**Maryland Next Gen NCLEX Test Bank Project**

**January 25, 2023**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case Study Topic**:  (& stand-alone bow-tie) | Care of Client Post-OP Spine Surgery (Laminectomy) | **Author:** | Mary DiBartolo, PhD, RN-BC, CNE, FAAN  Allison Hynson, MSN, RN |

**Case Summary**

|  |
| --- |
| 65-year-old female with a history of back pain for 10 years that has been unrelieved through pain management efforts is admitted to the medical-surgical unit after a L2-L4 laminectomy with Jackson Pratt drain placement. Client reports the bandage is “wet” as it is saturated with blood, and the JP drain has no output. Learner should recognize complications related to spine surgery, plan care, and implement the appropriate treatment plan. |

**Objectives**

|  |
| --- |
| 1. Identify appropriate interventions for the client with spine surgery  2. Monitor for post-op complications in the client having spine surgery  3. Recognize signs and symptoms of excess bleeding after surgery  5. Plan care for the client with postoperative bleeding  6. Provide education to the client who is being discharged after spine surgery |

|  |  |
| --- | --- |
| **Case Study Link** | **Case Study QR Code** |
| <https://umaryland.az1.qualtrics.com/jfe/form/SV_bgwTyOXBj9EGdIa> |  |
| **Bow tie QR Code** | **Bow-tie Link** |
|  | <https://umaryland.az1.qualtrics.com/jfe/form/SV_4Sc935OzwzAJujI> |

**Case References:**

Ignatavicius, D. D., Workman, M. L., Rebar, C. R., & Heimgartner, N. M. (2022). *Medical-surgical nursing: Concepts for interprofessional collaborative care* (10th ed.). Elsevier.

**Case Study Question 1 of 6**

The nurse is caring for a 65-year-old female who is admitted to the surgical unit following a L2-L4 laminectomy.

|  |  |  |
| --- | --- | --- |
| **Nurses’ Notes** | | |
| **DAY 1 1200:** Admitted to the surgical unit after an L2-L4 laminectomy with Jackson Pratt (JP) drain placement. Has a history of Type II diabetes and back pain for 10 years that was unrelieved with pharmacologic pain management. Jackson Pratt (JP) drain has 30 mL of output upon arrival to floor and is emptied. Bloodwork sent to lab after surgery. She is alert and oriented x4, pupils are 3 cm bilaterally, denies numbness or tingling in extremities, 5/5 strength in all extremities. Pain rated 6/10. Foley removed before arrival to floor around 1100 and she is due to void. The surgical dressing is clean, dry, and intact.  **Day 1 1330:** Pain level 3/10 after oxycodone administration  **Day 1 1600:** The client’s neurologic status remains stable. The client reports her back feels “wet”. There is 0 mL of output from the JP drain, the drain is uncompressed, and the surgical dressing is saturated with dark red blood. She reports bending over to get her call bell from the floor. She has not voided since Foley catheter was removed but reports the urge to go. Reports her last bowel movement was two days before surgery. | | | | | | | | | |
| **Vital Signs** | | |
| Time | Day 1: 1200 | | | Day 1: 1600 |
| T ◦F/ ◦C | 98.2F/36.7C | | | 98.4F/36.8C |
| P | 77 | | | 70 |
| RR | 20 | | | 16 |
| B/P | 110/80 | | | 107/70 |
| Pulse oximeter | 94 | | | 95 |
| Oxygen | 2L NC | | | Room air |
| Pain | 6 | | | 4 |
| **Laboratory Report** | | |
| Lab | | Results | | | | Reference range | | | |
| Glucose (fasting) | | 130 | | | | Normal < 99 mg/dL | | | |
| Hematocrit | | 30 | | | | Females: 35-47% | | | |
| Hemoglobin | | 11 | | | | Females:12-16 g/dL | | | |
| WBC | | 10 | | | | 4.5 – 10.5 x 103 cells/mm3 | | | |
| HgbA1C | | 6.0 | | | | Normal <5.7% | | | |
| INR | | 1 | | | | Normal: 1.0 | | | |
| Platelets | | 200,000 | | | | 140,000 to 450,000/ mm3 | | | |
| **Medications** | |
| Medication | | Dosage/Frequency/ Route | | | | | Time | | |
| Oxycodone | | 5 mg q 4 h PRN moderate pain (4-6) | | | | | 1230 |  |  |
| Oxycodone | | 10 mg q 4 h PRN severe pain (7-10) | | | | |  |  |  |

At 1330, the nurse reassesses the client’s pain after oxycodone administration. At 1600, the nurse takes VS and performs a neurological and dressing assessment.

