

N321 Care Plan # 2

Lakeview College of Nursing

Name: Kati Davis

**Demographics (3 points)**

<b>Date of Admission</b> <i>4/5/22</i>	<b>Client Initials</b> <i>J.M</i>	<b>Age</b> <i>65</i>	<b>Gender</b> <i>Female</i>
<b>Race/Ethnicity</b> <i>White/ Non-Hispanic or Latino</i>	<b>Occupation</b> <i>Not employed</i>	<b>Marital Status</b> <i>Widowed</i>	<b>Allergies</b> <i>Aspirin – Reaction: GI Upset</i> <i>Depakote – Reaction: Falling, unable to move</i> <i>Hydrocodone Acetaminophen – Reaction: nausea &amp; vomiting</i> <i>Sulfa – Reaction: rash</i> <i>Tramadol – Reaction: Headache</i>
<b>Code Status</b> <i>FULL</i>	<b>Height</b> <i>5’6”</i>	<b>Weight</b> <i>134lbs</i>	

**Medical History (5 Points)**

**Past Medical History:** *The client has a past medical history of adhesive capsulitis of shoulder, anxiety state, unspecified, arthritis, asthma, depression, depressive disorder, not elsewhere classified. Disorder of bursae and tendons in shoulder region, unspecified. Dysphagia, enthesopathy of hip region, esophageal reflux, fibromyalgia (11/25/2014), hypercholesteremia (9/17/2014), low back pain (8/8/2014), lumbago, myalgia and myositis, unspecified. Neoplasm of uncertain behavior of skin, osteoarthritis, unspecified, whether generalized or localized, lower leg. Unspecified angina pectoris, other and unspecified hyperlipidemia. Tobacco use disorder, unspecified asthma, unspecified disorder of cranial nerves, hypothyroidism, and vitamin D deficiency.*

**Past Surgical History:** *The client's past surgical history includes knee, unspecified, shoulder unspecified, laryngoscopy, direct, with injection into vocal cords; cervical spine (unspecified), spine (unspecified), vulva surgery, colonoscopy (7/8/2020), and upper GI endoscopy (5/7/21).*

**Family History:** *The client's family history includes breast cancer in her mother (age of onset: 62), hearing loss in another family member, hypertension in her brother, father, and mother. There is no history of thyroid, stroke, psychiatry, genitourinary, GI, genetic, diabetes, blood disease, asthma, arthritis, anesthesia, allergies, or alcohol/drug.*

**Social History (tobacco/alcohol/drugs including frequency, quantity, and duration of use):** *The client is currently an everyday smoker. Client smokes one pack per day and has for 40 years. Client reports never using smokeless tobacco. Childhood developmental issues: 6 siblings, denied trauma, does not use alcohol.*

**Assistive Devices:** *Gait belt and bedside sitter present.*

**Living Situation:** *The client lives alone approximately 30 mins away from family.*

**Education Level:** *High School graduate with some college.*

### **Admission Assessment**

**Chief Complaint (2 points):** *Confusion*

**History of Present Illness – OLD CARTS (10 points):** *The patient is a 65yo Caucasian female brought to the ED for new-onset confusion and involuntary movements that started (4/5). The patient on admission was alert and awake, very restless, confused, oriented to self only. Knows date of birth but not current month/year. The patient does not know their current location—no family at*

*the bedside. Per family, Lithium was started about a month ago. In the ED, labs showed supra-therapeutics levels of Lithium, low potassium and magnesium, prolonged QT. The patient received 1L IV fluid bolus, IV K rider Xs 2, IV mag rider X 2, IV cal gluconate X 1, IV activin 0.5 mg X 2, IV cefepime/metro/vancomycin X 1. The patient continues to be restless even after Ativan, but better per the emergency department team.*

### **Primary Diagnosis**

**Primary Diagnosis on Admission (2 points):** *Lithium toxicity*

**Secondary Diagnosis (if applicable):** *Secondary diagnosis is not applicable*

### **Pathophysiology of the Disease, APA format (20 points):**

*The patient's chief complaint was confusion. The inability to think clearly or rapidly as you normally do is referred to as confusion. A patient may be described as confused by having trouble paying attention, remembering things, and making judgments. In this instance, the patient was very forgetful of times she spoke with her son, and repeatedly asked about where her dentures were when they were in her mouth. These are just a couple of examples of how the patient being assessed was confused. Depending on the reason, confusion may appear suddenly or gradually over time. Confusion frequently lasts for a short period before dissipating. Other times, it is irreversible and cannot be reversed. It is possible that it is linked to delirium or dementia.*

*In this patient's case, the confusion was a result of her lithium toxicity. Lithium toxicity is simply another term for lithium overdose. One can have lithium toxicity if he/she takes too much lithium, which is a prescribed mood-stabilizing medication used to*

