

SCE Title: Dementia and UTI in a Patient with DNR Orders



Patient Name: Edward Mellen

Patient Age: 87

DOB: 08/01/1936

Patient Gender: Male

Patient Weight: 55kg

Height: 175cm

Base Patient/Handoff Report:

Patient History:

Past Medical History: The patient has Lewy body dementia and resides in a long-term care facility. He has a known history of hypertension, for which he takes medication. Two weeks ago an NGT was passed and feeding commenced due to difficulty in swallowing. She is awaiting placement of a permanent feeding tube.

Allergies: NKDA

Medications: Hydrochlorothiazide 25 mg twice a day, atenolol 50 mg twice a day, prophylactic aspirin 81 mg daily

Code Status: DNR

Social/Family History: The patient is widowed and has one daughter who is his next of kin. The patient's daughter lives in Australia. The daughter visited the patient three months ago and at that time a DNR order was initiated. The DNR order is clearly documented in accordance with all legal requirements in all records.

Handoff Report

The learners are expected to notify the healthcare provider of abnormal assessment findings where appropriate and necessary.

The report should follow the ISBARQ format and include:

Identify:

Edward Mellen age 87 DOB 8/1/1936 Male

Situation:

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The patient is an 87-year-old male with Lewy body dementia who has a suspected UTI and has been admitted directly from the long-term care facility where he resides. He is extremely agitated and has a documented DNR order. He has pulled his NGT out.

Background:

The patient has Lew body dementia, hypertension, and difficulty swallowing. He is awaiting placement of a permanent feeding tube. His next of kin, his daughter, lives in Australia.

Assessment:

Vital signs: HR 104, BP 132/96, RR 30, SpO2 92% on room air, Temperature 37.8C

General Appearance: Agitated, shouting, and disheveled

Cardiovascular: Sinus rhythm

Respiratory: Bilateral Crackles

GI: Hyperactive bowel sounds. Was being fed by BGT but has pulled out the tube

GU: Incontinent

Extremities: Not formally assessed, as patient is agitated. Moves all extremities purposefully with moderate strength

Skin: Warm. Bruises in various stages of healing

Neurological: Pupils are round and reactive to light. Does not follow commands. Due to her dementia and current agitated state, a full neurological assessment cannot be performed.

IVs: Saline lock in the right forearm

Fall Risk: High Risk

Pain: Unable to assess

Recommendations:

Admit to Medical-Surgical Unit, re-insert the nasogastric tube for fluids and nutrition, resume tube feedings and begin antibiotic treatment.

Questions:

Overview/Synopsis:

The learners are providing care for an 87-year-old male patient with Lewy body dementia. The patient has a do not resuscitate (DNR) order and has been directly admitted from a long-term care Dementia Unit to the Medical-Surgical Unit after developing a suspected urinary tract infection (UTI)

In state 1 Patient arrives on Unit--the patient demonstrates a HR in the 90s to 100s, BP in the 130s/90s, RR in the 30s, SPO2 in the low-90s on room air and a temperature of 37.8C. Crackles are heard in the lower lobes on chest auscultation. Heart sounds are normal. He is awake, shouting and very agitated. His pupils are equal and reactive to light. Bowel sounds are

hyperactive. He is incontinent of a small amount of urine with a strong odor. When the learners call for the lab results, the facilitator should provide the following report: Blood Glucose: 90; Chemistry: Na 148, K 4.0, BUN 22, Creatinine 1.0, Chloride 108; CBC: WBC 13, Hgb 15, HCT 53%. The learners are expected to demonstrate effective communication strategies and perform a physical assessment for a patient who is agitated, disoriented and shouting. The learners should prepare equipment to insert a nasogastric tube (NGT) and urinary catheter. The learners should initiate the IV fluid infusion, recognize the need for oxygen therapy and notify the healthcare provider.

