Patient Chart
121
Theresa Jones

HISTORY & PHYSICAL

Chief Complain: “I don’t know where I am.”

HPI: Theresa (Terry) Jones is a 78 y/o female with hypertension (HTN), type 2 diabetes mellitus (T2DM), coronary artery disease (CAD), and chronic kidney disease (CKD) stage III. She lives alone in a small apartment in a senior assisted-living facility and was found confused and disheveled by the facility staff. EMS transported her to the hospital for a medical evaluation.

PMX: Five-year history of HTN, T2DM, CAD, and CKD stage III.

Family HX: Not available at this time.

Social History: Terry Jones is widowed (6 months ago) – living independently at a senior assisted-living facility. She has 3 grown children living out-of-state who remain in contact with their mother.

REVIEW OF SYSTEMS

Constitutional: Denies anorexia, weight loss or gain. Reports feeling “warm” and “feverish”.
HEENT: Decreased hearing acuity noted. Denies blurred vision, diplopia, irritation, discharge, vision loss, eye pain, photophobia, ear pain or discharge, tinnitus, nasal obstruction or discharge, nosebleeds, sore throat, hoarseness, dysphagia. Will re-evaluate once confusion resolves.
Skin: Denies breaks in skin, bruising, rash, dryness, and/or suspicious lesions.
Cardiovascular: Denies chest pain, palpitations, syncope, numbness and/or tingling in extremities.
Respiratory: Denies cough, shortness of breath, chest pain with breathing. No recent history of respiratory infections. No history of smoking,
Gastrointestinal: Denies heartburn, abdominal pain, constipation, and/or diarrhea. Reports nausea & “no appetite” the past “couple of days.”
Genitourinary: Denies incontinence, dysuria, hematuria, urinary frequency, and/or nocturia.
Neurological: Denies transient paralysis, paresthesia, seizures, syncope, tremors, and/or vertigo**.**
Musculoskeletal: Denies joint pain/swelling, muscle cramps, muscle weakness, and/or stiffness.

PHYSICAL ASSESSMENT:

VITAL SIGNS: Temp. - 97.8°F (oral) **Pulse** - 110 bpm, NSR w/ occasional PVC’s **BP –** 92/50 mmHg **RR -** 28/min.
SpO2 - 93%on 4L/min O2, NC

GENERAL SURVEY: 78 y/o female on hospital gurney, appears fatigued, drowsy - dyspneic. Unreliable historian at this time r/t confusion. Visual disturbances noted during examination.
HEENT:

- Head: Normocephalic and atraumatic.
- Eyes: PERL’s. Extraocular muscles intact.
- Ears: Canals clear bilaterally, TM’s pearly gray, intact with good mobility. No fluid noted.
- Nose: nasal mucosa dry, septum, turbinates normal.
- Mouth: buccal mucosa dry, tongue normal, no erythema/exudate on posterior pharynx.
- Neck: supple, trachea midline, No carotid bruits. No lymphadenopathy or thyromegaly.

HISTORY & PHYSICAL (p 2)

PHYSICAL ASSESSMENT (continued)

SKIN: No rashes, lesions, ulcerations, subcutaneous nodules or indurations noted.

CARDIAC: S_1S_2, S_3 present, no S_4. No murmur present. Irregular rhythm noted. No thrill or palpable murmurs on palpation, no JVD, no displacement of PMI. No carotid or abdominal bruits. No enlargement of abdominal aorta. Carotid, radial, posterior tibialis, and pedal pulses 2+. 2+ pitting edema present bilaterally lower extremities.

PULMONARY: Clear to auscultation bilaterally, diminished lung sounds diminished at the bases.

GASTROINTESTINAL: Soft, non-tender, and non-distended abdomen with no masses; bowel sounds positive in all quadrants. No hepatosplenomegaly, liver nodularity, masses noted.

GENITOURINARY: Foley catheter in place draining small amount concentrated, dark yellow urine. No bladder distention, no bladder discomfort reported.

NEUROLOGIC: Drowsy, confused, oriented x 1 (person/self.) Cranial nerves: II - XII grossly intact. 2+ DTR’s bilaterally.

MUSCULOSKELETAL: Normal alignment & mobility; no deformity of neck, spine, ribs, pelvis noted. PROM present, equal strength in all extremities. No joint enlargement and/or tenderness.

