

Post-op Pain Management: Day of Surgery (1/2)



Sheila Dalton, 52 years old

Primary Concept
Pain
Interrelated Concepts (In order of emphasis)
1. Gas Exchange
2. Glucose Regulation
3. Perfusion
4. Inflammation
5. Clinical Judgment
6. Patient Education

Post-op Pain Management: Day of Surgery (1/2)

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:
RELEVANT Data from Social History:	Clinical Significance:

Developing Nurse Thinking by Identifying Significance of Clinical Data

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:

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:

Developing Nurse Thinking through APPLICATION of the Sciences Fluid & Electrolytes/Lab/diagnostic Results:

Complete Blood Count (CBC):	Current:	High/Low/WNL?	Prior:
WBC (4.5–11.0 mm ³)	11.8		7.2
Hgb (12–16 g/dL)	10.4		15.2
Platelets (150–450 x10 ³ /μl)	220		258
Neutrophil % (42–72)	85		68
Band forms (3–5%)	1		1

What lab results are RELEVANT and must be recognized as clinically significant by the nurse?

RELEVANT Lab(s):	Clinical Significance:	TREND: Improve/Worsening/Stable:

Basic Metabolic Panel (BMP):	Current:	High/Low/WNL?	Prior:
Sodium (135–145 mEq/L)	134		136
Potassium (3.5–5.0 mEq/L)	3.8		3.9
Glucose (70–110 mg/dL)	148		98
BUN (7–25 mg/dl)	20		22
Creatinine (0.6–1.2 mg/dL)	0.9		1.1

What lab results are **RELEVANT** and must be recognized as clinically significant by the nurse?

RELEVANT Lab(s):	Clinical Significance:	TREND: Improve/Worsening/Stable:

Lab Planning—Creating a Plan of Care with a PRIORITY Lab:

Lab:	Normal Value:	Why Relevant?	Nursing Assessments/Interventions Required:
Hemoglobin Value: 10.4	Critical Value:		

Pharmacology:

Home Med:	Classification:	Mechanism of Action (in own words):	Nursing Considerations:
<i>Atenolol</i>			
<i>Lisinopril</i>			
<i>Citalopram</i>			
<i>Hydrocodone/ acetaminophen</i>			
<i>Aspirin</i>			

Pathophysiology:

1. *What is the primary problem that your patient is most likely presenting?*

2. *What is the underlying cause/pathophysiology of this primary problem?*

Developing Nurse Thinking by Identifying Clinical RELATIONSHIPS

1. *What is the RELATIONSHIP of the past medical history and current medications?*

(Which medication treats which condition? Draw lines to connect)

Past Medical History (PMH):	Home Meds:
<ul style="list-style-type: none"> • Low back pain with lumbar compression fracture • Depression • COPD • Hypertension • 2 ppd smoker x 32 years 	Atenolol 50 mg daily Citalopram 40 mg daily Acetaminophen/hydrocodone 1-2 tabs every 4 hours prn pain Lisinopril 40 mg daily Aspirin 81 mg daily

2. *Is there a RELATIONSHIP between any disease in PMH that may have contributed to the development of the current problem? (Which disease likely developed FIRST then began a "domino effect"?)*

PMH:	What Came FIRST:
<ul style="list-style-type: none"> • Low back pain with lumbar compression fracture • Depression • COPD • Hypertension • 2 ppd smoker x 32 years 	What Then Followed:

3. *What is the RELATIONSHIP between the primary care provider's orders and primary problem?*

Care Provider Orders:	How it Will Resolve Primary Problem/Nursing Priority:
Hydromorphone PCA-Settings: *Bolus: 0.1-0.3 mg every 10" *Continuous: 0.1-0.3 mg *Max every 4 hours: 6 mg Continuous pulse oximetry Ondansetron 4 mg IV push every 4 hours prn nausea Titrate O2 to keep sat >90% Incentive spirometer (IS) 5-10x every hour while awake	

<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>Basic Metabolic Panel (BMP) in morning</p> <p>Complete Blood Count (CBC) in morning</p>	
---	--

Developing Nurse Thinking by Identifying Clinical PRIORITIES

1. Which Orders Do You Implement First and Why?

Care Provider Orders:	Order of Priority:	Rationale:
1. Hydromorphone PCA 2. Continuous pulse oximetry 3. Ondansetron (Zofran) 4 mg IV push every 4 hours prn nausea 4. Titrate O2 to keep sat >90% 5. Incentive spirometer (IS) 6. Apply lumbar orthotic brace when up in chair or ambulating 7. Clear liquids/advance diet as tolerated		

2. What nursing priority(ies) will guide your plan of care? (if more than one-list in order of PRIORITY)

3. What interventions will you initiate based on this priority?

Nursing Priority:	Nursing Interventions:	Rationale:	Expected Outcome:

4. *What are the PRIORITY psychosocial needs that this patient and/or family likely have that will need to be addressed?*

5. *How can the nurse address these psychosocial needs?*

6. *What educational/discharge PRIORITIES will be needed to develop a teaching plan for this patient and/or family?*

Caring & the “Art” of Nursing

1. *What is the patient likely experiencing/feeling right now in this situation?*

2. *What can I do to engage myself with this patient’s experience, and show that he/she matters to me as a person?*

Use Reflection to THINK Like a Nurse

Reflection-IN-action (Tanner, 2006) is the nurse’s ability to accurately interpret the patient’s response to an intervention in the moment as the events are unfolding to make a correct clinical judgment and transfer what is learned to improve nurse thinking and patient care in the future.

1. *What did I learn from this scenario?*

2. *How can I use what has been learned from this scenario to improve patient care in the future?*