Once the healthcare provider is notified, new orders are received. The learners are expected to administer oxygen. When the learners place the nasal cannula on the patient, the facilitator should open the Oxygen Intervention Option and choose Oxygen: Nasal Cannula 2 LPM

***In state 2 Condition Worsens** the learners are expected to reassess and manage the patient as his condition deteriorates, with a HR in the 100s to 110s, BP in the 120s to 130s/90s, RR in the mid-30s and SpO₂ in the high 80s on oxygen at 2 LPM via nasal canula. The patient sounds more breathless and remains agitated. When learners ask, the facilitator should report that the fingerstick glucose is 85. The learners are expected to repeat a focused assessment, monitor the IV infusion and report changes in the patient's condition to the healthcare provider. After new orders are received, the learners are expected to apply oxygen at 100% non-rebreather mask. When the learners administer the oxygen, the facilitator should open the Oxygen Intervention Option and choose Oxygen: Fraction of Inspired Oxygen 100%*

***In state 3 Condition Improves** The pt.'s, HR in the 100s BP in the 120s to 130s/90s, RR in the 20s and SpO₂ in the mid-90s on 100% oxygen via non-rebreather mask. His temperature is now 37.2C. Although he is still shouting, he is no longer breathless. The learners are expected to perform a focused assessment. The NGT and urinary catheter should be inserted, as the patient is no longer agitated and breathless. The learners should request a chest x-ray to confirm NGT placement. The learners should discuss the feeding regiment with the dietitian. Medications should be administered once NGT placement is confirmed. The learners should attempt to contact the patient's daughter by telephone to keep her informed of her father's condition.*

This SCE prepares the learners for the following items of the NCLEX-RN test format:

NCLEX-RN Test Plan:

Safe and effective care environment

Management of Care

Health Promotion and Maintenance

Psychosocial Integrity

Physiological Integrity

Basic Care and Comfort

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Pharmacological and parenteral Therapies

Reduction of Risk Potential

Physiological Adaptions

Orders:

Admission Orders—

Admit to Medical Surgical Unit

Diagnosis: Lewy body dementia and UTI

DNR

NPO

Bedrest until AM then may be out of bed with continuous supervision

Saline Lock

Docusate Sodium 100 mg daily via NGT

Hydrochlorothiazide 25 mg every 12 hours via NGT

Atenolol 50 mg every 12 hours via NGT

Aspirin 81 mg daily via NGT

Acetaminophen 650 mg via NGT or rectal suppository every 4 hours prn for fever or pain

Orders—State 1

Start oxygen at 2 LPM via nasal cannula

Give Zyprexa 5 mg IM STAT and PRN daily for agitation

Oxygen 100% via non-rebreather

Call if SpO₂ is less than 94% on the non-rebreather. May titrate oxygen to keep SpO₂ greater than 94%

ABG in 1 hour and in AM

CBC, Electrolytes, BUN, Creatinine, Glucose, Urea

Place NGT

Orders Received in State 2:

Oxygen at 100% via non-rebreather

Call if SpO₂ is less than 94% on the non-rebreather. May titrate oxygen to keep SpO₂ greater than 94%

ABG in 1 hour and in AM

Chest x-ray for NGT placement, if successful

Insert urinary catheter

Consult a dietician for nutritional support

Learning Objectives:

Identifies the signs and symptoms of urinary tract infection, hypoxia and dehydration-

UNDERSTANDING

Analyzes data and uses findings to formulate appropriate nursing interventions- ANALYZING

Demonstrates therapeutic communication with an agitated patient with dementia- APPLYING

Performs appropriate interventions for the elderly patient with dehydration and urinary tract infection- APPLYING

Formulates a plan of care for the patient with dementia, dehydration, urinary tract infection and deteriorating respiratory status-CREATING

Records and reports care appropriately- APPLYING

Evaluates effectiveness of care and adjusts the plan of care accordingly-EVALUATING

Learning Performance Measures:

- Reviews patient's medical record
- Performs hand hygiene before and after patient contact
- Demonstrates appropriate use of personal protective equipment
- Introduces self to patient
- Verifies patient identity with two identifiers
- Conducts basic environmental safety assessment and maintains safety measures
- Uses therapeutic communication to establish rapport and reduce patient anxiety
- Calculates and administers medications safely according to the Six Rights
- Provides developmentally appropriate education
- Evaluates effectiveness of communication
- Evaluates effectiveness of education
- Documents all findings, interventions, and patient responses