* Select the 4 findings that require **immediate** follow-up?

|  |
| --- |
| Blood pressure |
| Jackson-Pratt drainage\* |
| Pain rating |
| Status of surgical dressing\* |
| Respiratory rate |
| Hemoglobin & hematocrit |
| Urinary retention |
| Client report of bending to get call bell\* |
| Urinary retention |
| Status of Jackson-Pratt drain\* |

**Scoring rule: 0/1**

|  |
| --- |
| Rationale: The Jackson-Pratt drain is not collecting any drainage and is uncompressed indicating that there is no suction from the drain that is allowing the wound to drain blood/fluid. The dressing is saturated which could have been caused from the incision opening when the client bent over to get her call bell. The client should be immediately educated on spinal precautions- no bending, lifting, or twisting. Client’s BP and RR are stable. Her hemoglobin and hematocrit are below normal, but this could be due to blood loss after surgery and her levels are not immediately concerning. Pain of 4/10 after surgery is an expected finding. The client reports the urge to void, so urinary retention is not of concern unless she is unable to urinate. |

**Case Study Question 2 of 6**

The nurse is caring for a 65-year-old female who is admitted to the surgical unit following a L2-L4 laminectomy.

|  |  |  |
| --- | --- | --- |
| **Nurses’ Notes** | | |
| **DAY 1 1200:** Admitted to the surgical unit after an L2-L4 laminectomy with Jackson Pratt (JP) drain placement. Has a history of Type II diabetes and back pain for 10 years that was unrelieved with pharmacologic pain management. Jackson Pratt (JP) drain has 30 mL of output upon arrival to floor and is emptied. Bloodwork sent to lab after surgery. She is alert and oriented x4, pupils are 3 cm bilaterally, denies numbness or tingling in extremities, 5/5 strength in all extremities. Pain rated 6/10. Foley removed before arrival to floor around 1100 and she is due to void. The surgical dressing is clean, dry, and intact.  **Day 1 1330:** Pain level 3/10 after oxycodone administration  **Day 1 1600:** The client’s neurologic status remains stable. The client reports her back feels “wet”. There is 0 mL of output from the JP drain, the drain is uncompressed, and the surgical dressing is saturated with dark red blood. She reports bending over to get her call bell from the floor. She has not voided since Foley catheter was removed but reports the urge to go. Reports her last bowel movement was two days before surgery. | | | | | | | | | |
| **Vital Signs** | | |
| Time | Day 1: 1200 | | | Day 1: 1600 |
| T ◦F/ ◦C | 98.2F/36.7C | | | 98.4F/36.8C |
| P | 77 | | | 70 |
| RR | 20 | | | 16 |
| B/P | 110/80 | | | 107/70 |
| Pulse oximeter | 94 | | | 95 |
| Oxygen | 2L NC | | | Room air |
| Pain | 6 | | | 4 |
| **Laboratory Report** | | |
| Lab | | Results | | | | Reference range | | | |
| Glucose (fasting) | | 130 | | | | Normal < 99 mg/dL | | | |
| Hematocrit | | 30 | | | | Females: 35-47% | | | |
| Hemoglobin | | 11 | | | | Females:12-16 g/dL | | | |
| WBC | | 10 | | | | 4.5 – 10.5 x 103 cells/mm3 | | | |
| HgbA1C | | 6.0 | | | | Normal <5.7% | | | |
| INR | | 1 | | | | Normal: 1.0 | | | |
| Platelets | | 200,000 | | | | 140,000 to 450,000/ mm3 | | | |
| **Medications** | |
| Medication | | Dosage/Frequency/ Route | | | | | Time | | |
| Oxycodone | | 5 mg PO q 4 h PRN moderate pain (4-6) | | | | | 1230 |  |  |
| Oxycodone | | 10 mg PO q 4 h PRN severe pain (7-10) | | | | |  |  |  |

* Which lab value trends would the nurse expect to see with this client condition? **Select all that apply.**

|  |
| --- |
| * Increase in INR |
| * Decrease in hemoglobin\* |
| * Decrease in WBC * Decrease in HgbA1C * Decrease in hematocrit\* * Increase in platelets |
| **Scoring rule: +/-** |
| Rationale: The nurse would hemoglobin, and hematocrit to drop because of blood loss. WBC would not expect to be affected with blood loss. INR would not be expected to change as there is no indication the client is on anticoagulant therapy. HgbA1C is used to show average blood sugar levels over the past 2-3 months and would not be affected by post-surgical blood loss. Platelets would not be expected to increase in this case. |

