

CONGESTIVE HEART FAILURE (CHF)

University of Maryland Baltimore Washington Medical Center
 Minor Case Study Presentation, February 20, 2014

Data adapted to NCP form.

Nutrition Assessment: Medical Diagnosis							
Age: 59	Labs						
Gender: F	Lab	<u>2/3</u>	<u>2/4</u>	<u>2/5</u>	<u>2/6</u>	<u>2/7</u>	<u>2/10</u>
Height: 154.9 cm (5' 0.98")	Na	139	141	139	137	137	137
Weight: 74.3 kg (163.46 lbs)	K+	3.6	2.7	4.1	4.6	4.6	4.4
UBW: 61.3 kg (134.99 lbs)	Cl	96	96	96	93	98	96
BMI: 31 (obese)	BUN	13	12	16	20	27	37
BMI, UBW: 25.5 (overweight)	Cr	0.75	0.67	0.74	0.91	0.74	0.96
In-patient weights:	Ca total	9.0	8.9	9.0	9.5	9.8	9.7
2/03 73.4 kg	Mg	1.8	1.7	2.2	--	--	--
2/04 74.3 kg	GFR	>60	>60	>60	>60	>60	60
2/05 74.7 kg	Glucose	316	156	117	172	162	--
2/06 65.5 kg	FS: 2/04 206-265, 2/10 236-341						
	A1c (1/12/14) 14.7						
PMH	Medications						
- Type 2 Diabetes Mellitus	aspirin (analgesic; antipyretic; antiarthritic; NSAID; MI, CVA prevention)						
- Coronary Artery Disease	atorvastatin (antihyperlipidemic)						
- Cholelithiasis	clopidogrel (acute coronary syndrome treatment, MI prevention)						
- Congestive Heart Failure	furosemide (diuretic, antihypertensive) (hyponatremia)						
- Hyperlipidemia	insulin glargine (antidiabetic, hypoglycemic)						
- Myocardial Infarction	insulin lispro (antidiabetic, hypoglycemic)						
- Implantable Cardiac Defibrillator in place	losartan (antihypertensive, CHF treatment, type 2 diabetic nephropathy treatment, left ventricular dysfunction treatment)						
Symptoms	metoprolol (antihypertensive, antiangina)						
Dyspnea	nitroglyn (antiangina)						
Bilateral lower extremity edema	Mg Sulfate (repletion)						
Acute exacerbation of CHF	KCl (repletion)						
Diet History	Diet						
• <50% of usual PO intake x3 weeks.	2/3 NPO						
• Considerable decrease in appetite prior to 1/10/14 hospital admittance.	2/4 0645 Carbohydrate controlled standard, cardiac, 4gm sodium						
	2/4 1215 Carbohydrate controlled standard, cardiac, 2gm sodium						
Nutrition Diagnosis – utilize PES Statements							
NI-2.1 Inadequate oral intake related to reduced appetite as evidenced by patient report of poor intake for approximately 3 weeks prior to arrival.							
NB-1.6 Limited adherence to nutrition-related recommendations related to compliance to carbohydrate controlled diet as evidenced by a 1/12/14 A1c of 14.7% and patient self reported moderate compliance to CHF and DM diets.							
Nutrition Intervention – Nutrition prescription, Interventions with goals							

Nutrition Prescription kcal: 1534-1840 kcal/day protein: 61.36-73.63 g/day fluid: 1534 mL/day	Intervention with goals ND-1.1 General/healthful diet: Continue to provide carbohydrate controlled diet cardiac (1600-2000 kcal/day, low fat, no caffeine). ND-1-1 10838 Mineral-modified diet: Add 2 gm sodium restriction. E-1.1 Purpose of the nutrition education: Explain importance of sodium restriction. E-1.1 Purpose of the nutrition education: Explain carbohydrate counting. E-1.5 Recommended modifications: Reduce salt intake.
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Nutrition Monitoring and Evaluation

Indicator	Criteria
1. Energy intake 2. Sodium intake 3. Knowledge of sources of dietary sodium 4. Knowledge of importance of sodium restriction 5. Knowledge of carbohydrate counting	1. Consumes >50% meals and snacks 2. Limit sodium intake to 2 gm/day 3. Can identify sources of high sodium food products 4. Understands importance of sodium restriction 5. Understands principles of carbohydrate counting

Source	REQUIREMENTS		
	Kcal	Protein (gm)	Fluid (mL)
UM BWMC Standards	1534-1840.8	61.36-73.63	1534
AND NCM - Online	1382.04	49.09 - 61.36	---
AND EAL	---	73.63	1500

* UBW (61.36kg) used in all calculations, as it represents patient's dry weight.

My case study presents a 59 year old female admitted to BWMC for acute exacerbation of CHF. She lives alone and independently, and cooks for herself. Patient reported she is currently on disability leave from work as a result of her health. Family history includes her mother having had heart failure.

According to the Centers for Disease Control, heart failure contributed to 1 in 9 deaths in 2009, and is estimated to cost the US \$32 billion, annually. About one-half of people diagnosed with heart failure die within 5 years. In 2008, for Medicare recipients 65+ years of age, hospitalization rates for heart failure in Anne Arundel County, as well as the state of Maryland, exceeded national rates. State and county mortality rates were below that of the national mortality rate.

References

AND EAL

kcal: http://andvidencelibrary.com/conclusion.cfm?conclusion_statement_id=250665
protein: http://andvidencelibrary.com/conclusion.cfm?conclusion_statement_id=251025
sodium, fluid: http://andvidencelibrary.com/conclusion.cfm?conclusion_statement_id=250559

Centers for Disease Control and Prevention. (n.d.). *Division for Heart Disease and Stroke Prevention: Interactive Atlas*. Retrieved from: <http://nccd.cdc.gov/DHDSPAtlas/reports.aspx?geographyType=county&state=MD&themeSubClassId=14&filterIds=4,3,2,7,10,9&filterOptions=1,1,1,1,1,1#report>

AND NCM: https://www.nutritioncaremanual.org/topic.cfm?ncm_category_id=1&lv1=5803&lv2=255501&ncm_toc_id=255501&ncm_heading=Nutrition%20Care

UM BWMC: Nutrition Standards of Practice