ALLERGIES: NDKA

MEDICATIONS: Home medication history (reviewed with assisted living staff) includes:

- furosemide 40mg PO q day,
- aspirin 81 mg PO q day,
- glipizide 10 mg PO q day,
- carvedilol 25 mg PO BID, and
- atorvastatin 40 mg PO daily at bedtime (HS).

Assessment:
78-year-old female presented to the ED with confusion. Showing signs of dehydration with severely elevated blood glucose levels. Additional lab results pending. Diagnoses include:

1. Acute kidney injury (AKI) versus worsening of chronic kidney disease (CKD)
2. T2DM with questionable medication & diet adherence
3. Suspect acute renal problems related to T2DM
4. Debility & confusion related to AKI/CKD, T2DM
5. HTN
6. CAD

HISTORY & PHYSICAL (p 3)

Plan:

- Admit to medical intensive care unit (MICU).
- VS & monitoring every 1 hour per MICU protocol.
- Regular insulin IV infusion per hyperglycemic protocol.
- Bedside blood glucose monitoring Q1h.
- Tight glucose monitoring/control with accuchecks.
- Strict I&O and daily weight.
- Indwelling urinary catheter.

- Follow-up with pending diagnostic & lab results including:
  - Renal ultrasound,
  - CT abdomen, and
  - BMP results.

- CONTINUE home medications: *furosemide, aspirin, glipizide, carvedilol, atorvastatin*

- PRN medications
  - Acetaminophen 650 mg PO Q4H as needed (PRN) for fever and/or pain, and
  - Ondansetron 4 mg IV push Q4H PRN for nausea

- Discharge planning:
  - Contact case management to assist with contacting family re: hospital admission & discharge plans
  - Diabetic nurse consult if A1C > 9.0 – when confusion clears and condition improves.
  - PT/OT to evaluate patient before discharge: mobility, ADL's, safety issues.

Additional orders to follow.

Michael Evans MD

Dictated: ME MD
Today

Patient: Theresa Jones | DOB: 02/05/XX | Age: 78 y/o
Attending: Dr. Evans | Allergies: NKDA | MR#: 121
Diagnosis: Renal Failure T2DM, HHS | Gender: Female | Height: 5’4” Weight: 65kg

PHYSICIAN ORDERS

Date	Time	PHYSICIAN ORDERS AND SIGNATURE
Today	**Now**	Admit to Medical Intensive Care Unit **Condition:** Stable **Diagnoses**: • Acute kidney injury (AKI) versus Chronic Kidney Disease (CKD) • Hyperglycemic Hyperosmolar Syndrome (HHS) • Hypokalemia **Allergies**: NKDA **Oxygen:** 4L/min via NC, titrate to maintain SpO2 > 92% **Diet:** NPO pending further test results **Activity**: Bathroom privileges (BRP) with assist **Labs**: CBC, repeat BMP, BNP, HbA1C **Studies**: 2D echo to re-evaluate EF, renal ultrasound & CT abdomen w/out contrast **Nursing Communication:** Notify provider of arrival to unit. Follow unit protocols. **IV Fluids:** • 0.9% Normal Saline with 20 mEq KCl @ 150 mL/hr. • If serum K^+ less than 3.3 mEq/L hold insulin and treat hypokalemia until serum $^{K+}$ greater than 3.3 mEq/L* • 2 hours after initiating fluid replacement **begin insulin infusion**: a) Regular insulin (Novolin R 1U/mL) - 100 units regular insulin in 100 mLs 0.9% normal saline to run at 9.5 units/hr. b) Dose: 0.14 unit/kg/hour IV c) If blood glucose does not fall by 10% in first hour, give bolus of 0.14 units/kg while continuing insulin infusion, d) When blood glucose concentration reaches 300 mg/dL or less, decrease the insulin infusion to 0.02 – 0.05 units/kg/hr. e) When blood glucose reaches 200 mg/dL or less switch IV fluid to D5/0.45 NS (normal saline) **Daily Medications:** • heparin 5,000 units SC Q12H for venous thromboembolism (VTE) prophylaxis • pantoprazole 40 mg IVP Q24H for gastrointestinal (GI) prophylaxis **PRN Medications:** • ondansetron 4 mg IV push Q6h prn nausea • acetaminophen 650 mg PO Q4h prn pain/fever • morphine 2 mg IV push Q4h PRN severe pain • *Hypoglycemic protocol – MICU*, ordered • *Potassium electrolyte replacement protocol – MICU*, ordered *https://www.uwhealth.org/cckm/cpg/diabetes-and-endocrinology/related/DM-Diabetic-Ketoacidosis-DKA-Management-Algorithm-Adult-Patients-2019.pdf-
Today	**Now**	*Dr. Michael Evans MD*