*treat mania that is part of bipolar disorder. Lithium is an antimanic drug with a limited therapeutic index (Hedya et al., 2018). To put that in perspective, the patient's lithium on admission was 1.5. The therapeutic levels of lithium are between 0.6 and 1.2. Any level over 1.2 can start to cause problems. According to a reading titled, "Lithium Toxicity in Older Adults: a Systematic Review of Case Reports," the lithium doses being prescribed to older adults are higher than the recommended amount (Sun et al., 2018). Lithium toxicity seems to be precipitated by polypharmacy and comorbidities. Because of these higher doses being prescribed to older adults, it is almost easy to overdose on the drug, potentially without even realizing it.*

*The basis of lithium toxicity treatment is supportive therapy. Depending on the level of toxicity there are many other additional treatments that could be explored such as stomach pumping, hemodialysis, and whole bowel irrigation. With this patient, I saw more of IV fluids, medications, vital sign monitoring, and a sitter with her to ensure safety.*

### **Pathophysiology References (2) (APA):**

Hedya, S. A., Avula, A., & Swoboda, H. D. (2018). Lithium toxicity.

Sun, M., Herrmann, N., & Shulman, K. I. (2018). Lithium toxicity in older adults: a systematic review of case reports. *Clinical Drug Investigation*, 38(3), 201-209.

## Laboratory Data (15 points)

CBC **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	3.50 – 5.20	3.75	N/A	WNL
Hgb	12.0-18.0	12	N/A	WNL
<b>Hct</b>	34.0 – 47.0%	32.6 ↓	N/A	Low hematocrit can result from iron and vitamin deficiencies (Cleveland Clinic Staff, 2018). The patient has a history of a vitamin D deficiency. Low levels can also result from a thyroid abnormality (Cleveland Clinic Staff, 2018). The patient has a history of hypothyroidism.
Platelets	140-400	324	N/A	WNL
<b>WBC</b>	4.00 – 11.00	12.89 ↑	N/A	Lithium can both chronically and acutely raise the total WBC count (Leeuwen and Bladh, 2021).
Neutrophils	47.0 – 73.0%	N/A	N/A	N/A
Lymphocytes	18.0 – 42.0%	34.5	N/A	WNL
Monocytes	4.0 – 12.0%	7.3	N/A	WNL
Eosinophils	0.0 – 5.0%	2.2	N/A	WNL
Bands	0.0 – 10.0%	N/A	N/A	N/A

Chemistry **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-	136 – 145 mmol/L	137	143	WNL
<b>K+</b>	3.5 – 5.1 mmol/L	3.4 v	3.6	A lithium abnormality can make a potassium abnormality even worse (Leeuwen and Bladh, 2021).
<b>Cl-</b>	98 – 107 mmol/L	104	115 ^	Hyperchloremia may be a result of prolonged vomiting, diarrhea, sweating, or a high temperature (dehydration) (Leeuwen and Bladh, 2021).
<b>CO2</b>	22.0 – 29.0 mmol/L	22	19 v	Certain medications may cause a lower CO2 level (Leeuwen and Bladh, 2021).
Glucose	74 – 100 mg/dL	88	80	WNL
<b>BUN</b>	10 – 20 mg/dL	12	5 v	A low BUN level can be caused by malnutrition or even overhydration. The patient could be experiencing a little bit of overhydration from the IV fluids (Healthwise Staff, 2021).
Creatinine	0.55 – 1.02 mg/dL	0.93	0.70	WNL
Albumin	3.4 – 5.0 g/dL	3.6	3.6	WNL
Calcium	8.9 – 10.6 mg/dL	8.9	8.9	WNL
<b>Mag</b>	1.6 – 2.6	1.5 v	N/A	A magnesium deficiency is older

	<i>mg/dL</i>			<i>adults is common due to a poor diet (Leeuwen and Bladh, 2021).</i>
<b>Phosphate</b>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
<b>Bilirubin</b>	<i>0.2 – 1.2</i>	<i>0.7</i>	<i>N/A</i>	<i>WNL</i>
<b>Alk Phos</b>	<i>40-150</i>	<i>131</i>	<i>N/A</i>	<i>WNL</i>
<b>AST</b>	<i>5 - 34</i>	<i>13</i>	<i>N/A</i>	<i>WNL</i>
<b>ALT</b>	<i>0 - 55</i>	<i>7</i>	<i>N/A</i>	<i>WNL</i>
<b>Amylase</b>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
<b>Lipase</b>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
<b>Lactic Acid</b>	<i>0.50 – 2.20 mmol/L</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>

