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<td>RECOMMEND DRUG TREATMENT; DRUGS TO BE AVOIDED; FURTHER TESTS</td>
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SOAP sheet - UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences
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<td><strong>Problem:</strong></td>
<td></td>
<td></td>
<td>GOALS &amp; MONITORING PARAMETERS</td>
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<tr>
<td><strong>Subjective Evidence:</strong> Listen to what the patient is saying about how he/she feels.</td>
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<td></td>
<td>PATIENT EDUCATION</td>
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<tr>
<td>Observe the patient.</td>
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<tr>
<td>Note observations of others.</td>
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<tr>
<td><strong>Objective evidence:</strong> -Laboratory test results</td>
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<tr>
<td>-Physical assessment parameters</td>
<td></td>
<td></td>
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<tr>
<td>-Results of procedures and other diagnostic tests</td>
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<td></td>
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<tr>
<td>-History as documented in the medical record</td>
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<tr>
<td>What drug(s) is the patient on for the specific problem? All drugs being taken by a patient should correspond to a problem or the problem list is incomplete. Some drugs may treat more than one problem.</td>
<td>What is the cause of the problem? Does the patient have any risk factors? Is this a drug-induced disease?</td>
<td>Need for Therapy: Is the problem mild, moderate or severe; stable or progressive; acute or chronic? What would be the outcome if the patient is not treated? <strong>Current/Recommended Therapy:</strong> Are all current drugs necessary? State the reason why the regimen (current or recommended) is or is not the BEST regimen for this patient considering other problems and factors (age, gender, organ function, convenience, cost, etc.) Is the dose, dosage form, route and duration correct? Is the patient responding appropriately? Is the patient exhibiting adverse effects? Has the patient been adherent to treatment? <strong>Treatment Options:</strong> What are all of the options available to manage this problem?</td>
<td><strong>Recommend Treatment:</strong> -Continue treatment or -Discontinue drug, reasons for discontinuation -Recommend drug, dose, dosage form, route, schedule, and duration -Begin full dose or titrate Reasons why chosen stated under EVALUATE</td>
</tr>
<tr>
<td><strong>What to Avoid:</strong> Are there reasons why specific drugs are not being used to treat this problem? Why?</td>
<td></td>
<td><strong>Goal:</strong> What are the goals for this problem? (Cure, prevent complications, prevent morbidity or mortality, reduce symptoms, return an abnormal lab test to normal, avoid an adverse effect or interaction).</td>
<td></td>
</tr>
<tr>
<td>Should any drugs be specifically avoided in this patient? Why?</td>
<td></td>
<td><strong>Monitoring therapeutic:</strong> What are the S and O parameters used to determine if the goals are to be met. How often should they be performed? When will you know the endpoint has been reached?</td>
<td></td>
</tr>
<tr>
<td><strong>Further Plans:</strong> What additional tests or procedures are required to further confirm the diagnosis of the problem or to establish a baseline for monitoring the progress of the problem?</td>
<td></td>
<td><strong>Monitoring toxic:</strong> What are the S and O parameters used to determine if toxic or adverse effects are occurring? How often should they be performed? How will it be determined if they are drug-related? How will the reaction or effect be managed?</td>
<td></td>
</tr>
<tr>
<td>If the current treatment is not working or results in an adverse effect, what alternative therapies are available and under what circumstances should they be considered?</td>
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</table>

SOAP Form with Descriptors – UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences
PLA is a 47-year-old Caucasian female who presents to the medicine clinic with complaints of right upper quadrant pain and fatigue. In addition, she has recently been experiencing a “flare” of her PUD symptoms which has caused her to eat more frequently and “pop more Tums” in order to relieve her pain. She reports that despite feeling poorly, her depression is controlled on her current therapy.

HPI: PLA has been feeling progressively worse for about a year; however, she only mentioned this to a physician about 1 month ago. At that time a full hepatitis work-up was done and she was found to be positive for anti-HCV by ELISA and RIBA confirmatory tests.

PMH: Hypertension x 10 years
Depression x 5 years
Peptic Ulcer Disease x 1 year

SH: (+) EtOH x 20 years (none for past 5 years)
(+ ) IVDA x 15 years (none for past 10 years)
(+ ) tobacco – smokes 1 ½ packs per day (ppd)
Married with 2 teenage children
Occupation: Actress

FH: unknown

ALL: Ranitidine - thrombocytopenia

Meds: Lisinopril 10mg po daily x 10 years
Sertraline 50 mg po daily x 5 years
Sucralfate 1 g po 4 times daily x 1 year
Calcium carbonate (Tums) 750mg po 4 times daily prn abdominal pain x 6 months

PE
VS BP 132/82 HR 72 RR 21 T 37º C Wt 50 kg Ht 5’3”
GEN: WDWN female
HEENT: PERRLA
COR: RRR, no murmurs or gallops
CHEST: clear to A&P
ABD: right upper quadrant pain
GU: deferred
RECT: guaiac (-)
EXT: WNL
NEURO: A&O x 3