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HYPOGLYCEMIC PROTOCOL – MICU

Blood glucose (BG) **less than 70 mg/dL** and patient unconscious, uncooperative, and/or NPO

Presentation	Immediate Action/Treatment	Repeat Orders
Patient receiving hypoglycemic medications or clinical suspicion of hypoglycemia based on signs and symptoms below: ○ Diaphoresis ○ Shakiness ○ Mental status changes ○ LOC changes ○ Headache ○ Hunger ○ Seizures	***Staff to remain with patient** **Do not wait for lab BG confirmation before treating** **Patient with IV access**: ○ Give 25 mLs (12.5 grams) of Dextrose 50% IV push over 1 minute, followed by saline flush ○ BG remains < 70 mg/dL, give 50 mLs (25 grams) of Dextrose 50% over 1 minute, followed by saline flush ○ If patient has an IV insulin infusion pause the insulin infusion ○ Call HCP/primary team **Patient without IV access and BS <60 mg/dL**: ○ Give 1 mg Glucagon SC or IM x 1 and insert IV stat ○ Call HCP/primary team	Repeat BG and retreat every 15 minutes ○ until BG > 70 mg/dL without symptoms or ○ BG > 80 mg/dL ○ Call HCP/primary team as appropriate Glucagon should be repeated x 1 only

Reference:
MD Anderson Cancer Center: Hypoglycemia Management (2018)
https://www.mdanderson.org/content/dam/mdanderson/documents/for-physicians/algorithms/clinical-management/clin-management-hypoglycemia-web-algorithm.pdf

POTASSIUM ELECTROLYTE REPLACEMENT PROTOCOL - MICU

Use to replace potassium as needed based on electrolyte lab results.

This protocol is to be used in ADULT patients with normal kidney function. Creatinine must be < 1.4 mg/dL and urine output must be at least 0.5 mL/kg/hr.in each of the prior 3 hours.

Use intravenous **OR** oral form of KCl depending on patient assessment.

Potassium normal range 3.5 – 5.1 mEq/L

I. INTRAVENOUS: These orders are for use with a peripheral line only.

SERUM POTASSIUM LEVEL	POTASSIUM REPLACEMENT ORDER
• Than 4.0 mEq/L	No treatment
3.5 – 3.9 mEq/L	If patient NPO, KCl 40 mEq/500 mL NS IV x 1 over 4 hours
2.5 – 3.4 mEq/L	KCl 40 mEq/500 mL NS IV x 2, each to be given over 4 hours IVPB
≤ 2.4 mEq/L	**Call physician** and give KCl 40mEq/500 mL NS IV x 2 each to be given over 4 hours

Redraw potassium level **2 hours after the treatment is complete**.

II. ORAL: use liquid/tablet if patient able to take or tolerate enteral medications and serum potassium level is 3.5 – 3.9 mEq/L.

SERUM POTASSIUM LEVEL	POTASSIUM REPLACEMENT ORDER
3.5 – 3.9 mEq/L	KCl 40 mEq PO/NG x 1 now

Redraw potassium level **2 hours after the treatment is complete.**

Reference: Thanks Esme (& your TICU friend) for sharing
University Medical Center: Adult Peripheral Line Electrolyte Replacement Protocol, page1
(NPHY 383 (12/13/12; Review by 12/14)
Available for review upon request

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NURSING FLOW SHEET

DATE: Today					
VITAL SIGNS	**TIME**	**1200**			
	BLOOD PRESSURE				
	PULSE				
	RESP RATE				
	TEMP				
PAIN	**SCORE**				
	LOCATION				
	CHARACTER				
RESP	**OXYGEN**				
	OXIMETER				
NUTR	**DIET / % EATEN**				
	SUPP FEEDING				
INTAKE	**PO**				
	IV				
OUTPUT	**URINE**				
	DRAINS				

PROBLEM / EVENT DOCUMENTATION	
DATE / TIME	
SIGNATURE	

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MEDICATION ADMINISTRATION RECORD Pg. 1