**Case Study Question 3 of 6**

The nurse is caring for a 65-year-old female who is admitted to the surgical unit following a L2-L4 laminectomy.

|  |  |  |  |
| --- | --- | --- | --- |
| **Nurses’ Notes** | | | |
| **DAY 1 1200:** Admitted to the surgical unit after an L2-L4 laminectomy with Jackson Pratt (JP) drain placement. Has a history of Type II diabetes and back pain for 10 years that was unrelieved with pharmacologic pain management. Jackson Pratt (JP) drain has 30 mL of output upon arrival to floor and is emptied. Bloodwork sent to lab after surgery. She is alert and oriented x4, pupils are 3 cm bilaterally, denies numbness or tingling in extremities, 5/5 strength in all extremities. Pain rated 6/10. Foley removed before arrival to floor around 1100 and she is due to void. The surgical dressing is clean, dry, and intact.  **Day 1 1330:** Pain level 3/10 after oxycodone administration  **Day 1 1600:** The client’s neurologic status remains stable. The client reports her back feels “wet”. There is 0 mL of output from the JP drain, the drain is uncompressed, and the surgical dressing is saturated with dark red blood. She reports bending over to get her call bell from the floor. She has not voided since Foley catheter was removed but reports the urge to go. Reports her last bowel movement was two days before surgery. | | | | | | | | | | |
| **Vital Signs** | | | |
| Time | Day 1: 1200 | | | | Day 1: 1600 |
| T ◦F/ ◦C | 98.2F/36.7C | | | | 98.4F/36.8C |
| P | 77 | | | | 70 |
| RR | 20 | | | | 16 |
| B/P | 110/80 | | | | 107/70 |
| Pulse oximeter | 94 | | | | 95 |
| Oxygen | 2L NC | | | | Room air |
| Pain | 6 | | | | 4 |
| **Laboratory Report** | | | |
| Lab | | | Results | | | | Reference range | | | |
| Glucose (fasting) | | | 130 | | | | Normal < 99 mg/dL | | | |
| Hematocrit | | | 30 | | | | Females: 35-47% | | | |
| Hemoglobin | | | 11 | | | | Females:12-16 g/dL | | | |
| WBC | | | 10 | | | | 4.5 – 10.5 x 103 cells/mm3 | | | |
| HgbA1C | | | 6.0 | | | | Normal <5.7% | | | |
| INR | | | 1 | | | | Normal: 1.0 | | | |
| Platelets | | | 200,000 | | | | 140,000 to 450,000/ mm3 | | | |
| **Medications** | | |
| Medication | | Dosage/Frequency/ Route | | | | | | Time | | |
| Oxycodone | | 5 mg q 4 h PRN moderate pain (4-6) | | | | | | 1230 |  |  |
| Oxycodone | | 1. g q 4 h PRN severe pain (7-10) | | | | | |  |  |  |

* Drag the most appropriate word from the choices to fill in the blank of the following sentence.

The top priority for this client is

|  |
| --- |
| Word Choices |
| Pain management |
| Neurologic assessment |
| Surgical site management \* |
| Urinary status |

**Scoring rule: 0/1**

|  |
| --- |
| Rationale: The nurse should assess the incision to determine how to control the bleeding. The client is neurologically stable. The client has not voided 5 hours after the Foley has been removed but reports the urge to go. Client’s pain appears to be managed with oxycodone administration at 1230. |

**Case Study Question 4 of 6**

The nurse is caring for a 65-year-old female who is admitted to the surgical unit following a L2-L4 laminectomy.

