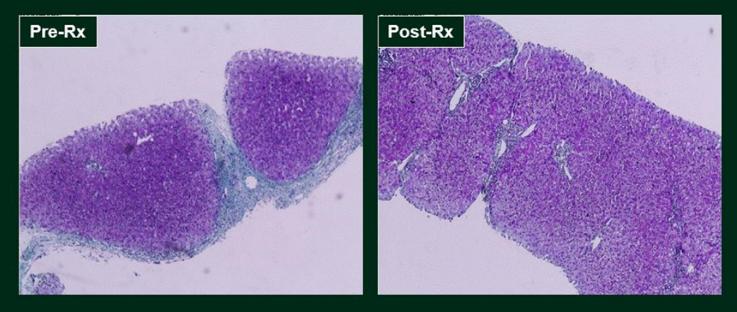
Fig. 2 Post-treatment liver biopsy shows portal and periportal fibrosis with focal bridging fibrosis (Batts-Lugwig Stage 2-3) a, Trichrome special stain X 50. b, higher magnification showing no sinusoidal fibrosis (Trichrome x100)



Epidemiology, Prevention, and Treatment of Hepatitis B

CLINICAL CARE OPTIONS

Histologic Improvement in Cirrhosis: 3 Years of Lamivudine Therapy

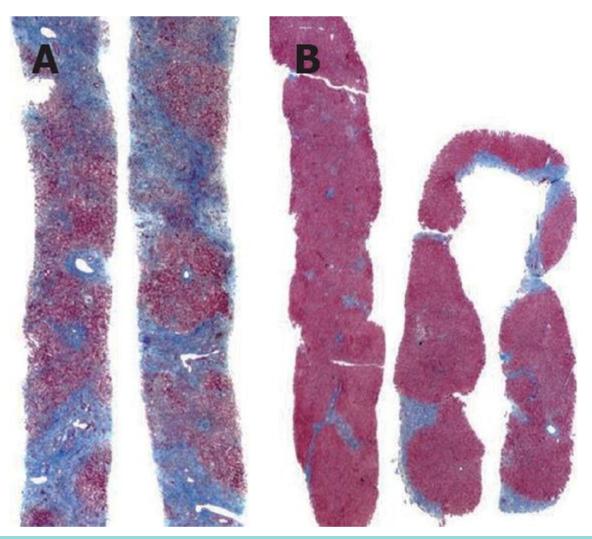


Wild-Type HBV

clinicaloptions.com/hep



Primary sclerosis cholangitis following bile duct stenting





Managing fibrosis from YOUR perspective

- Appropriate diagnosis
- . Treatment regimen
 - COMPLIANCE
- Avoiding additional risk factors for progression
 - Maintenance of healthy lifestyle factors





Ask the Experts Patient Education Program

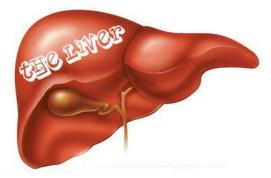
Coping with Hepatic Encephalopathy

Carlos Romero-Marrero MD Chief of Hepatology April 24, 2018





Hepatic Encephalopathy



 Hepatic Encephalopathy (HE) is caused by the liver not being able to filter out toxins. These toxins remain in your blood stream reaching your brain causing mild to severe confusion.

 HE symptoms can start out slowly, so it's important to catch them before they become severe.



Educational Goals

• Eliminating causes of HE

Understanding Medications

• Proper Nutrition







•Why do I get hepatic encephalopathy?





•Why do I develop HE?

- Constipation
- Dehydration
- Fluid buildup
- Use of alcohol or certain medications
- Poorly controlled diabetes
- Infection or bleeding related to liver disease.