SCHEDULED MEDICATIONS		
MEDICATION	**0700 - 1859**	**1900 - 0659**
heparin 5000 units SC Q12H	0900	1800
pantoprazole 40mg IV push QDAY	0900	

SIGNATURE	INTLS	SIGNATURE	INTLS

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MEDICATION ADMINISTRATION RECORD Pg. 2

NON – SCHEDULED MEDICATIONS		
MEDICATION	**0700 - 1859**	**1900 - 0659**
acetaminophen 650 mg PO Q4H prn pain/fever		
ondansetron 4 mg IV push Q6H prn nausea		
morphine 2 mg IV push Q4H prn severe pain		
Hypoglycemic MICU protocol – see orders		
Electrolyte replacement MICU protocol – see orders		

SIGNATURE	INTLS	SIGNATURE	INTLS

Property of UNLV/CSCLV

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MEDICATION ADMINISTRATION RECORD Pg. 3

<table>
<tr><th colspan="3">IV Fluids CONTINOUS SOLUTIONS</th></tr>
<tr><th>MEDICATION</th><th>0700 - 1859</th><th>1900 - 0659</th></tr>
<tr><td>IV fluids:

0.9% Normal Saline with 20 mEq KCl @ 150 mL/hr.</td><td></td><td></td></tr>
<tr><td>IV Insulin:
• Regular insulin (Novolin R 1U/mL) - 100 units regular insulin in 100 mLs 0.9% normal saline to run at 9.5 units/hr.

• Dose: 0.14 unit/kg/hour IV</td><td></td><td></td></tr>
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• If blood glucose does not fall by 10% in first hour, give bolus of 0.14 units/kg while continuing insulin infusion</td><td></td><td></td></tr>
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• When blood glucose concentration reaches 300 mg/dL or less, decrease the insulin infusion to 0.02 – 0.05 units/kg/hr.</td><td></td><td></td></tr>
<tr><td>c. IV insulin:
• When blood glucose reaches 200 mg/dL or less switch IV fluid to D5/0.45NS (normal saline)</td><td></td><td></td></tr>
<tr><td></td><td></td><td></td></tr>
</table>

SIGNATURE	INTLS	SIGNATURE	INTLS

Property of UNLV/CSCLV

LAB STUDIES & DIAGNOSTICS

HEMATOLOGY		
LAB TEST	**NORMAL RANGE**	**PATIENT VALUE**
Red Blood Cells (RBC)	Males: 4.5 - 5.3 million /mm3 Females: 4.1 - 5.1 million/mm3	4.8
Hematocrit (HCT)	Males: 37 - 49% Females: 36 - 46%	50% (**H**)
Hemoglobin (HgB)	Males: 13.0 - 18.0 g/100 ml Females: 12 - 16 g/100 ml	18.3 g/100 dL (**H**)
White Blood Cells (WBC)	4,500 - 11,000/mm3	10.5
Platelets (PLT)	140 - 400 X 103 mm3	180
MCV	80 - 100	88
MCH	27 - 33	30
Reticulocyte count	0.5 - 2.5%	0.8%

LAB STUDIES & DIAGNOSTICS (drawn in ED)

CHEMISTRIES		
LAB TEST	**NORMAL RANGE**	**PATIENT VALUE**
Sodium (NA+)	135 - 145 mEq/L	144
Potassium (K+)	3.5 - 5.0 mEq/L	3.3 (**L**)
Chloride (CL-)	100 - 108 mEq/L	102
Carbon Dioxide (C02)	22 - 36 mEq/L	26
Magnesium (Mg++)	1.5 - 2.0 mEq/L	1.8
Glucose	70 - 110 mg/dL	601 (**H**)
Calcium (Ca++)	8.5 - 10.5 mg/dL	9.2
Phosphorous (P04)	2.6 - 4.5 mg/dL	3.2
Blood Urea Nitrogen (BUN)	8 - 25 mg/dL	48 (**H**)
Creatinine	Male: 0.6 - 1.5 mg/dL Female: 0.6 - 1.1 mg/dL	2.8 (**H**)
Osmolality	280 - 295 mOsm/kg	304 (**H**)
Albumin	3.5 - 4.8 g/dL	3.6
Pre-Albumin	19 - 38 mg/dL	22
Ammonia	15 - 56 ug/dL	48
Bilirubin	0.3 - 1.0 mg/dL	0.8
Conjugated (Direct) Bilirubin	0 - 0.2 mg/dL	0.1
Alkaline Phosphatase	50 - 160 u/L	54
AST	Male: 14 - 20 u/L Female: 10 - 36 u/L	30
ALT	10 - 35 u/L	14
Amylase	53 - 123 u/L	24
Lipase	10 - 150 u/L	14
Pro-BNP	Less than 450pg/mL	380
HgbA1C	4 – 5.6%	9.8% (**H**)

