Encouraging Weight Management to Prolong Cirrhotic Damage R/T Hep C in a Patient Experiencing Bipolar II

How to Best Serve the Needs of your Patient to Build Rapport & Trust

Hep C: introduction / pathophysiology / etiology / Sx

Non-Alcoholic Fatty Liver Disease / Bipolar II / Anxiety

Patient Profile / Organizational History

Pertinent Medications

Pertinent Labs

Malnutrition Assessment / Nutrient Needs / Average Intake

Nutrition Diagnosis OLD / NEW

Patient Interventions

Appointment Overview

Meal Plan

Patient Outcome / Summary

5 Counseling Simulations

Hepatitis C Infection : HCV

Bookshelf ID: NBK554549 PMID: 32119436

80% Asymptomatic / Anorexia/Malaise/Fatigue / 8 Wk Incubation Period

55% - 85% Develop Chronic Infection / 30% Develop Cirrhosis / Liver Cancer

Etiology / Sx

Hep A/B/C/D Endemic to USA, A/B/C 90% Viral Hepatitis; C Most Common

Chronic HCV

DOI: 10.47162/RJME.61.1.04 PMCID: PMC7728117 PMID: 32747893

Insulin Resistance / Host Immunity / Oxidative Stress / Hepatic Steatosis

Pathogenesis & Disease Prognosis is Affected by the Above Physiological Changes

Chronic HCV

DOI: 10.47162/RJME.61.1.04 PMCID: PMC7728117 PMID: 32747893

Immune Senescence / Chronic Inflammation r/t Cytokine/Inflammasomes promotion

Prognosis

Altered Immunity & Inflammation of Chronic Hepatitis C Overtime Causes

Liver /Cardiovascular Damage & Metabolic Chaos

Hepatitis C → Insulin Resistance

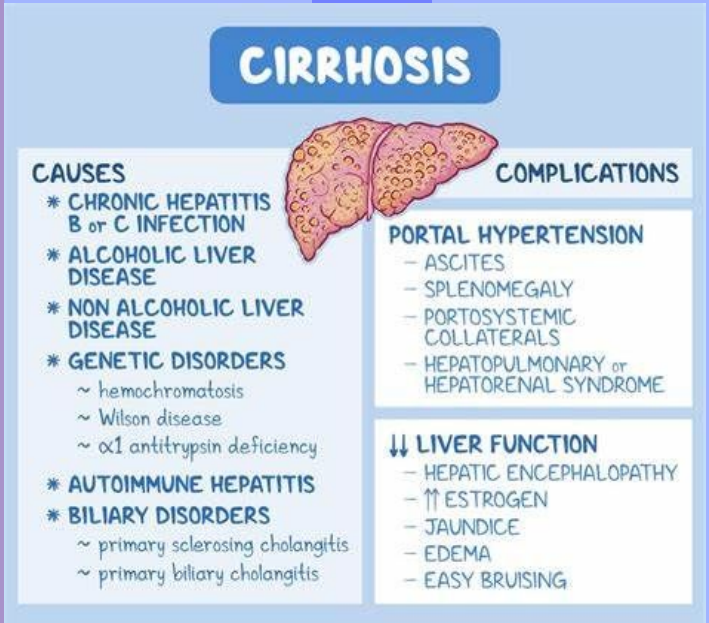
DOI: 10.47162/RJME.61.1.04 PMCID: PMC7728117 PMID: 32747893

HCV Pt's ↑ Risk of Developing T2DM than HBV

Insulin Resistance w/Hep C Correlated to

- Hepatic Fibrosis
- Hepatic Steatosis
- Hepatocellular Carcinoma
- Antiviral Tx Resistance

Hepatic Steatosis → Cirrhosis



When Counseling a Pt w/Hep C Consider...

- Dietary Fat Education [Sources/Portions]
- Omega 3 / Omega 6 Fatty Acid Ratio
- Liver Toxicant Education
- Insulin Sensitivity Education
- Alcohol Portion Education
- Inflammation Management Diet Education

Bipolar II

Bookshelf ID: NBK558998 PMID: 32644424

Is the top 10 leading causes of Disability🌍🌎🌏

Characterized By

- alternating episodes mania/hypomania/depression
- etiology unknown
- 70% dveleope Sx before the age of 25
- B II = hypomania / MDD & ⛔ Mania
- Tx Pharmacological / Behavioral Therapy