|  |  |  |  |
| --- | --- | --- | --- |
| **Nurses’ Notes** | | | |
| **DAY 1 1200:** Admitted to the surgical unit after an L2-L4 laminectomy with Jackson Pratt (JP) drain placement. Has a history of Type II diabetes and back pain for 10 years that was unrelieved with pharmacologic pain management. Jackson Pratt (JP) drain has 30 mL of output upon arrival to floor and is emptied. Bloodwork sent to lab after surgery. She is alert and oriented x4, pupils are 3 cm bilaterally, denies numbness or tingling in extremities, 5/5 strength in all extremities. Pain rated 6/10. Foley removed before arrival to floor around 1100 and she is due to void. The surgical dressing is clean, dry, and intact.  **Day 1 1330:** Pain level 3/10 after oxycodone administration  **Day 1 1600:** The client’s neurologic status remains stable. The client reports her back feels “wet”. There is 0 mL of output from the JP drain, the drain is uncompressed, and the surgical dressing is saturated with dark red blood. She reports bending over to get her call bell from the floor. She has not voided since Foley catheter was removed but reports the urge to go. Reports her last bowel movement was two days before surgery. | | | | | | | | | | |
| **Vital Signs** | | | |
| Time | Day 1: 1200 | | | | Day 1: 1600 |
| T ◦F/ ◦C | 98.2F/36.7C | | | | 98.4F/36.8C |
| P | 77 | | | | 70 |
| RR | 20 | | | | 16 |
| B/P | 110/80 | | | | 107/70 |
| Pulse oximeter | 94 | | | | 95 |
| Oxygen | 2L NC | | | | Room air |
| Pain | 6 | | | | 4 |
| **Laboratory Report** | | | |
| Lab | | Results | | | | | Reference range | | | |
| Glucose (fasting) | | 130 | | | | | Normal < 99 mg/dL | | | |
| Hematocrit | | 30 | | | | | Females: 35-47% | | | |
| Hemoglobin | | 11 | | | | | Females:12-16 g/dL | | | |
| WBC | | 10 | | | | | 4.5 – 10.5 x 103 cells/mm3 | | | |
| HgbA1C | | 6.0 | | | | | Normal <5.7% | | | |
| INR | | 1 | | | | | Normal: 1.0 | | | |
| Platelets | | 200,000 | | | | | 140,000 to 450,000/ mm3 | | | |
| **Medications** | |
| Medication | | | Dosage/Frequency/ Route | | | | | Time | | |
| Oxycodone | | | 5 mg q 4 h PRN moderate pain (4-6) | | | | | 1230 |  |  |
| Oxycodone | | | 10 mg q 4 h PRN severe pain (7-10) | | | | |  |  |  |
| Senna | | | 1 tab PO twice daily | | | | |  |  |  |

* For each potential nursing or collaborative interventions, click to specify whether the intervention is appropriate or not appropriate to include in the plan of care.

|  |  |  |
| --- | --- | --- |
| Potential Intervention | Appropriate | Not appropriate |
| Notify provider | * \* |  |
| Administer oxycodone 10 mg |  | * \* |
| Compress JP drain | * \* |  |
| Blood draw for hemoglobin and hematocrit | * \* |  |
| Insert indwelling urinary catheter |  | * \* |
| Administer senna 1 tab PO twice daily | * \* |  |

**Scoring rule: 0/1**

|  |
| --- |
| Rationale: Because the dressing is saturated, the nurse should notify the provider. The client’s pain appears well controlled at 4 and the order for oxycodone 10 mg is for pain of 7-10 so this would not be the appropriate dosage to administer. Ensuring the JP drain is compressed is necessary to create suction for drainage. Lab work for hemoglobin and hematocrit should be done to monitor blood loss because the dressing was saturated. Inserting a Foley catheter is not indicated- the client has the urge to void and it has not been 8 hours since the catheter was removed. Senna is appropriate to administer to surgical patients to prevent straining while having a bowel movement; the client also reports no bowel movement for two days and is on opioids which can lead to constipation. |

**Case Study Question 5 of 6**

The nurse is caring for a 65-year-old female who is admitted to the surgical unit following a L2-L4 laminectomy.