Other Tests **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

<b>Lab Test</b>	<b>Normal Range</b>	<b>Value on Admission</b>	<b>Today's Value</b>	<b>Reason for Abnormal</b>
<b>INR</b>	<i>0.9 – 1.1</i>	<i>1.1</i>	<i>N/A</i>	<i>WNL</i>
<b>PT</b>	<i>11.7 – 13. Sec</i>	<i>N/A</i>	<i>N/A</i>	<i>No values were recorded on admission day or day of assessment.</i>
<b>PTT</b>	<i>22.4 – 35.9</i>	<i>35.8</i>	<i>N/A</i>	<i>WNL</i>

	<i>Sec</i>			
<b>D-Dimer</b>	45 – 500 ng/ mL	N/A	N/A	No values were recorded on admission day or day of assessment.
<b>BNP</b>	N/A	N/A	N/A	No values were recorded on admission day or day of assessment.
<b>HDL</b>	N/A	N/A	N/A	No values were recorded on admission day or day of assessment.
<b>LDL</b>	N/A	N/A	N/A	No values were recorded on admission day or day of assessment.
<b>Cholesterol</b>	N/A	N/A	N/A	No values were recorded on admission day or day of assessment.
<b>Triglycerides</b>	N/A	N/A	N/A	No values were recorded on admission day or day of assessment.
<b>Hgb A1c</b>	N/A	N/A	N/A	No values were recorded on admission day or day of assessment.
<b>TSH</b>	0.350 – 4.940 U	N/A	N/A	No values were recorded on admission day or day of assessment.

Urinalysis **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
<b>Color &amp; Clarity</b>	Colorless – yellow	Amber/ Hazy	N/A	The patient has present Ketones in the urine; this can cause cloudiness (Leeuwen and Bladh, 2021). The suspected UTI can cause the amber tint.
<b>pH</b>	5 – 9	5.0	N/A	WNL
<b>Specific Gravity</b>	1.003 – 1.035	1.028	N/A	WNL

<b>Glucose</b>	(-)	(-)	N/A	WNL
<b>Protein</b>	(-)	(-)	N/A	WNL
<b>Ketones</b>	(-)	<b>30 !</b>	N/A	<i>One's body will burn fat for energy if the cells are lacking glucose. If this is the case, the substance called ketones can be produced (Medline Plus Staff, 2022).</i>
<b>WBC</b>	0-25	<b>111 !</b>	N/A	<i>This elevation of WBC could indicate a UTI (Leeuwen and Bladh, 2021).</i>
<b>RBC</b>	0-20	<b>54 !</b>	N/A	<i>An elevated RBC count can be a result from the UTI (Leeuwen and Bladh, 2021).</i>
<b>Leukoesterase</b>	(-)	(-)	N/A	WNL

**Cultures** **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

<b>Test</b>	<b>Normal Range</b>	<b>Value on Admission</b>	<b>Today's Value</b>	<b>Explanation of Findings</b>
<b>Urine Culture</b>	<i>Nothing detected</i>	N/A	N/A	<i>No values were recorded on admission day or day of assessment.</i>
<b>Blood Culture</b>	<i>Nothing detected</i>	N/A	N/A	<i>No values were recorded on admission day or day of assessment.</i>
<b>Sputum Culture</b>	<i>Nothing detected</i>	N/A	N/A	<i>No values were recorded on admission day or day of assessment.</i>
<b>Stool Culture</b>	<i>Nothing detected</i>	N/A	N/A	<i>No values were recorded on admission day or day of assessment.</i>

**Lab Correlations Reference (1) (APA):**

(Ascp), M. B. M. L. A. V. M., & Msn, R. M. B. L. (2021). *Davis's Comprehensive Manual of Laboratory and Diagnostic Tests with Nursing Implications (Davis's Comprehensive Manual of Laboratory & Diagnostic Tests with Nursing Implications)* (9th ed.). F.A. Davis Company.

Cleveland Clinic Staff. (2018, January). *Hematocrit (red blood cells) test: Test Details & Results*. Cleveland Clinic. Retrieved April 18, 2022, from <https://my.clevelandclinic.org/health/diagnostics/17683-hematocrit>

Healthwise Staff2021. (2021). *Blood Urea Nitrogen (BUN) Test*. Blood urea nitrogen (BUN) test. Retrieved April 18, 2022, from <https://lajollasurgical.com/health-library/hw-view.php?DOCHWID=aa36271#:~:text=Low%20values,their%20bodies%20break%20down%20protein.>

Medline Plus Staff. (2022, March 14). *Ketones in urine: Medlineplus medical test*. MedlinePlus. Retrieved April 18, 2022, from <https://medlineplus.gov/lab-tests/ketones-in-urine/#:~:text=If%20your%20cells%20don't,a%20coma%20or%20even%20death.>

### **Diagnostic Imaging**

**All Other Diagnostic Tests (5 points):** *CT of brain without contrast (4/5/22)*

**Diagnostic Test Correlation (5 points):**

What is it?

