

Part I: Recognizing RELEVANT Clinical Data

History of Present Problem:

Sheila Dalton is a 52-year-old woman who has a history of chronic low back pain and COPD. She had a posterior spinal fusion of L4-S1 today. She had an estimated blood loss (EBL) of 675 mL during surgery and received 2500 mL of Lactated Ringers (LR). Pain is currently controlled at 2/10 and increases with movement. She was started on a hydromorphone patient-controlled analgesia (PCA) with IV bolus dose of 0.1 mg and continuous hourly rate of 0.2 mg. Last set of VS in post-anesthesia care unit (PACU) P: 88; R: 20; BP: 122/76; requires 4 liters per n/c to keep her O2 sat >90 percent. You are the nurse receiving the patient directly from the PACU.

Personal/Social History:

Sheila is divorced and currently lives alone in her own apartment. She has two grown children from whom she is estranged.

What data from the histories are RELEVANT and have clinical significance to the nurse?

RELEVANT Data from Present Problem:	Clinical Significance:
<i>Patient having COPD, blood loss, input from iv, PCA pump, hydromorphone, 4 liters of oxygen</i>	<i>The clinical significance is that the client lost a decent amount of blood during the procedure therefore she needs to be monitored for signs of hypervolemia related to the increase of lactated ringers. Secondly the client needs to be monitored for respiratory depression related to hydromorphone use and history of COPD. This is significant because opioids can lower a person's respiration rate, and she already needs 4 liters related to COPD.</i>
RELEVANT Data from Social History:	Clinical Significance:
<i>Lives at home and seems to have no family support</i>	<i>The clinical significance is that it appears that the client has no family support at home to help her perform daily activities from the spinal fusion.</i>

Patient Care Begins—Arrives from PACU to Surgical Floor

Current VS:	P-Q-R-S-T Pain Assessment (5th VS):	
T: 100.2 F/37.9 C (oral)	Provoking/Palliative:	Movement/lying still
P: 110 (regular)	Quality:	Ache
R: 24	Region/Radiation:	Lumbar-incisional
BP: 98/50	Severity:	6/10-gradually increasing
O2 sat: 88% 4 liters per n/c	Timing:	Continuous since arrival from PACU

What VS data are RELEVANT and must be recognized as clinically significant by the nurse?

RELEVANT VS Data:	Clinical Significance:
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Pulse, respirations, BP, O2 sat, severity	<i>The pulse is elevated and needs to be monitored, respirations are also elevated, both are related to the increased severity of pain most likely. Blood pressure can be because of blood loss causing hypovolemia and not receiving enough fluids, lastly O2 state is most likely lower now because the client is not getting good gas exchange related to the elevated respiration rate.</i>
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Current Assessment:	
GENERAL APPEARANCE:	Appears uncomfortable, body tense, frequent grimacing–last used PCA 10 minutes ago
RESP:	Breath sounds clear with equal aeration ant/post but diminished bilaterally, non-labored respiratory effort, occasional moist–nonproductive cough
CARDIAC:	Pale-pink, warm and dry, no edema, heart sounds regular–S1S2, pulses strong, equal with palpation at radial/pedal/post-tibial landmarks
NEURO:	Alert and oriented to person, place, time, and situation (x4)
GI:	Abdomen soft/non-tender, bowel sounds hypoactive and audible per auscultation in all 4 quadrants, c/o nausea
GU:	Foley catheter secured, urine clear/yellow, 100 mL the past two hours
SKIN:	Skin integrity intact, skin turgor elastic, no tenting, dressing in place with no drainage noted

What assessment data are RELEVANT and must be recognized as clinically significant by the nurse?

RELEVANT Assessment Data:	Clinical Significance:
Appears uncomfortable, body tense, frequent grimacing, diminished bilaterally breathe sounds, occasional cough	<i>The client appears uncomfortable, tense, and is grimacing related to the increased pain levels, the most cough and diminished breathe sounds can be indication of fluid retention within the lungs.</i>

Diagnostic Results:

Basic Metabolic Panel (BMP)					
	Na	K	Gluc.	Creat.	
Current:	134	3.8	148	0.9	
Most Recent:	136	3.9	98	1.1	
Complete Blood Count (CBC)					
	WBC	HGB	PLTs	% Neuts	
Current:	11.8	10.4	220	85	
Most Recent:	7.2	14.2	258	68	

What data must be interpreted as clinically significant by the nurse? (Reduction of Risk Potential/Physiologic Adaptation)

RELEVANT Diagnostic Data:	Clinical Significance:	TREND: Improve/Worsening/Stable:
Sodium slightly low, glucose slightly high, white blood cells slightly elevated, hemoglobin lowered, neutrophils are slightly high	The client has a low sodium level most likely related to fluid retention, glucose is high most likely because the client has just ate a meal, white blood cells, and neutrophils are most likely high related to inflammation and possible infection within the lungs, hemoglobin is most likely low related to the blood loss.	<i>Sodium is worsening, glucose is worsening, white blood cells are improving, neutrophils are worsening.</i>

Part II: Put it All Together to THINK Like a Nurse!