Anxiety

1 DOI: 10.5498/wjp.v9.i1.7 2 NIHMSID: NIHMS630893 PMID: 24126546

current prevalence
~ 35% - 47%

lifetime prevalence
~ 75%

Characterized By

- ⅓ BD pts develop 1+ anxiety disorder
- neurobiological adaptations = ↑ compulsive behavior
- chronic stress = persistent homeostatic dysregulation
- ↑ hyperpalatable foods + ↑ calorically dense foods
- ↑ HPA Axis = neuroendocrine hormonal dysregulation
- ↑ HPA Axis = ↑ activation dopamine/reward system
- cytokines + adipocytes = ↑ HPA Axis

Patient Profile

Middle Aged Woman Minimum Wage / Patient Initiated Outpatient Therapy Winter 2023 / Counseled Patient March 2024

Dx: hypertension, obesity I, chronic hepatitis C infection from 18 - 50 yrs old [recently cured at Harborview Medical]

NAFLD, bipolar II disorder, osteopenia, unspecified anxiety disorder

Allergies / Intolerances:

chicken suspected allergy, corn oil suspected allergy, eggs / egg product suspected allergy, gluten intolerance, tomato suspected allergy, turkey suspected allergy, turmeric, curry powder

Anthropometrics:

New Wt 233lb 3/12/24

Ht/Wt 67"/211lbs [95.7 kg] IBW [HEAVY FRAME +10% 149 lbs]

BMI [OBESITY I / 33 new 36 OBESITY II]

%IBW [156% IBW] [MAW Appropriate; 77 kg]

UBW: 180 %UBW: %129

Sea Mar History

Patient's Nutrition Therapy Goals :

Improve Liver Function, Osteopenia Management, Wt Loss, & Postpone Liver Damage

[pt had no prior lb wt loss goal set]

Patient's Willingness to Change : Preparation & Maintenance

Meal Suggestions / Eating Habits r/t Osteopenia / Liver Health = Maintenance

Physical Activity = Preparation r/t anxiety & Maintenance r/t new habit walking at a track

→ pt reports feeling scared to go outside when hearing about recent crime/stalking trends

→ pt has survived an episode of stalking; bipolar II has made recovering to normal activities harder w/ ↑ anxiety

Pertinent Medications

Antihypertensive

Avoid Licorice : Dysphagia Nausea Cramps Edema

Angiotensin II Receptor Inhibitor

Avoid Licorice / Grapefruit / Grapefruit Related Citrus

Dyspepsia Abdominal Pain ↓ Renal Function ↓ Hgb Hct

ANTIGERD Histamine H2 Receptor Antagonists

Avoid Alcohol : ↓ Fe & B12 Absorption ↑ ALT/AST/ALP

Hallucinations Hepatitis Pancreatitis Pneumonia

Pertinent Labs

Hypertension 2023/2024

October 2023 140 / 93

January 2024 121 / 91

Kidney Function 2024

GFR 59

Cre 1.07 [> 2 indicate uremia]

Liver Function 2024

AST 31

ALP 120

ALT 28

Malnutrition Assessment

https://doi.org/10.1161/CIRCULATIONAHA.105.548198 PMID: 16129792

Pt Experiencing Malnutrition r/t at risk high BMI

Pt at risk for ATP III = ↑ WC ↑ BP = 2 / 3 diagnostic criteria

ATP III ↑ risk of CHD/CVD & ↑ CVD Mortality Risk

Pts Malnourished w/ 1 or more are at risk of ATP III

Dx ATP III = ≥ 3 / 6 conditions

↑ FBG ↑ WC ↑ BP ↑ LDL / TG ↑ BMI ↓ HDL

Recommended that Pts be evaluated for ATP III if ≥ 1 condition

Physically Inactive ↑ LDL / TG BMI ≥ 30 Metabolic Syndrome

Nutrient Needs: MAW

Kcal : MSJ w/MAW AF 1.3 IF 0

→ ____ 1,771 - 1,971 kcals/day ____

Protein : .6 - 1.2 g/kg MAW

→ ____ 46 - 92 g / day ____

Fluid : 25 - 30 mL/kg/day MAW

→ ____ 1,925 - 2,310 mL/day ____

Average Intake:

AM Snack
2 String cheese BP Meds

BREAKFAST
salad w/ 2 tbsp 1000 island dressing on yogurt/rice/meat

LUNCH
string cheese

DINNER
salad w/ 2 tbsp 1000 island dressing on yogurt/rice/meat

OLD NUTRITION Dx:

[FOOD & NUTRITION KNOWLEDGE DEFICIT] r/t lack of nutrition education AEB dietary recall & patient interview