LABS:
<table>
<thead>
<tr>
<th>Na</th>
<th>140</th>
<th>Glu</th>
<th>100</th>
<th>Mg</th>
<th>2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>4.5</td>
<td>Hct</td>
<td>35</td>
<td>Ca</td>
<td>9.5</td>
</tr>
<tr>
<td>Cl</td>
<td>99</td>
<td>Hgb</td>
<td>15</td>
<td>PO4</td>
<td>1.2</td>
</tr>
<tr>
<td>HCO3</td>
<td>26</td>
<td>WBC</td>
<td>6</td>
<td>Albumin</td>
<td>3.5</td>
</tr>
<tr>
<td>BUN</td>
<td>16</td>
<td>Plt</td>
<td>250</td>
<td>ALT</td>
<td>350</td>
</tr>
<tr>
<td>Scr</td>
<td>1.0</td>
<td>MCV</td>
<td>84</td>
<td>AST</td>
<td>330</td>
</tr>
<tr>
<td>Alk phos</td>
<td>250</td>
<td>INR</td>
<td>1.0</td>
<td>Tbili</td>
<td>1.5</td>
</tr>
<tr>
<td>HCV RNA:</td>
<td>585,000 copies/mL</td>
<td>Hepatitis C genotype:</td>
<td>1</td>
<td>HIV (-)</td>
<td>HBsAg (-)</td>
</tr>
</tbody>
</table>

Pregnancy test: negative
Liver biopsy: hepatocyte necrosis and Stage 3 bridging fibrosis c/w chronic hepatitis
Endoscopy: 0.3 cm ulceration in distal duodenum; H. pylori (-)

Problem List
1. Chronic Hepatitis C
2. Peptic Ulcer Disease
3. Drug-Induced Problem
4. Hypertension (DO NOT SOAP)
5. Depression (DO NOT SOAP)
### Chronic Hepatitis C

- **R upper quadrant pain**
- **fatigue**
- **+ anti-HCV**
- **HCV RNA 585,000**
- **liver biopsy c/w chronic hep C**
- **AST 330**
- **ALT 350**
- **Thili 1.5**
- **Alk phos 250**
- **Albumin 3.5**
- **HCV genotype 1**

#### Current Medications
- **HCV**
- **Risk factors:**
  - IVDA
  - EtOH
- **none**

#### Etiology
- Yes, pt needs therapy to:
  - **prevent progression to cirrhosis**
  - **eradicating virus**
  - **prevent need for liver transplantation**
  - **risk for hepatocellular CA**

- Must balance benefits and risks of therapy since pt already has depression
- Pt already taking an SSRI for depression
- Will need to assess status prior to starting therapy to make sure depression is controlled

Pt has several negative predictors to beneficial response with IFN:
- **Genotype 1**
- **Age > 40**
- **Stage 3 fibrosis on liver biopsy**

Pt has several positive predictors of beneficial response with IFN:
- **female**
- **lower body weight (< 70kg)**
- **HCV RNA < 1 million**

#### Treatment options:
- **Standard interferon**
  - suboptimal response shown in clinical studies
- **Peginterferon**
  - addition of PEG increases half-life
  - resulting in sustained serum conc
  - current “standard of care” with ribavirin
  - pt has no contraindications
  - no difference between 2 formulations (peg a-2a vs a-2b)
- **Ribavirin**
  - current “standard of care” with peg interferon
  - pt has no contraindications

#### Evaluate Need for Therapy; Evaluate Current or New Therapy
- Peginterferon alfa-2a __ 180 __ mcg __ SQ __ qweek +
  - Ribavirin __ 400mg __ po __ qam
  - 600mg __ po __ qpm __ with food
  - x 48 weeks

  **OR**
  - Peginterferon alfa-2b __ 75 __ mcg __ SQ __ qweek +
  - Ribavirin __ 400mg __ po __ qam
  - 600mg __ po __ qpm __ with food
  - x 48 weeks

- Check HCV RNA at 12 weeks for early virologic response (EVR)
- If HCV RNA negative or has fallen by at least 2 log 10 units (to 5850 or less)
  - continue therapy for full 48 weeks
- If not, then stop therapy
- Check a baseline TSH

#### Goals & Monitoring Parameters
- **eradicate virus**
- **decrease M & M**
- **normalize biochemical markers**
- **improve clinical s/sx**
- **prevent spread of disease**
- **prevent progression to cirrhosis and hepatocellular CA**
- **prevent development of end-stage liver disease and its complications**

- **AST/ALT q month**
- **CBC w/diff, plt qmonth**
- **TSH q3 months**
- **HCV RNA**
- **depression**
- **fatigue, malaise**
- **psychiatric changes**
- **SE of ribavirin especially cough and rash**
- **Antidepressants**
  - **flu-like sx**
  - **depression**
  - **fatigue, malaise**
  - **psychiatric changes**