1. After interpreting relevant clinical data, what is the primary problem?

(Management of Care/Physiologic Adaptation)

Problem:	Pathophysiology in OWN Words:
<i>The client has most likely accrued hospital related pneumonia and is retaining fluids.</i>	<i>The client received too much fluids after losing blood therefore relating to fluid overload, therefore causing fluid to retain in the lungs resulting in developing pneumonia which explains the elevated WBC and Neutrophils, nonproductive moist cough, and decreased O2 stat. Also explaining the diminished breath sounds caused by fluid within the lungs.</i>

Collaborative Care: Medical Management

2. State the rationale and expected outcomes for the medical plan of care. *(Pharm. and Parenteral Therapies)*

Medical Management:	Rationale:	Expected Outcome:
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<p>Hydromorphone PCA— Settings: *Bolus: 0.1–0.3 mg every 10” *Continuous: 0.1–0.3 mg *Max every 4 hours: 6 mg</p> <p>Continuous pulse oximetry</p> <p>Ondansetron 4 mg IV push every 4 hours prn nausea</p> <p>Titrate O2 to keep sat >90%</p> <p>Incentive spirometer (IS) 5–10x every hour while awake</p> <p>0.9% NS 100 mL/hour IV</p> <p>Clear liquids/advance diet as tolerated</p> <p>Apply lumbar orthotic brace when up in chair or ambulating</p>	<p><i>PCA pump is to help control the pain levels related to surgery</i></p> <p>Continuous pulse oximetry is relevant to monitor heart rate.</p> <p>Ondansetron is to help control nausea related to hydromorphone side effect</p> <p>Incentive spirometer is in increase gas exchange, and to help decrease the anesthesia collecting within the lungs.</p> <p>Normal saline to help replace fluids within the body.</p> <p>Clear liquids to help control upset GI related to nausea, Lumbar orthotic brace to help stabilize back after surgery until it is healed.</p>	<p><i>Control pain levels, monitor pulse regularly, have no nausea, incentive spirometer to increase gas exchange and improve O2 stat, normal saline to increased intake, clear liquid is to advance that way the stomach does not get upset, back brace is to allow the back to heal and stabilized without injury.</i></p>
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Collaborative Care: Nursing

3. What nursing priority (ies) will guide your plan of care? (Management of Care)

Nursing PRIORITY:	Control pain levels, and improve respirations/O2 saturation.	
PRIORITY Nursing Interventions:	Rationale:	Expected Outcome:

<p>Encourage the client to perform non-pharmacological pain reduction techniques</p> <p>Encourage the use of the incentive spirometer and encourage sitting in a chair as tolerated.</p>	<p>Encouraging non-pharmacological pain reduction can help control pain levels in ways such as guided imagery, or medicating</p> <p>Encourage incentive spirometer is to help improve gas exchange and sitting in a chair as tolerated is to help the client be able to breathe better</p>	<p><i>The clients' pain levels will decrease.</i></p> <p><i>The client is having an improved O2 sat and will be able to breath better.</i></p>
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4. What psychosocial/holistic care PRIORITIES need to be addressed for this patient? (Psychosocial Integrity/Basic Care and Comfort)

<p>Psychosocial PRIORITIES:</p>	<p><i>see that you can take care of them.</i></p>	
<p>PRIORITY Nursing Interventions:</p>	<p>Rationale:</p>	<p>Expected Outcome:</p>
<p>CARING/COMFORT: <i>How can you engage and show that this pt. matters to you?</i> By asking what you can do to help them feel better/ or if there is anything that will help them be more comfortable</p> <p>Physical comfort measures: <i>Ask if there is any clothing they would like, ask about pillows and blanket</i></p>	<p><i>By asking if there is anything you can do, can show that you care and want the client to be comfortable, physical comfort measures can consist of any special clothing, pillows, and blankets because physical comfort can improve pain levels and emotional comfort.</i></p>	<p><i>Build a trusting relationship with the client, and provide as much comfort as possible</i></p>
<p>EMOTIONAL SUPPORT: <i>Principles to develop a therapeutic relationship</i> Sit and listen, sitting with the client, as if they want to talk.</p>	<p><i>Sitting and listening to the client can show that you care and want to help just by providing them confront.</i></p>	<p><i>You will build an emotional connection with the client to establish rapport</i></p>
<p>SPIRITUAL CARE/SUPPORT: Ask if they would like to see the priest</p>	<p><i>By asking if they would like to speak to a priest will allow them comfort by offering them further support and resources.</i></p>	<p><i>The priest can provide further comfort and care for the client.</i></p>

5. What educational/discharge priorities need to be addressed to promote health and wellness for this patient and/or

family? (Health Promotion and Maintenance)

We need to address that she will need help for the first couple of weeks, so possible reaching out to friends and family or help, or look into getting home health nurse to help for a couple of weeks following surgery. We also need to teach about pain control. We need to educate the client on how much they are able to bend there back before going home, also the importance of wearing there brace as much as possible with movement.