|  |  |  |  |
| --- | --- | --- | --- |
| **Nurses’ Notes** | | | |
| **DAY 1 1200:** Admitted to the surgical unit after an L2-L4 laminectomy with Jackson Pratt (JP) drain placement. Has a history of Type II diabetes and back pain for 10 years that was unrelieved with pharmacologic pain management. Jackson Pratt (JP) drain has 30 mL of output upon arrival to floor and is emptied. Bloodwork sent to lab after surgery. She is alert and oriented x4, pupils are 3 cm bilaterally, denies numbness or tingling in extremities, 5/5 strength in all extremities. Pain rated 6/10. Foley removed before arrival to floor around 1100 and she is due to void. The surgical dressing is clean, dry, and intact.  **Day 1 1330:** Pain level 3/10 after oxycodone administration  **Day 1 1600:** The client’s neurologic status remains stable. The client reports her back feels “wet”. There is 0 mL of output from the JP drain, the drain is uncompressed, and the surgical dressing is saturated with dark red blood. She reports bending over to get her call bell from the floor. She has not voided since Foley catheter was removed but reports the urge to go. Reports her last bowel movement was two days before surgery.  **Day 1 1610:** The JP drain is compressed. Provider notified of dressing status and assessed the surgical site. The incision noted to be open in one area. A new dressing applied.  **Day 2 0900:** The client is alert and oriented x4 and there have been no changes in neurological status. The JP drain output was 50 mL overnight. Provider removed the JP drain, and the client is to be discharged. Client was fitted for thoracic-lumbar-sacral orthosis (TLSO) back brace. | | | | | | | | | | | |
| **Vital Signs** | | | |
| Time | Day 1: 1200 | | | | Day 1: 1600 | Day 2: 0900 | | |
| T ◦F/ ◦C | 98.2F/36.7C | | | | 98.4F/36.8C | 98.6F/37.0C | | |
| P | 77 | | | | 70 | 65 | | |
| RR | 20 | | | | 16 | 18 | | |
| B/P | 110/80 | | | | 107/70 | 116/74 | | |
| Pulse oximeter | 94 | | | | 95 | 98 | | |
| Oxygen | 2L NC | | | | Room air | Room air | | |
| Pain | 6 | | | | 4 | 3 | | |
| Other | | | |
| Lab | | Results | | | | | Reference range | | | | |
| Glucose (fasting) | | 130 | | | | | Normal < 99 mg/dL | | | | |
| Hematocrit | | 30 | | | | | Females: 35-47% | | | | |
| Hemoglobin | | 11 | | | | | Females:12-16 g/dL | | | | |
| WBC | | 10 | | | | | 4.5 – 10.5 x 103 cells/mm3 | | | | |
| HgbA1C | | 6.0 | | | | | Normal <5.7% | | | | |
| INR | | 1 | | | | | Normal: 1.0 | | | | |
| Platelets | | 200,000 | | | | | 140,000 to 450,000/ mm3 | | | | |
| **Medications** | |
| Medication | | | Dosage/Frequency/ Route | | | | | Time | | | |
| Oxycodone | | | 5 mg q 4 h PRN moderate pain (4-6) | | | | | 1230 | | 1800 | 0300 |
| Oxycodone | | | 10 mg q 4 h PRN severe pain (7-10) | | | | |  | |  |  |
| Senna | | | 1 tab PO twice daily | | | | |  | |  |  |

At 0900 on day 2, the nurse takes the client’s vital signs and performs and assessment. The provider comes to the bedside and places discharge orders for the client.

* What should the nurse teach the client prior to discharge? **Select all that apply**
* Take a prescribed stool softener daily upon discharge to prevent straining.\*
* Do not bend, twist, or lift more than 5-10 pounds after surgery.\*
* Wear your back brace at all times including when you sleep.
* Call the provider’s office if you experience fever or chills. \*
* Pull off the steri-strips over the incision if they begin to peel off the skin.
* Check the surgical dressing in the mirror daily. \*
* Limit your activity for the first two weeks after surgery.
* Take 10 mg of oxycodone for mild pain.

**Scoring rule: +/-**

|  |
| --- |
| Rationale: The client will be prescribed a stool softener upon discharge to prevent straining. Bending, lifting, and twisting should be avoided in clients with spine surgery. The TLSO brace should be worn when the client is moving around or sitting, but not while laying down. The client should call the providers office if they experience fever of chills as this could be a sign of infection. Steri strips should be left alone and permitted to fall of themselves, without the client pulling them off. The client should check the surgical site dressing daily to monitor drainage. Clients with spine surgery are encouraged to walk as much as possible after surgery and should not limit their activity. Mild pain should be managed with a non-opioid pain medication such as acetaminophen. |

**Case Study Question 6 of 6**

The nurse is caring for a 65-year-old female who is admitted to the surgical unit following a L2-L4 laminectomy.