*A CT scan of the brain is a noninvasive diagnostic imaging process that produces horizontal, or axial images of the brain using specific X-ray measurements.*

Why was it done?

*This brain CT was performed because the patient has a history of mental status change, with an unknown cause.*

Comparison available

*This was being compared to a non-contrast head CT from 11/3/21 and a non-contrast brain MRI from 4/1/2000*

Technique

*CT of the head was performed without contrast*

Findings

*No aggressive calvarial lesions or acute displaced calvarial fractures are seen.*

**Diagnostic Test Reference (1) (APA):**

ACR, R. S. N. A. and. (2021, February 8). *Computed Tomography (CT) - head*. Radiologyinfo.org. Retrieved April 18, 2022, from <https://www.radiologyinfo.org/en/info/headct>

Zhuo, C., Li, G., Lin, X., Jiang, D., Xu, Y., Tian, H., ... & Song, X. (2019). The rise and fall of MRI studies in major depressive disorder. *Translational psychiatry*, 9(1), 1-14.

**Current Medications (10 points, 1 point per completed med)  
\*10 different medications must be completed\***

**Home Medications (5 required)**

<b>Brand/Generic</b>	Atorvastatin (LIPITOR)	Folic acid	Acetaminophen (Tylenol)	Meloxicam (Mobic)	Pantoprazole (Protonix)
<b>Dose</b>	20 mg	1 mg	500 mg	15 mg	40 mg
<b>Frequency</b>	Daily	TID	Every 6 hours PRN	Daily	TID
<b>Route</b>	Oral	Oral	Oral	Oral	Oral
<b>Classification</b>	P: HMG – CoA reductase inhibitor T: Antihyperlipidemic	Antibiotics, Combos, Antimalarials, Sulfonamides, Antileprosy Agents	P: Nonsalicylate, para-aminophenol derivative T: Antipyretic, nonopioid analgesic	P: NSAID T: Analgesic	Proton pump inhibitor
<b>Mechanism of Action</b>	Reduces plasma cholesterol and lipoprotein levels by	Synthesized by bacteria from the substrate, para-	Inhibits the enzyme cyclooxygenase,	Blocks cyclooxygenase, the enzyme needed to	Interferes with gastric acid secretion by inhibiting the hydrogen-

	inhibiting HMG-CoA reductase and cholesterol synthesis in the liver by increasing the number of LDL receptors on liver cells to enhance LDL uptake and breakdown.	amino-benzoic acid and all cells require folic acid for growth.	blocking prostaglandin production and interfering with pain impulse generation in the peripheral nervous system.	synthesize prostaglandins, which mediate the inflammatory response and cause local pain, swelling, and vasodilation	potassium-adenosine triphosphatase enzyme system, or proton pump, and gastric parietal cells.
<b>Reason Client Taking</b>	To control lipid levels as adjunct to diet in primary hypercholesterolemia and mixed dyslipidemia	Taken to prevent and treat low blood levels of folate and high blood levels of homocysteine	To relieve mild to moderate pain	To relieve signs and symptoms of osteoarthritis	To treat GERD short term
<b>Contraindications (2)</b>	1) Active hepatic disease 2) Hypersensitivity to atorvastatin or its components	1) Folic acid hypersensitivity 2) Benzyl alcohol hypersensitivity	1) Hypersensitivity to acetaminophen or its components 2) severe hepatic impairment	1) History of angioedema 2) Hypersensitivity to aspirin or other NSAIDs	1) concurrent therapy with rilpivirine – containing products 2) hypersensitivity to pantoprazole
<b>Side Effects/Adverse Reactions (2)</b>	1) Arrhythmias 2) Hypoglycemia	1) Redness, skin rash 2) Difficulty breathing	1) Agitation/anxiety 2) Hepatotoxicity	1) GI bleeding 2) pancreatitis	1) C-Diff 2) hepatotoxicity
<b>Nursing Considerations (2)</b>	1) Know that atorvastatin is used in patients with homozygous familial hypercholesterolemia as an adjunct to other lipid-lowering	1) Women who are receiving antiepileptic therapy need individual counseling before starting folic acid.	1) Use cautiously in patients with hepatic impairment or active hepatic disease, alcoholism,	1) NSAIDs like this one should be avoided in patients with a recent MI because risk of reinfarction increases with	1) Take before meals 2) Do not crush

	treatments or alone only if other treatments are not available.	2) Most causes of folate deficiency are self-limiting and therefore folic acid has few indications for long-term use	chronic malnutrition, severe hypovolemia, or severe renal impairment 2) Monitor renal function in patient on long-term therapy.	NSAID therapy 2) Know that risk of heart failure increases with NSAID use.	
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**Hospital Medications (5 required)**

