

Student Name: Courtney David

Medical Diagnosis/Disease: Crohn's Disease

### NCLEX IV (8): Physiological Integrity/Physiological Adaptation

#### Anatomy and Physiology

##### Normal Structures

GI tract is from mouth to anus, mouth to the pharynx to the esophagus through the diaphragm to the stomach to the small intestines to the large intestines, which has the ascending colon, transverse colon and descending colon then goes into the sigmoid colon into the anus. 4 layers, mucosa lining, submucosa connective layer (contains glands, blood vessels, and lymph nodes) muscle (oblique, circular, longitudinal) and serosa around soft organs include mouth, esophagus, stomach, small intestines, large intestines, rectum, anus, liver, pancreas, gallbladder. Enteric nervous system (ENS) controls GI motility and secretions, 2 parts: submucosal plexus myenteric plexus, portal vein takes venous blood from GI tract to liver. Celiac (stomach/duodenum) superior mesenteric (distal small intestines to mid large intestine) and inferior mesenteric (distal large intestine to anus) arteries supply blood to GI tract. Teeth- mechanical breakdown of food by chewing Pancreas- produces insulin and glucagon, the pancreatic enzyme are secreted into the duodenum Liver- produce bile, bile is yellow to green in color and helps break down food. Gallbladder- bile is concentrated by the removal of water. Cystic duct is when the food digestion is not occurring, bile backs up the cystic duct and enters the gallbladder to be stored Physiology: the digestive system take in food breaks it down, physically and chemically into nutrients and absorbs the nutrients into the bloodstream, then the body gets rid of the nutrients it cant digest which is the feces you excrete.

#### Pathophysiology of Disease

Inflammatory bowel disease, chronic, remission and exacerbations  
Involves any segment of the GI tract from mouth to anus  
Cobblestone of mucosa  
No known cause  
Ulcers deep, longitudinal, penetrate  
Autoimmune disease, overactive, inappropriate or sustained immune response to environmental and bacterial trigger= genetically  
Susceptible people=inflammation which causes widespread tissue destruction  
Distal ileum/proximal colon usually effected

### NCLEX IV (7): Reduction of Risk

#### Anticipated Diagnostics

##### Labs

CBC (iron deficiency)  
SED rate  
Serum chem

##### WBC

##### Additional Diagnostics

H&P, endoscopy, stool culture (blood/infection), radiologic studies w/ barium contrast, colonoscopy w/ biopsy, MRI, CT

### NCLEX II (3): Health Promotion and Maintenance

#### Contributing Risk Factors

Race (white/Jewish high risk)  
Age (early adulthood/teenage)  
Diet (high in sugar)  
Smoking  
Stress  
Use of NSAIDs  
ABX use  
Oral contraceptives  
Genetics (family history= greater risk of getting it)

#### Signs and Symptoms

Diarrhea  
Weight loss  
Abdomen pain/cramping  
Fever  
Fatigue  
Rectal bleeding  
Vomiting

#### Possible Therapeutic Procedures

Non-surgical  
Blood products (active bleed)  
Lactose free diet/ gluten free diet  
Surgical  
Bowel resection  
Strictureplasty

#### Prevention of Complications

(What are some potential complications associated with this disease process)  
Cancer  
C.Diff infection  
Perforation  
Strictures  
SBS  
Bleeding

### NCLEX IV (7): Reduction of Risk

### NCLEX IV (6): Pharmacological and Parenteral Therapies

#### Anticipated Medication Management

Aminosalicylates (decrease inflammation)  
Antimicrobials (tx infection)  
Biologic therapies (inhibit TNF)  
Corticosteroids (decrease inflammation)

### NCLEX IV (5): Basic Care and Comfort

#### Non-Pharmacologic Care Measures

GI Rest promotion  
Support groups  
Monitor fluids/nutrition  
Monitor stools (for occult blood)

### NCLEX III (4): Psychosocial/Holistic Care Needs

#### What stressors might a patient with this diagnosis be experiencing?

Fear of surgery  
Anxious of exacerbations  
Fear of malnutrition  
Fear of death

Immunosuppressants (decrease immune system)  
Analgesics

Fear of unknown disease

**Client/Family Education**

**NCLEX I (1): Safe and Effective Care Environment**

List 3 potential teaching topics/areas

- Type of diet to prevent Crohn's flare up.
- Medication regimen for Crohn's disease
- Things to avoid preventing exacerbations (stress, NSAIDs, smoking)

Multidisciplinary Team Involvement

(Which other disciplines do you expect to share in the care of this patient)

Gastrointestinal (GI), MD, nurse, Dietary, surgeon

## Potential Patient Problems (Nursing Diagnoses)

### To Be Completed Before the Simulation

Anticipated Patient Problem: Deficient Fluid volume

Clinical Reasoning: Low hemoglobin, low hematocrit level, intake and output, clear liquid diet, GI bleed, diarrhea, vomiting

Goal 1: Patient will have a fluid intake of 30ml/hr during my time of care.