|  |  |  |  |
| --- | --- | --- | --- |
| **Nurses’ Notes** | | | |
| **DAY 1 1200:** Admitted to the surgical unit after an L2-L4 laminectomy with Jackson Pratt (JP) drain placement. Has a history of Type II diabetes and back pain for 10 years that was unrelieved with pharmacologic pain management. Jackson Pratt (JP) drain has 30 mL of output upon arrival to floor and is emptied. Bloodwork sent to lab after surgery. She is alert and oriented x4, pupils are 3 cm bilaterally, denies numbness or tingling in extremities, 5/5 strength in all extremities. Pain rated 6/10. Foley removed before arrival to floor around 1100 and she is due to void. The surgical dressing is clean, dry, and intact.  **Day 1 1330:** Pain level 3/10 after oxycodone administration  **Day 1 1600:** The client’s neurologic status remains stable. There is 0 mL of output from the JP drain, the drain is uncompressed, and the surgical dressing is saturated with dark red blood. She reports bending over to get her call bell when it fell on the floor. She has not voided since the Foley removed but reports the urge to go. Reports her last bowel movement was two days before surgery.  **Day 1 1610:** The JP drain is compressed. Provider notified of dressing status and assessed the surgical site. The incision noted to be open in one area. A new dressing applied.  **Day 2 0900:** The client is alert and oriented x4 and there have been no changes in neurological status. The JP drain output was 50 mL overnight. Provider removed the JP drain, and the client is to be discharged. Client was fitted for thoracic-lumbar-sacral orthosis (TLSO) back brace. | | | | | | | | | | | |
| **Vital Signs** | | | |
| Time | Day 1: 1200 | | | | Day 1: 1600 | | Day 2: 0900 | |
| T ◦F/ ◦C | 98.2F/36.7C | | | | 98.4F/36.8C | | 98.6F/37.0C | |
| P | 77 | | | | 70 | | 65 | |
| RR | 20 | | | | 16 | | 18 | |
| B/P | 110/80 | | | | 107/70 | | 116/74 | |
| Pulse oximeter | 94 | | | | 95 | | 98 | |
| Oxygen | 2L NC | | | | Room air | | Room air | |
| Pain | 6 | | | | 4 | | 3 | |
| **Laboratory Report** | | | |
| Lab | | Results | | | | Reference range | | | | | |
| Glucose (fasting) | | 130 | | | | Normal < 99 mg/dL | | | | | |
| Hematocrit | | 30 | | | | Females: 35-47% | | | | | |
| Hemoglobin | | 11 | | | | Females:12-16 g/dL | | | | | |
| WBC | | 10 | | | | 4.5 – 10.5 x 103 cells/mm3 | | | | | |
| HgbA1C | | 6.0 | | | | Normal <5.7% | | | | | |
| INR | | 1 | | | | Normal: 1.0 | | | | | |
| Platelets | | 200,000 | | | | 140,000 to 450,000/ mm3 | | | | | |
| **Medications** | |
| Medication | | | Dosage/Frequency/ Route | | | | | Time | | | |
| Oxycodone | | | 5 mg q 4 h PRN moderate pain (4-6) | | | | | 1230 | | 1800 | 0300 |
| Oxycodone | | | 10 mg q 4 h PRN severe pain (7-10) | | | | |  | |  |  |
| Senna | | | 1 tab PO twice daily | | | | |  | |  |  |

* For each client statement, click to specify whether the statement indicates an understanding, or no understanding of teaching provided.

|  |  |  |
| --- | --- | --- |
| Statement | Understanding | No understanding |
| “I should take the stool softener only if I feel constipated.” |  | * \* |
| “I should walk as much as possible after surgery.” | * \* |  |
| “I am able to get my bandage wet and can soak in the tub to relieve pain.” |  | * \* |
| “I should only take the opioid medication when I experience moderate or severe pain.” | * \* |  |
| “I should leave the steri strips on the incision until they fall off.” | * \* |  |
| “I should be able to pick up my dog as long as it does not cause pain.” |  | * \* |
| “I should wear the brace to sleep but can take it off when I’m walking around.” |  | * \* |
| “I do not need to worry about the surgical dressing until I go to the provider in two weeks.” |  | * \* |

**Scoring rule: 0/1**

|  |
| --- |
| Rationale: The client will be prescribed a stool softener upon discharge to prevent straining. Bending, lifting, and twisting should be avoided in clients with spine surgery. The TLSO brace should be worn when the client is moving around or sitting, but not while laying down. The client is able to get the bandage wet in the shower but should not soak in a tub or hot tub. Steri strips should be left alone and permitted to fall of themselves, without the client pulling them off. The client should check the surgical site dressing daily to monitor drainage. Clients with spine surgery are encouraged to walk as much as possible after surgery and should not limit their activity. Opioid pain medications should be used for moderate to severe pain, while mild pain should be managed with a non-opioid pain medication such as Tylenol. |