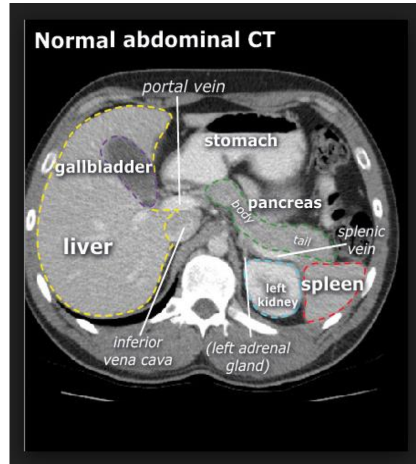
LAB STUDIES & DIAGNOSTICS

URINANLYSIS		
LAB TEST	**NORMAL RANGE**	**PATIENT VALUE**
Color	Pale yellow - amber	Dark yellow
Appearance	Clear to slightly hazy	Clear
Odor	Slight	None
Specific Gravity	1.005 – 1.030	1.036 (H)
pH	5.0 – 7.5	7.2
Glucose	≤ 130 mg/dL	2+ (H)
Ketones	Negative	Negative
Protein	Negative	1+ (positive)
Nitrite for bacteria	Negative	Negative
Leukocyte Esterase	Negative	Negative
Bacteria	None	None
White blood cells	≤2 - 5/hpf	None
Red blood cells	≤2/hpf	1
Squamous epithelial cells	≤15 – 20/hpf	Few
Yeast	None	None

IMAGING

CT ABDOMEN

Impression:
Negative CT of the abdomen.

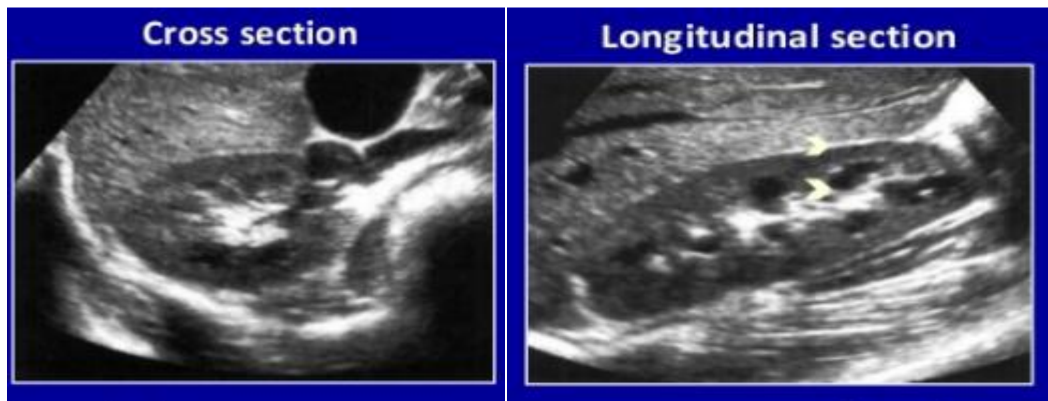


S. Howie MD

IMAGING

RENAL ULTRASOUND

Impression:
No tubular damage or obstruction noted. Negative renal ultrasound.



S. Howie MD

The following is the form of a “Declaration,” provided for under Nevada Statues:

DECLARATION

If I should have an incurable and irreversible condition that, without the administration of life-sustaining treatment, will, in the opinion of my attending physician, cause my death within a relatively short time, and I am no longer able to make decisions regarding my medical treatment. I direct any attending physician, pursuant to NRS 449.535 to 449.690, inclusive, to withhold or withdraw treatment that only prolongs the process of dying and is not necessary for my comfort or to alleviate pain.

If you wish to include the following statement in this declaration, you must INITIAL the statement in the box provided:

> Withholding or withdrawal of artificial nutrition and hydration may result in death by starvation or dehydration. Initial this box if you want to receive or continue receiving artificial nutrition and hydration by way of gastrointestinal tract after all other treatment is withheld pursuant to this declaration . . . . |_____|

Signed this _________________ day of _____________, 19______.