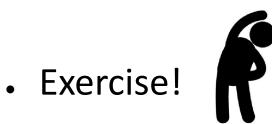


•Prevent constipation:

• Take lactulose as prescribed

UNIT DOSE Delivers 30 ml. NDC 0121-4577:30 LACTULOSE SOLUTION USP 20 g/30 mL Indication: For the treatment of constipation. See Insert. FOR INSTITUTIONAL USE CONIY USE CONIY CONIY 0 0301214, 57730 3 RX ONLY PHARMACEUTICAL ASSOCATES, INC. MILL GREINVILLE, SC 2005 FAST

- Aim for 3-4 BMs per day
- Eat foods with fiber









•Prevent dehydration:

- 4 BMs maximum per day
- Hydrate with 8 glasses of water per day UNLESS on a fluid restriction





Prevent fluid buildup

- Take diuretics as prescribed
- Keep track of your daily weights
- Manage your ascites by keeping paracentesis appointments





Prevent fluid buildup

Eat a diet low in sodium



Avoid processed foods

Choose fresh options







Avoid alcohol & certain medications

Avoid alcohol use



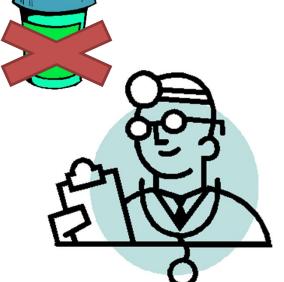
Avoid opiod pain medications

(oxycodone, percocet, morphine, dilaudid)

Avoid anti-anxiety or sleep medications

(xanax, klonopin, valium, ativan, ambien)

• Ask your liver doctor about safe alternatives





Be in control of your diabetes!

 Minimize sugary foods and carbohydrates

• Monitor your blood sugars

 Take your insulin or diabetes medications as prescribed







Beware of infection or bleeding:

- Look for signs of infection (fever and chills)
- Take antibiotics as prescribed
- Look for signs of bleeding
- Keep your endoscopy appointments



Medications



- Lactulose
- Rifaximin
- Zinc



Lactulose

The first line of defense against HE

- Decreases toxins (ammonia) = Decreases confusion (HE)
- Daily goal: 3-4 semi-formed BMs a day
- Side effects: diarrhea, bloating





Reaching your daily goal

 Titration: to take more or less than the prescribed dose of lactulose to achieve 3-4 semiformed bowel movements a day





Cleveland Clinic

Daily Bowel Movement Guide

	Good start! Keep going!
	You have reached your goal for today! Keep taking your lactulose the way you have been.
	Stop taking lactulose for today. You have had enough BMs today.
7 8+	Danger! Contact your liver doctor to reevaluate dosing of lactulose.

This information is not intended to replace the medical advice of your doctor or health care provider. Please consult your health care provider for advice about a specific medical condition. © The Cleveland Clinic Foundation 2015 index #15856



Things to remember



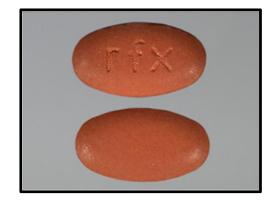
Take lactulose as prescribed even when not eating.

 Lactulose can be mixed with water, juice, or applesauce.



Rifaximin

- Antibiotic that acts on your stomach
- Prevents buildup of ammonia
- Taken on a daily basis regardless of confusion
- Can cause diarrhea or red urine





•Zinc

- Improves overall nutrition
- Needed for the body to break down ammonia
- Take with a meal
- Can cause constipation





.Nutrition



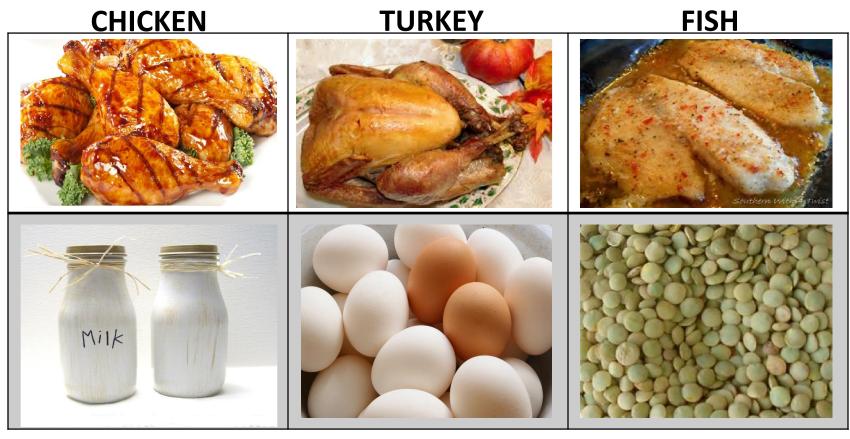


•Protein



- Essential for the body
- Used to build and repair tissue
- Can be used for energy