State 1 Patient Arrives to Unit Performance Measures

- Completes a physical assessment of the patient with dementia
- Attempts effective communication with the patient despite the patient's verbal outbursts
- Tries to use therapeutic communication to establish rapport and reduce patient anxiety
- Identifies normal and abnormal findings
- Explain all procedures and interventions to the patient before implementing
- Prepares equipment for NGT and urinary catheter insertion and approaches patient in a calm manner

SCE Development

- Avoids traumatic insertion of NGT and urinary catheter when the patient is combative and uncooperative
- Initiates intravenous fluids as ordered when unable to pass the NGT
- Anticipates the need for oxygen
- Informs the healthcare provider of the abnormal findings, laboratory values and inability to insert NGT and urinary catheter

Performance Measures After State 1 Orders Received:

- Administers oxygen at 2 LPM via nasal cannula
- Administers IM Zyprexa

State 2 Condition Worsens Performance Measures

- Performs a focused assessment
- Monitors the IV pump and patient frequently to ensure correct operation and flow rate and early detection of infiltration
- Administers the antibiotics according to the Six Rights
- Obtains the fingerstick glucose results
- Reassesses the patient, identifies the deterioration in the patient's respiratory condition and notifies the healthcare provider.

Performance Measures After State 2 Orders Received:

- Changes oxygen to a non-rebreather mask at 100%
- Notifies lab of orders
- Prepares the equipment but does not attempt NGT and urinary catheter insertion until the patient's condition improves with oxygen.

State 3 Condition Improves Performance Measures:

- Performs a focused assessment
- Monitors the IV pump and the patient frequently and ensures the correct operation and flow rate and early detection of infiltration
- Maintains oxygen at 100%
- Insert the NGT and urinary catheter using the correct technique
- Consults with dietitian regarding feeding regimen
- Administers medications via the NGT according to the Six Rights once NGT placement is confirmed
- Attempts to contact the patient's daughter to update her on the patient's status

Preparation Questions:

Medication Dosage Calculation Skills: -Medication orders and S.I. Units

Tablets and Capsules

I.V. Infusions

Injectable Medicines Therapy:

Intermittent Infusions

Equipment & Supplies:

IV supplies

10mL distilled water (2) (labeled 0.9% Sodium Chloride flush)

20-gauge IV catheter

Transparent dressing

1000 mL distilled water (labeled Dextrose 5% in 0.45% Normal Saline)

IV pump

IV pump tubing

IV piggyback secondary tubing (2)

Genitourinary Supplies

16 Fr. Urinary catheter insertion kit with drainage bag

Distilled water 1000 mL with 2 mL of yellow food coloring for urine source

Miscellaneous:

Patient chart with appropriate forms and order sheets

Patient ID band

Stethoscope

BP cuff adapted for use with simulator

Non-Sterile Gloves

Sharps Container

Thermometer

3XL pajamas or nightgown

Baby Food

Yellow food coloring

Purple eyeshadow

Yellow eyeshadow

Light green eyeshadow

Petroleum jelly

Monitors Required:

ECG

NIBP

SpO2

Medication Supplies

Distilled water 250 mL (Labeled Ciprofloxacin 500 mg)

Simulated oral medications (6) labeled:

- *Acetaminophen 350 mg per tablet (2)*
- *Atenolol 50 mg*
- *Hydrochlorothiazide 25 mg*
- *Aspirin 81 mg*
- *Zyprexa 5 MG IM*

Medication bottle with liquid (30mL) (labeled Docusate Sodium 100 mg per 15 mL)

Medication bottle with liquid (100mL) (labeled Acetaminophen 350 mg per 15 mL)

Oxygen, Airway and Ventilation Supplies

Oxygen flowmeter

Oxygen source

Nasal cannula

Pulse Oximeter

Non-rebreather mask

Additional oxygen delivery devices for learners to choose from (optional) (1 of each)

Gastrointestinal Supplies

14 fr nasogastric tube (3)

Nasogastric feeding pump tubing

Nasogastric feeding pump

50 mL piston syringe

Tape

Feeding bag containing distilled water (labeled High-Protein, Isotonic Enteral Nutrition)

pH testing strips

Facilitator Notes:

This SCE was created with the patient Edward Mellen, and only this patient can be used. The physiological values documented indicate appropriate and timely interventions. Differences will be encountered when care is not appropriate or timely. The facilitator should not click “Run” until ready to start the SCE.