Signature: ______________________________
Address: _______________________________
____
____

The declarant voluntarily signed this writing in my presence.

Witness: _______________________________
Address: _______________________________
Witness: _______________________________
Address: _______________________________

The following is the form of a "Durable Power of Attorney for HealthCare Decisions" provided for under Nevada Statute:

DURABLE POWER OF ATTORNEY FOR HEALTHCARE DECISIONS WARNING TO PERSON EXECUTING THIS DOCUMENT

This is an important legal document. It creates a Durable Power of Attorney for HealthCare. Before executing the document you should know these important facts:

1. This document gives the person you designate as your Attorney-in-Fact the power to make health care decisions for you. The power is subject to any limitations or statement of your desires that you include in this document. The power to make health care decisions for you may include consent, refusal of consent, or withdrawal of consent to any care, treatment, service, or procedure to maintain, diagnose, or treat a physical or mental condition. You may state in this document any types of treatment or placements that you do not desire.
2. The person you designate in this document has a duty to act consistent with your desires as stated in this document or otherwise made known, or, if your desires are unknown, to act in your best interest.
3. Except as you otherwise specify in this document, the power of the person you designate to make health care decisions for you may include the power to consent to your doctor not giving treatment or stopping treatment which would keep you alive.
4. Unless you specify a shorter period in this document, this Power will exist indefinitely from the date you execute this document and if you are unable to make health care decisions for yourself, this power will continue to exist until the time when you become able to make health care decisions for yourself.
5. Notwithstanding this document, you have the right to make medical and other health care decisions for yourself so long as you can give informed consent with respect to the particular decision. In addition, no treatment may be given to you over your objection, and health care necessary to keep you alive may not be stopped if you object.
6. You have the right to revoke the appointment of the person designated in this document to make health care decisions for you by notifying that person of the revocation orally or in writing.
7. You have the right to revoke the authority granted to the person designated in this document to make health care decisions for you by notifying the treating physician, hospital, or other provider of health care orally or in writing.
8. The person designated in this document to make health care decisions for you has the right to examine your medical records and to consent to their disclosure unless you limit this right in this document.
9. This document revokes any prior Durable Power of Attorney for Health Care.
10. If there is anything in this document that you do not understand, you should ask a lawyer to explain it to you.

1. DESIGNATION OF HEALTHCARE AGENT

I, __________________________________ (insert your name) do hereby designate and appoint:
Name:
Address:
Telephone Number:
As my attorney-in-fact to make health care decisions for me as authorized in this document.
(Insert the mane and address of the person you wish to designate as your attorney-in-fact to make health care decisions for you. Unless the person is also your spouse, legal guardian or the person most closely related to you by blood, none of the following may be designated as your attorney-in-fact: (1) your treating provider of health care; (2) an employee of your treating provider of health care; (3) an operator of a health care facility; or (4) an employee of an operator of a health care facility.)

2. CREATION OF DURABLE POWER OF ATTORNEY FOR HEALTH CARE

By this document, I intend to create a Durable Power of Attorney by appointing the person designated above to make health care decisions for me. This power of attorney shall not be affected by my subsequent incapacity.

3. GENERAL STATEMENT OF AUTHORITY GRANTED

In the event that I am incapable of giving informed consent with respect to health care decisions, I hereby grant to the attorney-in-fact named above full power, and authority to make health care decisions for me before, or after my death, including: consent, refusal of consent, or withdrawal of consent to any care, treatment, service, or procedure to maintain, diagnose, or treat physical or mental condition, subject only to the limitations and special provisions, if any, set forth in paragraph 4 or 6.

4. SPECIAL PROVISIONS AND LIMITATIONS

(Your attorney-in-fact is not permitted to consent to any of the following: commitment to or placement in a mental health treatment facility, convulsive treatment, psychosurgery, sterilization, or abortion. If there is any other types of treatment or placement that you do not want your attorney-in-fact’s authority to give consent for or other restrictions you wish to place on your attorney-in-fact’s authority, you should list them in the space below. If you do not write any limitations, your attorney-in-fact will have the broad powers to make health care decisions on your behalf which are set forth in paragraph 3, except to the extent that there are limits provided by law.)

In exercising the authority under this Durable Power of attorney for HealthCare, the authority of my attorney-in-fact is subject to the following special provisions and limitations:

____

____