MILK

EGGS

LENTILS

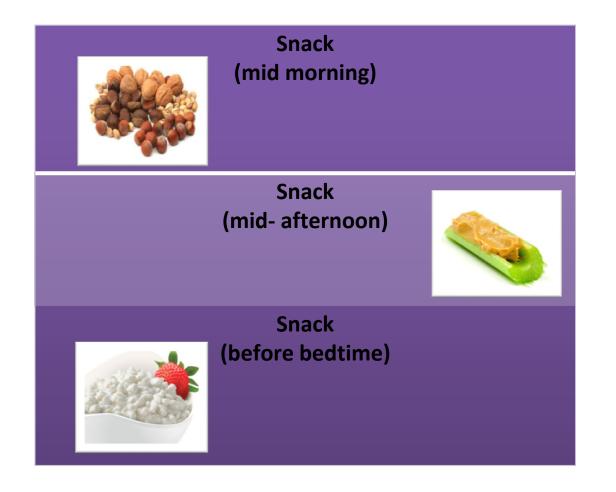


	Servings Per Container: 1 Amount Per Serving	-	
•	Calories 80 Calories from Fat		
	% Daily Valu		
		1%	
		0%	N
	Trans Fat Og		
	Polyunsaturated Fat Og		
	Monounsaturated Fat Og		
		12%	
	Sodium 340mg	14%	
	Potassium 170mg	4%	
	Total Carbohydrate 1g	1%	
	Protein 18g	32%	
	Iron 4% • Vitamin D	15%	1
	Niacin 45% • Vitamin B	68%	
	Vitamin B12 60% • Selenium	90%	
	Not a significant source of Fibe Sugars, Vitamin A, Vitamin C or	r,	
	Galcium.		
	*Percent Daily Values are based o 2,000 calorie ciet.	na	
	INCREDIENTO TIONE STORE		
	2,000 calorie ciet.		
	Percent Daily Values are based o		

Use food labels to determine the amount of protein you are eating each day



.Snacking is important





TIME	MEAL
7:30 AM-8:00 AM	BREAKFAST
10:00 AM-11:00 AM	SNACK
1:00 PM-1:30 PM	LUNCH
3:30 PM-4:00 PM	SNACK
6:00-6:30 PM	DINNER
9:30PM-10:00 PM	SNACK





Ask the Experts Patient Education Program

Liver Cancer

Meelie DebRoy, MD FACS April 24, 2018



Liver Cancer

- Most common type of liver cancer hepatocellular carcinoma (HCC)
- Other types (less common) cholangiocarcinoma, hepatoblastoma
- Does not include cancers that have spread from other areas of the body – colon, breast, lung



Liver Cancer - Symptoms

- Most people do not have any symptoms in the early stages
- Some include:
 - Losing weight without trying
 - Loss of appetite
 - Nausea/ vomiting
 - Weakness/ being tired
 - Yellow discoloration of your skin/white of your eyes



Liver Cancer – Risk Factors

- Chronic Hepatitis B/Hepatitis C infection
- Cirrhosis irreversible scarring of the liver
- Inherited liver diseases hemochromatosis, Wilson's disease
- Fatty liver disease alcoholic or non-alcoholic (associated with Diabetes)
- Toxins aflatoxins



Liver Cancer - Screening

- No benefit for screening in the general population (no h/o liver disease)
- High-risk patients
 - Hepatitis B
 - Hepatitis C and liver cirrhosis
 - Primary Biliary Cirrhosis



Liver Cancer –
 Screening/Diagnosis
 Blood testing – AFP (alpha-feto protein)

- Imaging Ultrasound, CT scan or MRI
 - Usually done every 6-12 months

• Sample of liver tissue for testing - biopsy



Liver Cancer - Treatment

Surgery

- Surgery to remove the tumor if extent of tumor and overall liver function is healthy enough to allow this
- Liver Transplantation depends on the stage of the tumor. During liver transplantation, your diseased liver is removed and replaced with a healthy liver from a donor.