<b>Brand/Generic</b>	Enoxaparin (Levenox)	Ramelteon (Razerem)	Pramipexole (MIRAPEX)	Polyethylene glycol oral powder packet (Miralax)	Magnesium L-lactate (mag-tab SR)
<b>Dose</b>	40 mg	8 mg	0.5 mg	17 g	168 mg
<b>Frequency</b>	Daily	Daily at bedtime	TID	TID	TID
<b>Route</b>	Subcutaneous	Oral	Oral	Oral	Oral

<b>Classification</b>	P: Low-molecular-weight heparin T: Anticoagulant	P: Melatonin receptor agonist T: Hypnotic	P: Nonergoline dopamine agonist T: Antiparkinsonian	Osmotic laxative	P: Mineral T: Electrolyte replacement
<b>Mechanism of Action</b>	Potentiates the action of antithrombin III, a coagulation inhibitor. By binding with antithrombin III, enoxaparin rapidly binds with and inactivates clotting factors.	Binds to melatonin receptors MT1 and MT2 in the suprachiasmatic nucleus (SCN) of the hypothalamus.	May stimulate dopamine receptors in the brain, thereby easing symptoms of Parkinson's disease, which is thought to be caused by a dopamine deficiency.	This works by drawing water into the colon. The water softens the stool and may naturally stimulate the colon to contract. This helps ease bowel movements.	Assists all enzymes involved in phosphate transfer reactions that use adenosine triphosphate (ATP).
<b>Reason Client Taking</b>	To prevent DVT	To treat insomnia in patients having difficulty to fall asleep	Used to treat Parkinson's disease and restless leg syndrome.	To treat occasional constipation	To correct magnesium deficiency
<b>Contraindications (2)</b>	1) Active-major bleeding 2) History of immune-mediated heparin-induced thrombocytopenia within past 100 days or in the presence of circulating antibodies, which may persist for several years.	1) Concurrent therapy with fluvoxamine 2) History of angioedema with previous ramelteon treatment	1) Hypersensitivity to pramipexole or its components  <i>There are no other contraindications listed in the text.</i>	1) Low levels of calcium, sodium, and potassium in the blood 2) If one has severe ulcerative colitis	1) Hypersensitivity to magnesium salts or any component of magnesium-containing preparations 2) Coma, marked heart disease, renal impairment
<b>Side</b>	1) pulmonary	1) Throat tightness	1) Cardiac failure	1) Severe or bloody	1) Arrhythmias

<b>Effects/Adverse Reactions (2)</b>	edema 2) A fib	2) Suicidal ideations	2) Abnormal behavior	diarrhea 2) cramping and bloating	2) Hypotension
<b>Nursing Considerations (2)</b>	1) Keep protamine sulfate nearby in case of accidental overdose 2) Expect to give drug with aspirin to patient with unstable angina, STEMI, and non-Q-wave MI	1) Not recommended for patients with COPD or severe sleep apnea because its effects have not been studied in these patient populations 2) Monitor patient closely for hypersensitivity reactions such as dyspnea, nausea, swelling, throat tightness, and vomiting	1) Use cautiously in patients with hallucinations, hypotension or retinal problems. Drug may worsen these problems. 2) Use cautiously in patients with renal impairment because pramipexole elimination may be decreased. poly	1) Document an abdominal assessment, frequency of bowel movements, and stool characteristics before administering laxative.	1) Be aware that magnesium sulfate is the elemental form of magnesium. Oral preparations aren't all equivalent 2) Make sure patient chews chewable tablets thoroughly before swallowing

**Medications Reference (1) (APA):**

Jones & Bartlett Learning. (2020). *Nurse’s Drug Handbook 2021*. Jones & Bartlett Learning. (Original work published 2021)