**Bow-Tie**

The nurse is caring for a 65-year-old female who is admitted to the surgical unit following a L2-L4 laminectomy.

|  |  |  |  |
| --- | --- | --- | --- |
| **Nurses’ Notes** | | | |
| **DAY 1 1200:** Admitted to the surgical unit after an L2-L4 laminectomy with Jackson Pratt (JP) drain placement. Has a history of Type II diabetes and back pain for 10 years that was unrelieved with pharmacologic pain management. Jackson Pratt (JP) drain has 30 mL of output upon arrival to floor and is emptied. Bloodwork sent to lab after surgery. She is alert and oriented x4, pupils are 3 cm bilaterally, denies numbness or tingling in extremities, 5/5 strength in all extremities. Foley removed before arrival to floor around 1100 and she is due to void. The surgical dressing is clean, dry, and intact.  **Day 2 0900:** Vital signs taken and client reports feeling “lousy.” Alert and oriented x 4 with full sensation in all extremities. The JP drain has 10 mL of serosanguineous drainage. The surgical dressing is intact and has yellow drainage the size of quarter. The client reports 9/10 pain in her back that is unrelieved with oxycodone administration at 0700. | | | | | | | | | | |
| **Vital Signs** | | | |
| Time | Day 1: 1200 | | | | Day 2: 0900 |
| T ◦F/ ◦C | 98.2F/36.7C | | | | 101.2F/38.4C |
| P | 77 | | | | 89 |
| RR | 20 | | | | 18 |
| B/P | 110/80 | | | | 105/75 |
| Pulse oximeter | 94 | | | | 95 |
| Oxygen | 2L NC | | | | Room air |
| Pain | 3 | | | | 9 |
| **Laboratory Report** | | | |
| Lab | | | Results | | | | Reference range | | | |
| Glucose (fasting) | | | 130 | | | | Normal < 99 mg/dL | | | |
| Hematocrit | | | 30 | | | | Males: 42-52%; Females: 35-47% | | | |
| Hemoglobin | | | 11 | | | | Males: 13-18 g/dL; Females:12-16 g/dL | | | |
| WBC | | | 17 | | | | 4.5 – 10.5 x 103 cells/mm3 | | | |
| Platelets | | | 200,000 | | | | 140,000 to 450,000/ mm3 | | | |
| **Medications** | | |
| Medication | | Dosage/Frequency/ Route | | | | | | Time | | |
| Oxycodone | | 5 mg q 4 h PRN moderate pain (4-6) | | | | | |  |  |  |
| Oxycodone | | 1. mg q 4 h PRN severe pain (7-10) | | | | | | 0700 |  |  |

* Complete the diagram by dragging from the choices below to specify what condition the client is most likely experiencing, 2 actions the nurse should take to address that condition, and 2 parameters the nurse should monitor to assess the client’s progress.

|  |  |  |
| --- | --- | --- |
| Action to take |  | Parameter to monitor |
|  | Condition most likely experiencing |  |
| Action to take |  | Parameter to monitor |
|  |  |  |
| **Actions to take** | **Potential conditions** | **Parameters to monitor** |
| Reinforce surgical dressing | Clotting of the JP drain | Temperature \* |
| Administer acetaminophen\* | Postoperative pain | Neurologic status |
| Administer ibuprofen | Surgical site infection\* | Respiratory rate |
| Assess surgical site\* | Sepsis | Blood pressure |
| Empty JP drain |  | WBC\* |

**Scoring rule: 0/1**

|  |
| --- |
| Rationale: The client is experiencing infection of the surgical site which can be identified through yellow drainage on the surgical bandage, increased pain, and increased WBC count. The nurse would want to administer Tylenol to reduce the fever and remove the bandage to assess the surgical site to view for other signs of infection. Reinforcing the surgical dressing is not appropriate, as the nurse would want to remove the bandage to assess the incision. Administering ibuprofen for fever is contraindicated in a client with spinal surgery due to increased risk of bleeding. It is not necessary to empty the JP drain as there is only 10 mL of output.  The nurse would want to monitor the client’s temperature to assess the response to Tylenol and monitor the client’s WBC as it will indicate improvement of worsening of the infection. The client’s neurologic status, respiratory rate, and blood pressure are currently stable and are not the top priority. |