Liver Cancer - Treatment

- Localized treatments
 - Injecting chemotherapy directly into the tumors
 - Placing beads filled with radiation into the tumor
 - Radiofrequency ablation (RFA) heating/destroying cancer cells using a thin needle inserted into your abdomen
 - Cryoablation freezing the cancer cells using a thin needle



Liver Cancer

Chemotherapy – May slow or stop the spread of tumors, but do not cure them

Radiation therapy

 Uses high-energy X-rays to destroy cancer cells and shrink the tumor



Liver Cancer - Support

- Be informed about your condition
- Talk to your family and friends
- Support groups in your area ALF, National Cancer Institute, American Cancer Society
- Advance directives



Liver Cancer - Preparing

- Questions for your doctor
 - Type of cancer, stage of cancer
 - Copy of Pathology report
 - Do I need more testing?
 - Treatment options?
 - Is there one treatment you would recommend over others?
 - Time to make a decision about treatment?
 - Second opinion?
 - Brochures, websites that you recommend?





Ask the Experts Patient Education Program

The Patient Perspective

Mindy Craft April 24, 2018



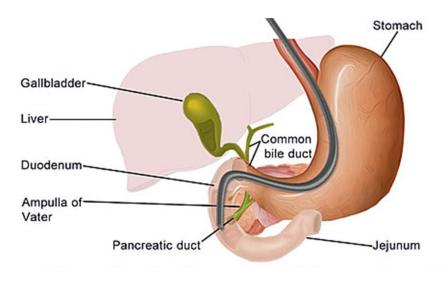
An Unexpected Journey





Primary Sclerosing Cholangitis

- Causes Shrinkage of the Bile Ducts
- Considered One of the 7000 Rare Diseases in the World
- Identified Through ERCP Procedure



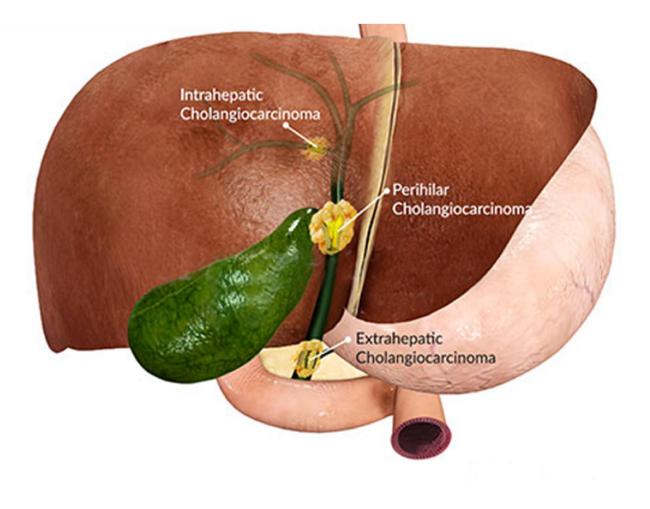


Living with Liver Disease

- Symptoms
 - Fatigue
 - Jaundice
 - Pruritus (Severe Itching)
 - Cognitive Disorders
 - Cholangitis
- ERCP



.The Diagnosis Cholangiocarcinoma





.The Treatment Go Big or Go Home!

- Chemotherapy
- 4D Radiation
- Brachytherapy
 - Internal Radiation
- Liver Transplant











.My Living Donor (Karen Ciolek)





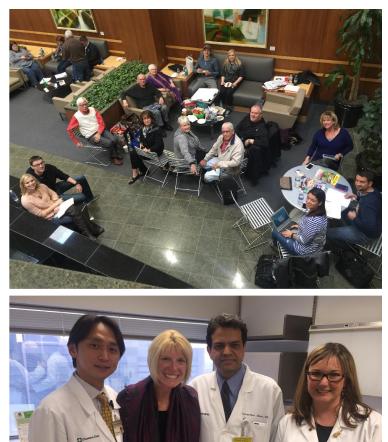
.Transplant Day February 1, 2016





.My Army







Spend Liverversary Together