**Assessment**

**Physical Exam (18 points) – HIGHLIGHT ALL PERTINENT ABNORMAL FINDINGS**

<p><b>GENERAL:</b>  <b>Alertness:</b>  <b>Orientation:</b>  <b>Distress:</b>  <b>Overall appearance:</b></p>	<p><i>The patient is alert, cooperative, and in no acute distress. She is groomed and appears tired. The patient is disoriented to time and setting, but oriented to place and self.</i></p>
<p><b>INTEGUMENTARY:</b>  <b>Skin color:</b>  <b>Character:</b>  <b>Temperature:</b>  <b>Turgor:</b>  <b>Rashes:</b>  <b>Bruises:</b>  <b>Wounds: 0</b>  <b>Braden Score: 20</b>  <b>Drains present: Y</b> <input type="checkbox"/> <b>N</b> <input checked="" type="checkbox"/>  <b>Type:</b></p>	<p><i>Skin is white, intact, warm, and dry without jaundice. Normal turgor. No rashes, bruises, or lesions present. The patient presents normal mobility. Nails are without clubbing. The patient’s capillary refill is &lt; 3 seconds on fingers and toes bilaterally. Braden score is 20 based upon the assessment performed 4/14/2022. This number indicates there is no risk of the patient developing an acquired ulcer or injury while she is staying in the hospital.</i></p>
<p><b>HEENT:</b>  <b>Head/Neck:</b> <i>Skull is normocephalic. Hair is evenly distributed and combed. Trachea is midline</i>  <b>Ears:</b> <i>WNL</i>  <b>Eyes:</b> <i>WNL</i>  <b>Nose:</b> <i>WNL</i>  <b>Teeth:</b> <i>Dentures</i></p>	<p><i>Normocephalic, anicteric sclera, moist mucous membranes, no oral lesions. The head and neck are symmetrical. Trachea is midline without deviation. Oral cavity pink moist and clear. Auricles are bilateral no visible deformities. The septum is midline no visible bleeding. The client wears glasses. The client’s EOMs are intact bilaterally and PERRLA bilaterally. Teeth are dentures. The top dentures are intact appropriately; the patient complains the bottom pair need a new fitting.</i></p>
<p><b>CARDIOVASCULAR:</b></p>	<p><i>Upon auscultation, there are clear S1 and S2</i></p>

<p><b>Heart sounds:</b> <i>Clear S1 and S2 sounds S1, S2, S3, S4, murmur etc.</i>  <b>Cardiac rhythm (if applicable):</b> <i>Normal</i>  <b>Peripheral Pulses:</b> <i>2+ bilaterally</i>  <b>Capillary refill:</b> <i>&lt; 3 seconds</i>  <b>Neck Vein Distention:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Edema</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Location of Edema:</b></p>	<p><i>sounds without murmurs or gallops. The client's point of maximum impulse is palpable. Normal rate and rhythm present. The patient's extremities are pink, dry, and warm. No edema present.</i></p>
<p><b>RESPIRATORY:</b>  <b>Accessory muscle use:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Breath Sounds: Location, character</b></p>	<p><i>Breathing is equal and non-labored. Upon assessment the anterior and posterior breath sounds are clear bilaterally.</i></p>
<p><b>GASTROINTESTINAL:</b>  <b>Diet at home:</b> <i>Regular</i>  <b>Current Diet</b> <i>Regular</i>  <b>Height:</b> <i>5'6"</i>  <b>Weight:</b> <i>134lbs</i>  <b>Auscultation Bowel sounds:</b> <i>Active in all quadrants</i>  <b>Last BM:</b> <i>4/13/2022</i>  <b>Palpation: Pain, Mass etc.:</b> <i>N/A</i>  <b>Inspection:</b>          <b>Distention:</b> <i>None</i>          <b>Incisions:</b> <i>None</i>          <b>Scars:</b> <i>None</i>          <b>Drains:</b> <i>None</i>          <b>Wounds:</b> <i>None</i>  <b>Ostomy:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Nasogastric:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>          <b>Size:</b>  <b>Feeding tubes/PEG tube</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/></p>	<p><i>Upon initial inspection, the client's abdomen appears flat. There are active bowel sounds in all four quadrants. The client is 5 foot 6 inches and 134 pounds. The client appears to have a normal appetite and follows a normal diet. There is no distention, scars, incisions, drains, or wounds visible upon assessment.</i></p>

<p><b>Type:</b></p>	
<p><b>GENITOURINARY:</b>  <b>Color:</b> Amber  <b>Character:</b> Hazy  <b>Quantity of urine:</b>  <b>Pain with urination:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Dialysis:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Inspection of genitals:</b>  <b>Catheter:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Type:</b>  <b>Size:</b></p>	<p><i>Urine is amber in color and hazy. The patient's lab results indicate a possible urinary tract infection which would explain the color and character of the urine.</i></p>
<p><b>MUSCULOSKELETAL:</b>  <b>Neurovascular status:</b>  <b>ROM:</b>  <b>Supportive devices:</b>  <b>Strength:</b>  <b>ADL Assistance:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Fall Risk:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/>  <b>Fall Score:</b> 8  <b>Activity/Mobility Status:</b>  <b>Independent (up ad lib)</b> <input type="checkbox"/>  <b>Needs assistance with equipment</b> <input type="checkbox"/>  <b>Needs support to stand and walk</b> <input checked="" type="checkbox"/></p>	<p><i>Patient neuros are intact with full range of motion in extremities. She is mobile. Her fall score is 8. The patient shows no signs of muscular atrophy in limbs. Patient is at a low risk of falling but has a bedside sitter because of the confusion.</i></p>
<p><b>NEUROLOGICAL:</b>  <b>MAEW:</b> Y <input checked="" type="checkbox"/> N <input type="checkbox"/>  <b>PERLA:</b> Y <input checked="" type="checkbox"/> N <input type="checkbox"/>  <b>Strength Equal:</b> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> <b>if no -</b>  <b>Legs</b> <input type="checkbox"/> <b>Arms</b> <input type="checkbox"/> <b>Both</b> <input type="checkbox"/>  <b>Orientation:</b>  <b>Mental Status:</b>  <b>Speech:</b>  <b>Sensory:</b></p>	<p><i>Patient is oriented to place and self but <b>disoriented to time and setting</b>. Her level of consciousness is alert. He shows equal strength and clear speech. The client's strength is equal throughout. The client was able to perform finger grips and pedal pushes without difficulty.</i></p>