Goal 2: Patient will not have an active GI bleed during my time of care.

<b>Relevant Assessments</b>	<b>Multidisciplinary Team Intervention</b>
(Prewrite) What assessments pertain to your patient's problem? Include timeframes.	(Prewrite) What will you do if your assessment is abnormal?
Assess intake and output q8hr	Encourage patient to drink clear liquids q1hr
Assess hemoglobin and hematocrit levels daily	Administer blood products PRN based on H&H levels during my care.
Assess skin turgor daily	Maintain IV fluids NS during my time of care.
Assess urine characteristics and normal voiding patterns q4hr	Educated on s/sx of dehydration- low urine output, concentrated dark yellow urine, dry skin
Assess weight qshift (holding onto fluid)	Encourage a low fiber high protein diet daily
Assess LOC/mental status q4hr	Administer oxygen, maintain HOB elevated during my time of care.

**To Be Completed Before the Simulation**

Anticipated Patient Problem: Acute pain- abdomen

Clinical Reasoning: guarding, restlessness, muscle tension, chronic use of NSAIDS for pain control, pain scale rating

Goal 1: Patient will report a controlled pain with a rating of 3/10 (decreasing with time) during my time of care.

Goal 2: Patient will use non-pharmacological interventions to assist in controlling pain such as guided imager, yoga and music therapy during my time of care.

<b>Relevant Assessments</b>	<b>Multidisciplinary Team Intervention</b>
(Prewrite) What assessments pertain to your patient's problem? Include timeframes.	(Prewrite) What will you do if your assessment is abnormal?
Assess pain scale q4hr	Administer analgesics (Aleve, ibuprofen, acetaminophen) during my time of care.
Assess Crohn's disease s/sx during my time of care.	Administer corticosteroid for Crohn's flare up during my time of care.
Assess patient positioning daily	Encourage ambulation/position as tolerated q2hr during my time of care. (knees flexed)
Assess pain characteristics q2hr	Apply warm compress to abdomen q1hr during my time of care.
Assess BP, HR, temp q4hr	Encourage guided imagery, focused breathing, and diversional activities during my time of care.
Assess sleep patterns (due to pain)	Encourage rest period, dark environment during my time of care.

ACTIVE LEARNING TEMPLATE: *Medication*

STUDENT NAME Courtney David

MEDICATION Infliximab

REVIEW MODULE CHAPTER \_\_\_\_\_

CATEGORY CLASS Tumor necrosis factor (TNF) blocking agent- Antirheumatic, disease-modifying, GI, Immunosuppressant

**PURPOSE OF MEDICATION**

**Expected Pharmacological Action**

Binds to tumor necrosis factor, inhibiting functional activity of TNF  
TE: prevents disease and allows diseased joints to heal.

**Therapeutic Use**

In combination with methotrexate, reduces signs/symptoms, inhibits progression of structural damage, improves physical function in moderate to severe active RA. Treatment of psoriatic arthritis. Reduces s/sx induces and maintains wremission in moderate to severe active crohn's disease. maintains fistula closure in fistulizing crohn's disease.

**Complications**

Side Effects: frequent- HA, nausea, fatigue, fever  
Occasional- fever/chills during infusion, pharyngitis, vomiting, pain, dizziness, bronchitis, rash, rhinitis, cough, pruritus, sinusitis, myalgia, back pain  
Rare- hypotension or hypertension, paresthesia, anxiety, depression, insomnia, diarrhea, UTI.

**Medication Administration**

IV infusion: Crohn's disease: adults, elderly, children 6yrs and older: 5mg/kg followed by additional doses at 2 and 6 wks after first infusion then q8wks thereafter. For adults who respons the lose response, consideration may be given to treatment with 10mg/kg

**Contraindications/Precautions**

Contraindications: hypersensitivity to infliximab. moderate to severe HF (doses greater than 5mg/kg should be avoided) sensitivity to murine proteins, sepsis, serious active infection.  
Cautions: hematologic abnormalities, history of COPD, preexisting or recent onset of CNS demyelinating disorders, seizures, mild HF, history of recurrent infections, conditions predisposing pt to infections, pts exposed to tuberculosis, elderly pts, chronic hepatitis B virus infection.

**Nursing Interventions**

Assess hydration status, monitor urinalysis, erythrocyte sedimentation rate (ESR), BP, monitor for signs of infection, monitor daily pattern of bowel activity stool consistency: Crohn's: monitor C-reactive protein, frequency of stools assess for abdominal pain.