[EXCESSIVE ENERGY INTAKE] r/t inadequate hunger/satiety cues AEB BMI of >30 kg/m2, dietary recall & patient interview

[INADEQUATE INTAKE OF MINERALS: Ca, P, & vit D] r/t food & nutrition knowledge deficit AEB osteopenia diagnosis

NEW NUTRITION Dx:

[INADEQUATE PHYSICAL ACTIVITY] r/t anxiety AEB Dx unspecified anxiety disorder & patient interview

Patient Interventions: Patient Education / Counseling

RDN GOAL →

Address Hepatic Steatosis

PATIENT SMART GOALS →

Using Canola / Olive Cooking Oil

Monitor/Track/Manage Alcohol Consumption

RDN GOAL →

Address Insulin Resistance

PATIENT SMART GOALS →

Decreasing Carbs / Increasing non-starchy vegetables

Increasing Nutrient Density of Meals

Eating More Colorful Fiber

RDN GOAL →

Address Chronic Inflammation

PATIENT SMART GOALS →

Take Fish Oil Omega 3 Fatty Acid Supplement

Decrease Intake of Fried Calorically Dense Food

Increase Fruit/Vegetable Consumption

Patient Interventions: Wt Loss Plan

RDN GOAL →
Short - Term Goal

PATIENT SMART GOALS →
@ BMI 30 / 86 kg: - 12 kg / - 22 lbs in 8-12 Mo
at 8 Mo = ~ 3 lbs/Mo; + 4 Mo to allow for maintenance

RDN GOAL →
Long - Term Goal

PATIENT SMART GOALS →
@ BMI 24.9 / 72 kg or 158 lbs
= no time goal set until first goal achieved

RDN GOAL →
Increase Physical Activity

PATIENT SMART GOALS →
Walk 3X Wk
Explore New Walking Sites

Appointment Overview

Build Rapport → **Introduce: Yourself/Purpose of Counseling/Benefits of Counseling**

Referral Reminder → **Assess: Physician Experience/Personal Health Barriers/PMHx & Record in Chart Note**

Ask Patient What Their Goals For The Appointment Are → **Plan Alterations & Record in Chart Note**

Offer Nutrition Education → **Based on pt current mood/recent-life-events choose most beneficial educations**

Meal Plan/Recommendations Must Focus on Being

1. Anti - Inflammatory r/t increased oxidative stress of chronic infection
2. Immune Supporting r/t chronic hepatitis C infection
3. Diabetic Friendly / Diabetes Prevention Friendly r/t insulin resistance w/ hepatitis C infection
4. NAFLD Friendly Including Wt Loss
5. Anemia Preventative / Postponing Onset

Meal Plan

Breakfast

Meal : **Brown Rice Veggie Bowl w/ Mozzarella, Salsa, Bell Pepper Avocado, Cucumber, Steamed Carrots**

spices : Oregano / Cumin / Basil / Paprika

Fluid : Tea & 8oz water

SNACK

Handful of pistachios w/ Apple & Mozzarella Cheese

Lunch

Meal : **Brown Rice Flour Pasta w/ Olive Oil, Broccoli, Cauliflower Feta, Ground Beef, Corn, Masa Flour, Onions, Avocado Chopped Purple Cabbage, & Steamed Carrots**

spices : Oregano / Basil / Chives / Thyme / Garlic

Fluid : 8oz water

SNACK

Spinach Cinnamon Nutmeg Blueberry Smoothie w/ Greek Yogurt & Olive Oil

Dinner

Meal : **No Crust Shepards Pie w/ Olive Oil, Broccoli, Cauliflower, Peas Ground Beef, Mashed Potatoes w/Milk, Masa Flour, Onions, & Corn**

spices : Oregano / Basil / Chives / Thyme / Pepper / Garlic / Paprika

Fluid : Homemade Sprite 4oz water

Patient Outcome

Pt responded well to learning about the Glycemic Load / Glycemic Index & understood how to check a food online

Pt agreed to Short - Term Wt loss Goal 12kg

Pt agreed to SMART Goal Walking 3X Wk

Pt appeared less anxious about walking at new locations [still preparation phase]

Pt responded well to nutrition education that centered on Decreasing Inflammation

In Summary

Pt's Chronic Hepatitis C Infection put them at risk f Cirrhosis / Cancer; Chronic Hep C Infection can cause Insulin Resistance / Chronic Inflammation; pt at risk of ATP III Dx equates to ↑ risk of CHD/CVD