<b>LOC:</b>	
<b>PSYCHOSOCIAL/CULTURAL: Coping method(s): Developmental level: Religion &amp; what it means to pt.: Personal/Family Data (Think about home environment, family structure, and available family support):</b>	<i>Appropriate affect, good eye contact, and a normal speech pattern. For coping, patient's daughter in law and son visits. The patient is a Baptist. She practices at Grace church in Mahomet. Developmental level is appropriate for the patient's age – normal adult.</i>

**Vital Signs, 2 sets (5 points) – HIGHLIGHT ALL ABNORMAL VITAL SIGNS**

<b>Time</b>	<b>Pulse</b>	<b>B/P</b>	<b>Resp Rate</b>	<b>Temp</b>	<b>Oxygen</b>
<i>0720</i>	<i>70</i>	<i>124/60</i>	<i>19</i>	<i>97.6 F</i>	<i>97</i>
<i>1130</i>	<i>82</i>	<i>127/69</i>	<i>18</i>	<i>97.6 F</i>	<i>100</i>

**Pain Assessment, 2 sets (2 points)**

<b>Time</b>	<b>Scale</b>	<b>Location</b>	<b>Severity</b>	<b>Characteristics</b>	<b>Interventions</b>
<i>0720</i>	<i>5</i>	<i>Head and Neck</i>	<i>Constant</i>	<i>Dull</i>	<i>Her aspirin scheduled this morning should help relieve the pain. The patient plans to take a nap.</i>
<i>1115</i>	<i>3</i>	<i>Head and</i>	<i>Moderate</i>	<i>Dull "I broke</i>	<i>N/A</i>

		<i>neck</i>		<i>my neck, so I always have this pain.”</i>	
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**IV Assessment (2 Points)**

<b>IV Assessment</b>	<b>Fluid Type/Rate or Saline Lock</b>
<b>Size of IV:</b> <i>20 G</i> <b>Location of IV:</b> <i>Right wrist</i> <b>Date on IV:</b> <i>4/5/22</i> <b>Patency of IV:</b> <i>Intact</i> <b>Signs of erythema, drainage, etc.:</b> <i>None</i> <b>IV dressing assessment:</b> <i>Clear, dry, and intact</i>	<i>Patient is on fluid therapy. Patient tolerated IV placement well.</i>

**Intake and Output (2 points)**

<b>Intake (in mL)</b>	<b>Output (in mL)</b>
<i>984 mL (previously documented within the 24-hour time frame)</i> <i>500 mL (normal saline – running during time of clinical)</i> <i>480 mL (water)</i>	<i>1750 mL</i>

**Nursing Care**

**Summary of Care (2 points)**

**Overview of care:** *Vitals are stable. Patient is medically ready for discharge but pending clinical improvement and recommendation from psych.*

**Procedures/testing done:** *CT of brain performed 4/5/22*

**Complaints/Issues:** *Complaints of dull neck and head pain from previous injury.*

**Vital signs (stable/unstable):** *Stable*

**Tolerating diet, activity, etc.:** *Patient is on a normal diet and is tolerating normal daily activities well.*

**Physician notifications:** *Acute metabolic encephalopathy improving delirium versus cognitive deficits. Lithium toxicity is resolved.*

**Future plans for the client:** *Continue fluid therapy, place client into memory unit placement, discontinue lithium, B12 daily supplement, psych has recommended 5mg Aricept daily.*

**Discharge Planning (2 points)**

**Discharge location:** *Patient is needing 24/7 supervision and it is unsafe to discharge her alone at her own home. Daughter-in-law, Jamie, was informed that Eagle's view memory care unit has her on the wait list, but there is no anticipated date of admission yet. Jamie states she will contact the case manager if they have reconsidered taking patient with them in their home.*