Learners should perform an appropriate physical exam. The facilitator or patient should verbalize the physical findings the learners are seeking but not enabled by the simulator (such as pain on palpation). The facilitator should use the microphone and/or preprogrammed vocal or audio sounds to respond to the learners’ questions, if present on your simulator.

Where appropriate, do not provide information unless specifically asked by the learners. In addition, ancillary results (e.g., ECG, chest x-ray, labs) should not be provided until request them.

If the patient becomes unconscious in the SCE, then speaking and vocalization should cease.

It is important to moulage the simulator to enhance the fidelity or realism of the SCE. For this patient:

- *Place a white or gray wig on the simulator. Run fingers through the wig to give a disheveled appearance.*
- *Place a personal protective brief prepared with approximately 50 mL dark simulated urine on the simulator. To create dark urine, mix 50 mL tap water with small amount of powdered tea mix and 5 mL ammonia*
- *Dress the simulator in oversized pajamas*
- *Place in supine position. Place one leg and one arm over bedside rails and slide the simulator down to depict restlessness. To simulate agitation, the facilitator can move the extremities into random positions when learners are distracted*
- *Drops of baby food may be placed on the patient's oversized clothing to give the appearance of dried food*
- *Place small areas of thin, almost dry petroleum jelly on the simulator's arms, legs and forehead. Pat yellow and purple eyeshadow over these areas to give the appearance of bruises in various stages of healing*
- *Place tape in the appropriate area on an NGT, coat the lower portion of the NGT with water-soluble jelly and place the NFT on the chest to indicate that the patient has pulled it out*
- *Prime the genitourinary system feature prior to the simulation. Remove the catheter after priming is complete, as the learners are to insert the catheter during the SCE*
- *The learners receive an order to reinsert the NGT. For simulators with the NGT insertion feature, prepare the feature for use. For simulators without the NGT insertion feature, distract or remove the learners from the bedside. Take an NG tube that has been cut 16 inches from the suction port. Insert the tube 4 inches into the nare or mouth then tape it in place. Fluids must NOT be administered through the simulated NGT, as this will damage the simulator*
- *Place a saline lock in the right arm prior to simulation.*

When the learners initiate cardiac monitoring, the tracing and heart rate appear on a real ECG monitor. For facilities without ECG monitoring, have the learners apply ECG electrodes to the mannequin and attach the leads. Once all 3 or 5 leads are in place, reveal the TouchPro ECG tracing.

Simulation Personnel should play the following roles:

- *Healthcare provider*
- *Dietician*

SCE Development

- *Laboratory Technician*
- *Transferring Unit*
- *Daughter on the telephone*

Make a patient chart with the appropriate written order forms, MARs Diagnostic results, etc. for learners to utilize. The chart should include the specific patient identification information.

Begin the simulation with the transferring unit (simulation personnel) providing verbal handoff to the admitting unit (learner) using ISBARRQ

Have the learners role-play inter-professional communication by reporting the patient's response to interventions. If the data presented is disorganized or missing vital components, have the healthcare provider respond inappropriately. Emphasize the importance of data organization and completeness when communicating. Role-play intra-professional communication by having the learners hand off to the admitting or transferring unit or have the learners hand off to the next shift.

Debriefing and instruction after the scenario are critical. Learners and facilitators may wish to view a video of the scenario afterward for instructional and debriefing purposes.