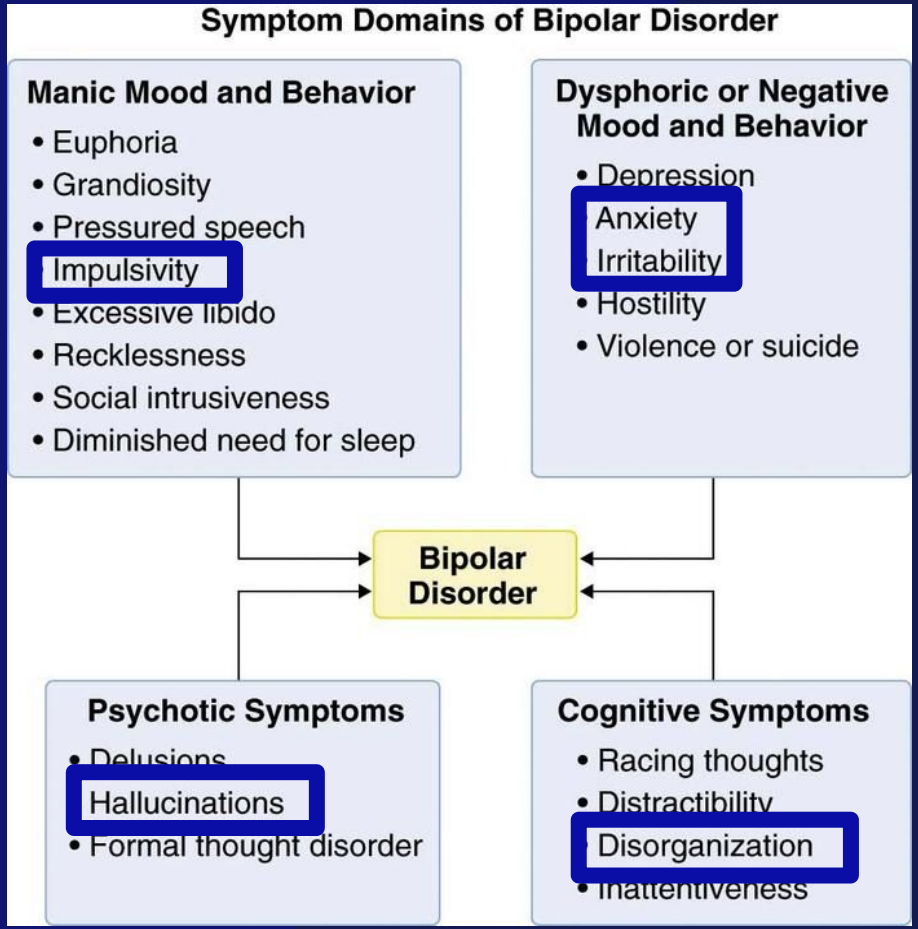
Tx Plan Focuses on Regulating

- Chronic Inflammation
- Chronic Stress / Anxiety
- Chronic Stimulation of HPA Axis
- Dopamine Signaling

Motivational Counseling Focuses on

- Attainable Empathetic Nutritional Goals
- Physical Activity that makes the Pt feel Safe
- Creative Rational Recommendations

Simulations of Critical Disorder Phenomena


Symptom Domains of Bipolar Disorder
Manic Mood and Behavior
• Euphoria
• Grandiosity
• Pressured speech
• Impulsivity
• Excessive libido
• Recklessness
• Social intrusiveness
• Diminished need for sleep
Dysphoric or Negative Mood and Behavior
• Depression
• Anxiety
• Irritability
• Hostility
• Violence or suicide
Bipolar Disorder
Psychotic Symptoms
• Delusions
• Hallucinations
• Formal thought disorder
Cognitive Symptoms
• Racing thoughts
• Distractibility
• Disorganization
• Inattentiveness

How Would You Handle the Appointment if...

The Patient Became so Elated With Your

Nutritional Recommendations that they Started

Discussing With You Their Plans to

Completely Change Their Entire

Diet / Eating Habits / Portion Sizes / Eating Patterns

The Patient Became so Committed to

Your Nutritional Recommendations that

they Told You that When they get Back Home

They are Going to Throw Away

400-500 Worth of Groceries

The Patient Became Convinced that You

Made a Recommendation

That Intentionally Harms their Health

The Patient Reported to You that it is

Hard for Them to Follow Your Nutritional Advice

Because They Lose all Patient Handouts & Cannot

Consistently Remember Your Recommendations

The Patient Reported to You in a Follow-Up Counseling Session that they have Experienced New Hallucinations; they Ask You if a New Food/Supplement in their Diet Could be Causing their Sudden Hallucinations