#### Patient Education
- **SQ administration techniques**
- **SE of IFN especially flu-like sx**
- **SE of ribavirin especially cough and rash**
- **Consider taking IFN at bedtime to alleviate s/sx**

- **Compliance with therapy Long-term yet potentially life-saving therapy**
  - **Do not donate blood/organs/tissues**
  - **Safe sex practices to Prevent transmission of virus and Prevent pregnancy**
  - **Avoid sharing razors and toothbrushes with household family members**
  - **Cover open wounds**
  - **No alcohol**
  - **Limit acetaminophen**
  - **Consider having husband and 2 children tested for HepC**
**SUBJECTIVE / OBJECTIVE**

**PROBLEM SUBJECTIVE & OBJECTIVE EVIDENCE**

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<tr>
<td>Peptic Ulcer Disease</td>
<td>__pt reports “flare” __eating more frequently __“popping” Tums to relieve pain __Endoscopy shows ulcer in distal duodenum __H. pylori negative</td>
</tr>
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**CURRENT MEDICATIONS**

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<tr>
<td>__sucralfate 1gm po qid calcium carbonate 750mg po qid pm pain</td>
<td>__unknown</td>
</tr>
<tr>
<td>Risk Factors: __age &gt; 45 yrs __smoking __Physiologic stress due to hepatitis C?? __ETOH</td>
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**ASSESSMENT**

**EVALUATE NEED FOR THERAPY; EVALUATE CURRENT OR NEW THERAPY**

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<td>__Yes, pt needs therapy to alleviate symptoms and prevent further ulceration that may lead to GI bleeding</td>
<td>__Current therapy not working to alleviate symptoms __Sucralfate in combination with calcium carbonate is causing hypophosphatemia (D/I problem) __Consider d/c’ing sucralfate and calcium carbonate and changing to alternative therapy</td>
</tr>
<tr>
<td>__H. pylori negative, so do not need to consider H. pylori regimens</td>
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**RECOMMEND DRUG TREATMENT; DRUGS TO BE AVOIDED; FURTHER TESTS**

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<tr>
<td>Peptic Ulcer Disease</td>
<td>__D/C sucralfate __D/C calcium carbonate __D/C smoking (Credit for any PPI) _Omeprazole _20-40mg _po _qd _30 min before a meal _x 4-8 weeks OR _Esomeprazole _20mg _po _qd _30 min before a meal _x 4-8 weeks OR _Lansoprazole _30-60mg _po _qd _30 min before a meal _x 4 weeks OR _Pantoprazole _40mg _po _qd _30 min before a meal _x 4 weeks OR _Rabeprazole _20mg _po _qd _30 min before a meal _x 4 weeks</td>
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**PLAN**

**GOALS & MONITORING PARAMETERS**

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<tr>
<td>__goals: __relieve symptoms __reduce gastric acidity and secretion __promote ulcer healing __prevent ulcer recurrence and complications</td>
<td>__Monitor: __epigastric pain __weight SE of PPIs: __N/D, abdominal pain __dizziness __HA __rash __LFTs</td>
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**PATIENT EDUCATION**

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<td>__Stop smoking __No ETOH __Eat smaller meals __Avoid spicy foods or foods that seem to aggravate sx __Avoid ASA, NSAIDs if possible (may need low-dose/short course for IFN tx above)</td>
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**PPI Pt Ed:**

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<td>__Take 30 min before a meal __Do not crush or chew caps __Swallow whole __Notify MD if vomiting blood or having difficulty swallowing</td>
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Ex Hepatitis Case Key_SPPS212A_F08
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<td>Drug-Induced Hypophosphatemia</td>
<td><em>none</em></td>
<td><em>sucralfate</em></td>
<td><em>calcium carbonate</em></td>
<td>_Sodium phosphate (Neutra-Phos) 250mg po dissolve in water or juice qid x 1 day OR _Sodium/potassium phosphate (Neutra-Phos K) 250mg PO dissolve in water or juice qid x 1 day OR _Sodium phosphate (K-Phos Neutral) 250mg PO dissolved in water or juice qid with meals and at bedtime x 1 day _Check PO4 after giving PO4 replacement</td>
<td>Goals: _normalize serum PO4 to 2.5-4.5 mg/dl manage underlying condition (drugs for PUD) Monitor: <em>serum PO4 SE of sodium phosphate diarrhea</em></td>
<td>_Do not swallow the tablet or capsule Dissolve powder or tablet or capsule in water or juice Drink with meals to obtain maximum effect Foods high in phosphorus: dairy products meats poultry fish cereal products</td>
</tr>
<tr>
<td>__PO4 = 1.2</td>
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<td></td>
<td>Yes, pt needs treatment to restore PO4 to normal values and prevent sx complications Pt is currently asymptomatic so can treat with an oral agent Have already D/C’d sucralfate and calcium carbonate above PO4 of 1.2 is considered mild-moderate so can treat with an oral agent</td>
<td></td>
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