**Home health needs (if applicable):** *24/7 supervision, PT/OT being recommended.*

**Equipment needs (if applicable):** *None recorded*

**Follow up plan:** *Follow up with PCP after discharge.*

**Education needs:** *Patient should be educated on lithium toxicity and the signs and symptoms of the toxicity. instruction for him and family on identifying an OD and when/how to administer the medication.*

**Nursing Diagnosis (15 points)**

**\*Must be NANDA approved nursing diagnosis and listed in order of priority\***

<p><b>Nursing Diagnosis</b></p> <ul style="list-style-type: none"> <li>• Include full nursing diagnosis with “related to” and “as evidenced by” components</li> <li>• Listed in order by priority – highest priority to lowest priority pertinent to this client</li> </ul>	<p><b>Rationale</b></p> <ul style="list-style-type: none"> <li>• Explain why the nursing diagnosis was chosen</li> </ul>	<p><b>Interventions (2 per dx)</b></p>	<p><b>Outcome Goal (1 per dx)</b></p>	<p><b>Evaluation</b></p> <ul style="list-style-type: none"> <li>• How did the client/family respond to the nurse’s actions?</li> <li>• Client response, status of goals and outcomes, modifications to plan.</li> </ul>
<p><i>Acute confusion related to lithium toxicity as evidenced by disorientation to time and setting.</i></p>	<p><i>I chose confusion as the first diagnosis because this was the patient’s chief complaint.</i></p>	<ul style="list-style-type: none"> <li>• <i>Assess patient’s LOC and changes in behavior to provide baseline for comparison within ongoing assessment findings</i></li> <li>• <i>Have a staff member stay at patient’s bedside, if necessary, to protect patient from harm as long as</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Patient will experience no injury</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Patient does not experience injury during episodes of acute confusion</i></li> <li>• <i>Family members report an increased ability to cope with patient’s confused state.</i></li> </ul>

		<i>patient is confused</i>		
<i>Risk for injury related to confusion as evidenced by bedside sitter</i>	<i>Priority of the patient is always safety which is addressed with this nursing diagnosis</i>	<ul style="list-style-type: none"> <li>• Assist patient and family to identify situations and hazards that can cause accidents to increase patient’s awareness of potential dangers</li> <li>• Encourage patient to make repairs and remove potential safety hazards from environment to decrease possibility of injury</li> </ul>	<ul style="list-style-type: none"> <li>• Patient will remain free from physical injury</li> </ul>	<ul style="list-style-type: none"> <li>• Patient and family identify and eliminate safety hazards in their surroundings</li> <li>• Patient and family members demonstrate prevention and safety precautions</li> </ul>
<i>Deficient knowledge related to lithium’s small therapeutic window as evidenced by her possible overdose.</i>	<i>The patient should have a solid understanding of each prescribed medication and the possible effects if taken incorrectly or in excess</i>	<ul style="list-style-type: none"> <li>• Find a quiet, private environment for teaching patient and support person.</li> <li>• Establish environment of mutual trust and respect to enhance learning.</li> </ul>	<ul style="list-style-type: none"> <li>• Patient will state or demonstrate understanding of what has been taught.</li> </ul>	<ul style="list-style-type: none"> <li>• Patient expresses motivation to learn</li> <li>• Patient states understanding of all that has been learned.</li> </ul>

**Other References (APA):**

Linda Lee Phelps. (2020). *Sparks & Taylor’s Nursing Diagnosis Reference Manual*. Wolters Kluwer Medical.

**Concept Map (20 Points):**



### Subjective Data

### Nursing Diagnosis/Outcomes

#### Nursing Diagnosis

- Acute confusion related to lithium toxicity as evidenced by disorientation to time and setting. *Patient complains of headache.*
- Risk for injury related to confusion as evidenced by bedside sitter. *Patient complains of neck pain.*
- Deficient knowledge related to lithium's small therapeutic window as evidenced by her possible overdose

#### Outcomes

- Patient will experience no injury
- Patient will remain free from physical injury
- Patient will state or demonstrate understanding of what has been taught.

### Objective Data

### Client Information

### Nursing Interventions

- Assess patient's LOC and changes in behavior to provide baseline for comparison. *The patient is a 65-year-old Caucasian female brought to the ED for possible confusion and involuntary movements that started (4/5). The patient on admission was alert and awake, Temperature: 97.6°, oriented to person only. Knows date of birth but not current month/year*
- Have a staff member stay at patient's bedside, if necessary, to protect patient from falls as long as patient is confused
- Assist patient and family to identify situations and hazards that can cause accidents to increase patient's awareness of potential dangers
- Encourage patient to mark repairs and combine potential safety hazards from environment
- Find a quiet, private environment for teaching patient and support person.
- Establish environment of mutual trust and respect to enhance learning.