**Interactions**

Drug: anakinra, anti-TNF agents, baricitinib, pimecrolimus, tacrolimus (topical), tocilizumab may increase adverse effects. may decrease therapeutic effect of BCG, Vaccines (live) may increase levels adverse effects of belimumab, natalizumab, vaccines, vedolizumab  
Herbal: Echinacea may decrease effects

**Client Education**

Report persistent fever, cough, abdominal pain, swelling of ankles/feet.  
treatment may depress your immune system and reduce you ability to fight infection.  
report symptoms of infection such as body aches. chills, cough, fatigue, fever, avoid those with active infection. do not recieve live vaccines, expect frequent tuberculosis screening report travel plans to possible endemic areas.

**Evaluation of Medication Effectiveness**

crohn's disease doesnt get worse, less flare ups, reduced s/sx of crohn's disease

ACTIVE LEARNING TEMPLATE: *Medication*

STUDENT NAME Courtney David

MEDICATION Morphine Sulfate REVIEW MODULE CHAPTER \_\_\_\_\_

CATEGORY CLASS Opioid Agnoist/Analgesic (Scehdule II)

**PURPOSE OF MEDICATION**

**Expected Pharmacological Action**

Binds with opioid receptors within CNS, inhibiting ascending pain pathways

**Therapeutic Use**

Alters pain perception, emotional response to pain

**Complications**

Ambulatory pts, pts not in severe pain may experince nausea and vomiting more frequently than pts in supine position or who have severe pain  
Sedation, decreased BP (orthostatic hypotension), diaphoresis, facial flushing, constipation, dizziness, drowsiness, nausea, vomiting, allergic reaction, dyspnea, confusion, palpatations, tremors, urinary retention, abd cramps, vision changes, dry mouth, headache, decreased appetite, pain buring at injection site  
RARE: paralytic ileus

**Medication Administration**

PO (immediate release): 10-30mg q4hrs/pm  
IV: 2.5mg-5mg q3-4hrs/pm, repated doses  
1-2mg may be given more frequently if needed  
IV continous infusion: 0.8-10mg/hr, range 20-50mg/hr  
PCA: 1mg/ml, demand dose 1mg (range 0.5-2.5mg) lockout interval 5-10mins  
Extended release: given 1x daily or divided over 12hrs

**Contraindications/Precautions**

C: hypersensitivity to morphine, acute/severe asthma, GI obstruction, known or suspected paralytic ileus, concurrent use of MAOI's or use of MAOI's in the last 14 days, severe respiratory depression  
Extreme caution: COPD, cor pulmonale, hypoxia, hypercapnia, preexisting respiratory depression, head injury, increased ICP, hypotension  
PC: biliary tract disease, pancreatitis, addisons disease, cardiovascular disease, morbid obesity, adrenal insufficeny, elderly, hypothyroidism, urethral stricture, prostatic hyperplasia, CNS depression toxic pyscosis, seizures, drug abuse/misuse

**Nursing Interventions**

Monitor VS 5-10mins after IV admin, 15-30mins after SQ and IM. Be alert for decreased respirations and BP, check for adequate voiding, monitor daily pattern for bowel activity, avoid constipation, initiate deep breathing/cough excersices partucualry in pts who have pulmonary issues, assess for clinical improvement, record onset for pain relief, screen for drug abuse/misuse, drug seeking behavior

**Interactions**

Alcohol, other CNS depressants (Lorazepam, gabpentin, zolpidem) may increase CNS effects, respiratory depression, hypotension.  
MAOIs (Phenelzine & Selegiline) may prodcue serotonin syndrome (reduce dosage to 1/4 of usual morphine dose. Herbal medications with sedative properties (Chamomile, Kava Kava, Valerian), Lab values may increase serum amaylase and lipase

**Client Education**

Change postions slowly to avoid orthostatic hypotension, aviod tasks that require alertness, monior skills until response to drug is established, avoid alcohol, cns depressants, tolerance and dependence may occur with extended use of high doses, report ineffecative pain control, constipation, urianry retention

**Evaluation of Medication Effectiveness**

No longer c/o of any pain or improvement of pain

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To Be Completed During the Simulation:

<b>Actual Patient Problem:</b> deficient fluid volume			
<b>Clinical Reasoning:</b> LOW H+H, intake+output, clear liquid diet, vomiting	Goal: Pt will have urine output of 30 ml/hr during my care	Met: <input checked="" type="checkbox"/>	Unmet: <input type="checkbox"/>
<b>Actual Patient Problem:</b> Acute pain-abdominal bleed during my care	Goal: Pt will not have a active over time	Met: <input type="checkbox"/>	Unmet: <input checked="" type="checkbox"/>
<b>Clinical Reasoning:</b> guarding, restless, muscle tension, use of NSAIDs (chronic)	Goal: Pt will report controlled pain with a 3/10 (decreasing)	Met: <input type="checkbox"/>	Unmet: <input type="checkbox"/>
	Goal: Pt will use non-pharm to assist in controlling pain such as guided imagery during my care.	Met: <input type="checkbox"/>	Unmet: <input type="checkbox"/>

Additional Patient Problems:  
3. Anxiety (stress)

Below will be your notes, add more lines as needed. **Relevant Assessments:** Indicate pertinent assessment findings.  
**Multidisciplinary Team Intervention:** What interventions were done in response to your abnormal assessments?  
**Reassessment/Evaluation:** What was your patient's response to the intervention?

Patient Problem	Time	Relevant Assessments	Time	Multidisciplinary Team Intervention	Time	Reassessment/Evaluation
1	1500	ileostomy placed 6 months ago, report stated trace serosanguinous fluid in ostomy bag	1600	checked ostomy bag once on floor, serosanguinous fluid present, emptied	1700	monitor output for more serosangu fluid
1	1630	H+H = 7 and 21.1, blood type A- two units of RBC	1630	Administered RBC unit	1645	vs 38.8, HR 96 RR 22, BP 103/60 Pt - chill, restlessness, headache
2, 3	1630	late note - cp pain 6/10, worse with stress, top of stomach	1630	discussate bowel sounds	1630	bowel sound present x4 hyperactive
1, 2	1630	late note - cp "I feel like im going to faint"	1630	vs and cold cloth for neck placed oxygen 2L/min	1632	BP 94/56 02 94% HR 110 RR 26
2	2000	post-op endorectory tender, cramping 8/10 pain	2000	administered 4mg IV push morphine	2100	pain scale 2/10 "feel much better"
2, 3	2200	"stress make pain worse" "G-to-H at night" "frozen dinner"	2200	educated on ↑ protein limit, stress management, avoid NSAIDs	(next day) 0830	discharge - Pt stated "I won't take ibuprofen anymore, im going to start packing my lunch + make smarter choices with food and go to the park for a walk to manage stress"

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### ATI Virtual Clinical Questions and Reflection:

- 1) Identify two members of the healthcare team collaborating in the care of this patient:
  - a. ESTER - RN
  - b. Dr March - gastroenterologist
- 2) What were some steps the nursing team demonstrated that promoted patient safety?
  - a. matched patients blood bracelet to blood products numbers.
  - b. Stopped the transfusion due to a reaction
  - c. Applying oxygen with RR of 26 and O<sub>2</sub> 94%.
- 3) Do you feel the nurse and medical team utilized therapeutic communication techniques when interacting with individuals, families, and health team members of all cultural backgrounds?
  - a. If yes, describe: Every person working Ms. Lieberman's case worked together, professional and had patient safety at the forefront.
  - b. If no, describe: \_\_\_\_\_

### Reflection

- 1) Go back to your Preconference Template:
  - a. Indicate (circle, star, highlight, etc.) the components of your preconference template that you saw applied to the care of this patient.
- 2) Review your Nursing Process Form: Did you select a correct priority nursing problem?
  - a. If yes, write it here: Deficient fluid volume
  - b. If no, write what you now understand the priority nursing problem to be:  
\_\_\_\_\_
- 3) Review your Patient Problem Form: Did you see many of your anticipated nursing assessments and interventions used?
  - a. Were there interventions you included that were not used in the scenario that could help this patient?
    - i. If yes, describe:  
encourage patient to drink clear liquids  
encourage low fiber diet (GI rest, prevent flare ups)
    - ii. If no, describe:  
\_\_\_\_\_  
\_\_\_\_\_
- 4) After completing the scenario, what is your patient at risk for developing?
  - a. Shock
  - b. Why? If the GI bleed was left untreated, a lack of blood flow to the rest of the body resulting in damage to organs + organ failure.

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- 5) What was your biggest "take-away" from participating in the care of this patient? How did this impact your nursing practice?

The biggest take-away from participating in the care of this patient is to ensure you received a detail patient history to know exactly what they may be experiencing + why. I also learned that its important to stay with the patient and take vital signs every 15 minutes (first) during a blood transfusion because a reaction can occur at any time during any bag/unit of blood. If you suspect a reaction, its better to stop the transfusion, gather vital signs, ensure patient is stable and call the provider for the next steps. Education is an important part of a nurses job to ensure patient is safe outside of the hospital.