Debriefing Points:

The facilitator should begin by introducing the process of debriefing:

- *Introduction: Discuss faculty role as a facilitator, expectations, confidentiality, safe-discussion environment*
- *Personal Reactions: Allow learners to recognize and release emotions, explore learners' reactions*
- *Discussion of events: analyze what happened during the SCE, using video playback if available*
- *Summary: Review what went well and what did not, identify areas for improvement and*

evaluate the experience

Questions to be asked during debriefing:

- *What was the experience like for you?*
- *What happened and why?*
- *What did you do and was it effective?*
- *Discuss your interventions (technical and non-technical). Were they performed appropriately and in a timely manner?*
- *How did you decide on your priorities for care and what would you change?*
- *How did patient safety concerns influence your care? What did you overlook?*
- *In what ways did you personalize your care for this patient and family members (recognition of culture, concerns, anxiety)?*
- *Discuss your teamwork. How did you communicate and collaborate? What worked, what didn't work and what will you do differently next time?*
- *What are you going to take away from this experience?*

Teaching Q&A:

State 1 Patient Arrives on Unit:

What assessments are important for this patient?

- **Respiratory**
- **Cardiovascular**
- **Infection**
- **Nutrition/Hydration**

What are the abnormal findings?

- **RR, Temperature, SpO2**
- **Hyperactive bowel sounds**
- **Confusion**
- **Lab values indicate poor hydration**
- **Lab values indicate an infectious process**
- **Bruises may indicate abuse**

What is the significance related to each abnormal finding?

- **RR indicates hypoxic due to infection. Hypoxic causes altered cerebral perfusion, exacerbating dementia**
- **Temperature indicates sepsis due to infection. Sepsis increases metabolic demands, requiring oxygen and glucose**
- **Confusion is caused by hypoxia and sepsis. This makes it difficult to assess the patient's mental status**
- **Bruising should be documented and discussed with the nursing home**

Why is it important that the nurse report all the abnormal findings when providing ISBARRQ by phone?

- **When help is requested via telephone, the responder only acts on the information given. Learners need to be accurate and concise in their report. IF not, the patient may come to harm.**

How can the nurse support this patient emotionally?

- **Use empathetic communication techniques. Keep the patient in familiar clothing. Use a calendar and photos from the nursing home to aid in remembering**

What is Dementia?

- **An umbrella term describing a decline in a cognitive function due to damage or disease other than what is expected from the normal process of aging.**
- **Diagnosed in part by a Mini-Mental State Examination (MMSE) or the Abbreviated**

Mental Test Score (AMTS). The term comes from the Latin “de” meaning “apart/away” and “mentis” meaning “mind”

What is Lewy body dementia?

- ***Impaired cognitive function due to abnormal proteinaceous cytoplasmic masses, a reduction in dopamine-producing neurons and loss of acetylcholine-producing neurons.***

What drugs can be used to assist cognitive functioning in a patient with dementia?

- ***Acetylcholinesterase inhibitors (tacrine, donepezil, galantamine, and rivastigmine) do not halt the disease but improve memory and thought for patients with mild to moderate dementia***
- ***N-methyl-D-aspartate (NMDA) blockers (memantine) produce notable improvements in basic activities of daily living for patients with moderate to severe dementia***

State 2 Condition Worsens

Why is it important to reassess the patient?

- ***After any treatment or if the patient shows a change in presentation, it is imperative to reassess, because the elderly patient may or may not respond positively to treatment***
- ***In this case, the patient is sounding more breathless and is unable to complete a sentence. This is a change in condition that warrants reassessment***

Why is the patient’s blood pressure elevated?

- ***The patient has a history of hypertension and has not been able to receive her medications, as she removed her NGT***
- ***He is also agitated, anxious and in distress, which will cause elevation of his pulse, RR and BP***

What should the nurse be alert for in the patient’s vital signs given her predisposition for sepsis?

- ***Dramatic decrease in blood pressure due to venous dilation caused by toxins***

State 3 Condition Improves:

Why is it important to reinsert the NGT?

- ***The patient is still not receiving adequate nutrition***
- ***The patient is being treated for an infection and needs calories to aid healing***

Should this patient have been treated even with a DNR order?

- ***Yes. Withholding treatment is not the same as resuscitating. Refer to your local and national guidelines. When do not resuscitate orders are given, their meaning should be clearly documented. This patient had a treatable infection and prior to this episode appeared to be settled in the nursing home***

Should this patient be transferred back to the nursing home and, if so, what actions need

SCE Development

to be taken?

- *The decision should be made between the daughter and healthcare provider*
- *If the patient returns, the nursing home staff needs to be trained on the patient's care and management*

References:

Preloaded Scenarios: