Note ID: 13180007-DS-16

Subject ID: 13180007

HADM ID: 24862640

Storetime: 11/11/61 9:58

Name: ___ Unit No: ___

Admission Date: ___ Discharge Date: ___

Date of Birth: ___ Sex: M

Service: MEDICINE

Allergies:

No Known Allergies / Adverse Drug Reactions

Attending: ___.

Chief Complaint:

shortness of breath

Major Surgical or Invasive Procedure:

None

History of Present Illness:

___ year old man with numerous cardiac risk factors, prior CVA presented with sudden onset worsening of subacute dyspnea found to have flash pulmonary edema admitted for acute HFpEF exacerbation.

Per EMS and confirmed with family, patient was found on the couch by his family was minimally responsive. Patient described subacute shortness of breath over the last two weeks (e.g., having to sit down multiple times when going to grocery store or up steps at home). He has also had a cough, rhinorrhea but no fever, no sputum. This worsened acutely this morning when he woke-up struggling to breath. EMS was called, SBP to 176 per ED documentation, patient was given nitro x2 and started on CPAP.

In the ED, he was started on bipap diuresed with OV Lasix, started on home BP medications and then transferred to floor.

- Initial vitals: HR 109 BP 176/67 RR 26 ___ 90, patient was tachypneic, unable to speak in full sentences, crackles L>R, no focal deficits
- EKG: not commented upon
- Labs/studies notable for: Patient was given: NG x2. Lasix IV 40mg (at 4:30am), Zosyn/Vanc

Amlodipine 10mg, Carvedilol 25mg, Lisinopril 2.5mg, levothyroxine, insulin 10U regular,

- Vitals on transfer: ___ 1040 Temp: 98.4 PO BP: 115/45 R

Lying HR: 68 RR: 20 O2 sat: 98% O2 delivery: 3LNC Dyspnea: 3

RASS: 0 Pain Score: ___

Of note, since ___, he has had known inducible ischemia on LCX distribution from stress test. The risks (including dialysis after contrast load) and benefits were discussed with primary cardiologist Dr. ___. Coronary angiogram was deferred.

He also had a recent admission to the heart failure service with uptitration of blood pressure control agents. Coronary angiogram was deferred at that time. ACEi was stopped (prior lisinopril 40mg) given worsened CKD vs ___. Low dose lisinopril was reinitiated at last visit with Dr. ___.

Multiple notes in OMR describe issues with ensuring consistent supply of medications. The patient and his family confirm this. However, they state recently no change in medications, ___ comes once per week. He describes his diet as healthy but family concerned about salt intake. No h/o arrhythmia, no palpitations.

On the floor, he reports ongoing mild wheeze, improving shortness of breath, no current chest pain.

REVIEW OF SYSTEMS:

Positive per HPI.

Past Medical History:

1. CARDIAC RISK FACTORS

- Type 2 Diabetes Mellitus

- Hypertension

- Dyslipidemia

- Coronary artery disease

2. CARDIAC HISTORY

- Secondum ASD

- Mild AR

3. OTHER PAST MEDICAL HISTORY

- Extensive intracranial atherosclerosis, worse in the right

MCA territory.

- Cerebrovascular disease, status post CVA in ___

- Asthma

- OSteoarthritis

Social History:

___

Family History:

Both parents have heart disease. Mother-___ w/ heart problems and

diabetes & father is ___ w/ diabetes. 16 brothers and sisters. No

known hx of early coronary artery disease or sudden cardiac

death.

Physical Exam:

ADMISSION PHYSICAL EXAM

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VS: ___ 1040 Temp: 98.4 PO BP: 115/45 R Lying HR: 68 RR: 20

O2 sat: 98% O2 delivery: 3LNC Dyspnea: 3 RASS: 0 Pain Score:

___

GENERAL: ___ speaking man, wearing nasal cannulae sititng in chair surrounded by family

NECK: Supple. JVP of 12 cm +hepatojugular reflux

CARDIAC: Regular rate and rhythm. Normal S1, S2. Right upper border systolic murmur III/VI. no thrills or lifts.

LUNGS: No chest wall deformities or tenderness. Respiration is unlabored with no accessory muscle use. No crackles, wheezes or rhonchi.

ABDOMEN: Soft, non-tender, non-distended. No hepatomegaly. No splenomegaly.

EXTREMITIES: Warm, well perfused. No clubbing, cyanosis, or peripheral edema.

SKIN: No significant skin lesions or rashes.

PULSES: Distal pulses palpable and symmetric.

DISCHARGE PHYSICAL EXAM

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VS:

24 HR Data (last updated ___ @ 817)

Temp: 98.3 (Tm 98.4), BP: 136/56 (135-164/56-69), HR: 78 (57-84), RR: 20 (___), O2 sat: 97% (95-97), O2 delivery: RA

24 HR Data (last updated ___ @ 817)

Temp: 98.3 (Tm 98.4), BP: 136/56 (135-164/56-69), HR: 78 (57-84), RR: 20 (___), O2 sat: 97% (95-97), O2 delivery: RA

Fluid Balance (last updated ___ @ 600)

Last 8 hours Total cumulative -405ml

IN: Total 120ml, PO Amt 120ml

OUT: Total 525ml, Urine Amt 525ml

Last 24 hours Total cumulative -725ml

IN: Total 1000ml, PO Amt 900ml, IV Amt Infused 100ml

OUT: Total 1725ml, Urine Amt 1725ml

WEIGHT: 74.3 kg (75.6 kg)

GENERAL: Sitting up in a chair next to bed. NAD.

NECK: JVP 7-8 cm.

CARDIAC: Regular rate and rhythm. Normal S1, S2. Right upper border systolic murmur III/VI.

LUNGS: Respiration is unlabored with no accessory muscle use. CTAB. No wheezes/rales/rhonchi.

ABDOMEN: +BS. Distended but soft. Non-tender to palpation.

EXTREMITIES: Warm. 1+ edema L > RLE.

Pertinent Results:

ADMISSION LABS

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___ 03:08AM BLOOD WBC-4.5 RBC-3.12* Hgb-8.2* Hct-26.8*

MCV-86 MCH-26.3 MCHC-30.6* RDW-14.6 RDWSD-45.7 Plt ___

___ 03:08AM BLOOD Neuts-80.1* Lymphs-10.2* Monos-7.1

Eos-1.8 Baso-0.4 Im ___ AbsNeut-3.62 AbsLymp-0.46*

AbsMono-0.32 AbsEos-0.08 AbsBaso-0.02

___ 03:08AM BLOOD ___ PTT-23.2* ___

___ 03:08AM BLOOD Glucose-384* UreaN-36* Creat-2.5* Na-135

K-4.9 Cl-100 HCO3-22 AnGap-13

___ 03:08AM BLOOD ALT-19 AST-17 AlkPhos-105 TotBili-0.2

___ 03:08AM BLOOD proBNP-820*

___ 03:08AM BLOOD cTropnT-0.02*

___ 12:50PM BLOOD cTropnT-0.01

___ 03:08AM BLOOD Albumin-3.6 Calcium-8.3* Phos-5.2* Mg-1.9

___ 03:14AM BLOOD ___ pO2-148* pCO2-35 pH-7.42

calTCO2-23 Base XS-0

___ 03:14AM BLOOD Lactate-2.5*

MICRO STUDIES

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UCx ___ 7:56 am URINE

**FINAL REPORT ___

URINE CULTURE (Final ___: NO GROWTH.

Legionella Urine Antigen ___ 3:49 pm URINE Source: ___.

**FINAL REPORT ___

Legionella Urinary Antigen (Final ___:

NEGATIVE FOR LEGIONELLA SEROGROUP 1 ANTIGEN.

(Reference Range-Negative).

Performed by Immunochromogenic assay.

A negative result does not rule out infection due to other

L.

pneumophila serogroups or other Legionella species.

Furthermore, in

infected patients the excretion of antigen in urine may

vary.

BCx ___

_____

IMAGING

========

CXR (___)

IMPRESSION:

Findings are compatible with moderate pulmonary edema with a moderate left pleural effusion. Underlying bibasilar atelectasis and/or pneumonia in the appropriate clinical setting should also be considered.

CT HEAD WO CON (___)

IMPRESSION:

Area of low-density left occipital ___ represent subacute infarct, if there are clinical symptoms, consider brain MRI without contrast. Small chronic lacunar infarct right basal ganglia. Few calcifications at the pons, nonspecific, may be sequela of prior inflammatory or ischemic process, cavernoma cannot be excluded.

TTE (___)

CONCLUSION: The left atrial volume index is mildly increased. There is mild symmetric left ventricular hypertrophy with a normal cavity size. There is normal regional and global left ventricular systolic function. The visually estimated left ventricular ejection fraction is 55-60%. There is no resting left ventricular outflow tract gradient. Normal right

ventricular cavity size with normal free wall motion. The aortic sinus diameter is normal for gender with normal ascending aorta diameter for gender. The aortic valve leaflets (3) appear structurally normal. There is no aortic valve stenosis. There is trace aortic regurgitation. The mitral valve leaflets appear structurally normal with no mitral valve prolapse. There is trivial mitral regurgitation. The pulmonic valve leaflets are normal. The tricuspid valve leaflets appear structurally normal. There is physiologic tricuspid regurgitation. The pulmonary artery systolic pressure could not be estimated. There is a trivial pericardial effusion.

IMPRESSION: Mild symmetric left ventricular hypertrophy with normal cavity size and regional/global biventricular systolic function. No significant mitral regurgitation.

Compared with the prior TTE ___, the findings are similar.

MRI/MRA HEAD AND NECK (___)

IMPRESSION:

1. No hemorrhage or acute infarct.
2. Chronic infarcts within the subcortical right frontal lobe and left temporal and occipital lobes.
3. Atrophic pons likely a sequela of prior infarcts.

4. Severe intracranial atherosclerotic disease resulting in
narrowing of
nearly all of the large intracranial vessels.
5. Chronic occlusion of the distal right middle carotid artery
M1 segment with
collateral vessels seen distally.
6. Narrowing of the proximal bilateral internal carotid
arteries, left greater
than right.
7. Atherosclerotic disease narrowing the left vertebral artery
proximally and
causing chronic occlusion distally.
8. Large left-sided pleural effusion.

Brief Hospital Course:
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PATIENT SUMMARY
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___ year old man with numerous cardiac risk factors, prior CVA,
HFpEF who presented with sudden onset worsening of subacute
dyspnea found to have flash pulmonary edema admitted for acute
HFpEF exacerbation.

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ACTIVE ISSUES:

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#Acute exacerbation of HFpEF (EF 57%)

Likely ___s possible ischemia given his

positive stress in ___. Also possibly triggered by

pneumonia. Did endorse occasional angina symptoms, but trop was

flat with no EKG changes. TTE showed no regional wall motion

abnormalities and no mitral regurgitation. He was actively

diuresed. His lisinopril was held due to ___. His heart failure

regimen upon discharge:

DIURESIS: Torsemide 40 mg QD

AFTERLOAD: Hydralazine 100 mg TID

Clonidine 0.2 mg BID

Held lisinopril given ___

Amlodipine 10 mg QD

NHBK: Carvedilol 37.5 mg BID;

- Discharge weight: 72.7 kg (160.27 lb)

- Discharge Cr: 3.7

___ on CKD:

#Hyperkalemia:

Initially due to venous congestion, then likely due to

overdiuresis. He had underlying CKD and his creatinine did not

return to his baseline upon discharge. We suspect that he will

need to initiate HD in the near future. His K rose to about 5.8

the week prior to discharge, but this improved with Lasix IV,

kayexelate, and low potassium diet.

#Community acquired pneumonia

Cough, worsened SOB, hypoxemia (although alternate explanation) but no leukocytosis or fevers; influenza negative. Legionella and strep were negative. Patient was given a 5-day course of ceftriaxone and azithromycin.

#Hypertension

Goal <130/80. As patient is on several anti-hypertensives with still an elevated blood pressure, he underwent a secondary hypertension workup. His last renal ultrasound in ___ was within normal limits. He was placed on continuous O2 monitoring overnight, and patient did not desaturate. His aldosterone to renin ratio was 0.13, indicating no primary hyperaldosteronism. 24 hour urine metanephrines and catecholamines were within normal limits.

#CAD w/ inducible ischemia

#NSTEMI

Troponin peaked at 0.02, thought to be type 2 due to volume overload. Continued aspirin, atorvastatin, carvedilol. The decision was made to hold off on coronary angiogram due to kidney function and the suspicion that this was type 2.

#H/o CVA

Patient had an episode while in hospital with dysarthria,

confusion/mild expressive and receptive

aphasia ___ > ___ that led to a Code Stroke. CT Head

non-con negative. MRA Brain/Neck, MRI Head with chronic changes,

no acute infarct. ___ EEG with slowing but no epileptiform

changes. UCx and BCx negative. ___ evaluated the patient and

found no acute needs. He was continued to aspirin and high-dose

atorvastatin.

#H/o "asthma"

Patient stated that he uses rescue inhaler daily. We started him

on Advair, as we suspect that he has COPD given his extensive

smoking history.

#Medication adherence

Patient reportedly has difficulty with medication adherence. We

blister packed his medications upon discharge through the ___

Pharmacy.

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CHRONIC ISSUES:

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#Anemia:

Suspect secondary to EPO deficiency in CKD, iron studies showed

iron deficiency. Patient was repleted with 4 doses of ferric

gluconate.

#DM type II:

Poorly controlled, on basal galargine as well as GLP-1, last A1c 12.3% (but off insulin at that time). Hyperglycemic on admission but without anion gap and bicarb 22 with strong ion difference 35 very reassuring against metabolic acidosis. The ___ diabetes team saw the patient and titrated his insulin regimen.

His insulin regimen on discharge:

- Lantus 30 u with breakfast
- Lantus 10 u QHS
- Standing Humalog 5 u with breakfast
- Standing Humalog 5 u with lunch
- Standing Humalog 5 u with dinner

#Hyperlipidemia

- Continued Atorvastatin 80mg daily

#Cerebrovascular accident

#Intracranial atherosclerosis

- Continued ASA 81mg daily
- Continued atorvastatin 80 mg QD as above

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TRANSITIONAL ISSUES

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[ ] Follow-up: PCP, ___, cardiology

[ ] New medications: Torsemide 40 mg qd, advair

[ ] Changed medications: Insulin (lantus 40 qam and 10 qpm w/ Novolog ___ w/ SSI with meals; discharged w/ insulin pens), coreg was increased to 37.5 mg BID. Amlodipine was switched from qod to everyday.

[ ] Please monitor BP as an outpatient and consider starting imdur.

[ ] HFpEF - Consider initiation of spironolactone once Cr is downtrending.

[ ] ?COPD - Consider PFTs to see if patient has COPD. Started on advair as an inpatient.

[ ] DM: Please monitor his blood glucose as an outpatient as his blood glucoses ran elevated as an inpatient. He should follow-up with ___ as an outpatient.

[ ] Lung cancer screening - Given patient's smoking history, consider outpatient CT Chest.

[ ] Hyperlipidemia - Per prior cardiology note, patient approved for PCSK9 inhibitor.

[ ] Iron deficiency anemia: Will need a colonoscopy as an outpatient

[ ] CKD - Anticipate he may need dialysis in the future. K on discharge was 4.8 and Cr on discharge was 3.7.

[ ] Labs: Please recheck a BMP at his next follow-up appointment to monitor K and Cr.

[ ] Discharge weight: 72.7 kg

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CORE MEASURES

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#CODE: Full

#CONTACT: ___ daughter HCP

___ on Admission:

The Preadmission Medication list is accurate and complete.

1. Lisinopril 2.5 mg PO DAILY

2. CloNIDine 0.2 mg PO BID

3. amLODIPine 10 mg PO EVERY OTHER DAY

4. HydrALAZINE 100 mg PO TID

5. Aspirin 81 mg PO DAILY

6. CARVedilol 25 mg PO BID

7. Atorvastatin 80 mg PO QPM

8. liraglutide 1.2 mg subcutaneous DAILY

9. Levothyroxine Sodium 100 mcg PO DAILY

10. Glargine 55 Units Breakfast

11. Furosemide 40 mg PO BID

12. Albuterol Inhaler ___ PUFF IH Q6H:PRN wheezing, SOB

Discharge Medications:

1. BD Ultra-Fine Short Pen Needle (pen needle, diabetic) 31

gauge x ___ miscellaneous ASDIR

2. Fluticasone-Salmeterol Diskus (250/50) 1 INH IH BID

RX *fluticasone-salmeterol [Advair Diskus] 250 mcg-50 mcg/dose 1

dose inhaled twice a day Disp #*1 Disk Refills:*0

3. sevelamer CARBONATE 800 mg PO TID W/MEALS

RX *sevelamer carbonate 800 mg 1 tablet(s) by mouth three times

a day with meals Disp #*90 Tablet Refills:*0

4. Torsemide 40 mg PO DAILY

RX *torsemide 20 mg 2 tablet(s) by mouth once a day Disp #*60

Tablet Refills:*0

5. amLODIPine 10 mg PO DAILY

6. CARVedilol 37.5 mg PO BID

RX *carvedilol 25 mg 1.5 tablet(s) by mouth twice a day Disp

#*90 Tablet Refills:*0

7. Glargine 30 Units Breakfast

Glargine 10 Units Bedtime

Humalog 5 Units Breakfast

Humalog 5 Units Lunch

Humalog 5 Units Dinner

Insulin SC Sliding Scale using HUM Insulin

8. Albuterol Inhaler ___ PUFF IH Q6H:PRN wheezing, SOB

9. Aspirin 81 mg PO DAILY

RX *aspirin 81 mg 1 tablet(s) by mouth once a day Disp #*30

Tablet Refills:*0

10. Atorvastatin 80 mg PO QPM

RX *atorvastatin 80 mg 1 tablet(s) by mouth once a day Disp #*30

Tablet Refills:*0

11. CloNIDine 0.2 mg PO BID

RX *clonidine HCl 0.2 mg 1 tablet(s) by mouth twice a day Disp

#*60 Tablet Refills:*0

12. HydrALAZINE 100 mg PO TID

RX *hydralazine 100 mg 1 tablet(s) by mouth three times a day

Disp #*90 Tablet Refills:*0

13. Levothyroxine Sodium 100 mcg PO DAILY

RX *levothyroxine 100 mcg 1 tablet(s) by mouth once a day Disp

#*30 Tablet Refills:*0

Discharge Disposition:

Home With Service

Facility:

___

Discharge Diagnosis:

PRIMARY DIAGNOSIS

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Acute on chronic heart failure with preserved ejection fraction

SECONDARY DIAGNOSES

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Acute kidney injury

Coronary artery disease

Type 2 Diabetes Mellitus

Hyperkalemia

Discharge Condition:

Mental Status: Clear and coherent.

Level of Consciousness: Alert and interactive.

Activity Status: Ambulatory - Independent.

Discharge Instructions:

Dear ___,

It was a pleasure participating in your care. Please read through the following information.

WHY WAS I ADMITTED TO THE HOSPITAL?

- You were admitted to the hospital because you had been feeling short of breath and you were found to have fluid on your lungs. This was felt to be due to a condition called heart failure, where your heart does not pump hard enough and fluid backs up into your lungs.

WHAT HAPPENED WHILE I WAS IN THE HOSPITAL?

- You were given a diuretic medication through the IV to help get the fluid out. You improved considerably and were ready to leave the hospital.
- You underwent an echocardiogram, which is an ultrasound of

your heart; this showed that your heart is functioning the same as before.

- You underwent an MRI/MRA of your head and neck because there was concern that you had a new stroke; you did not have a new stroke.

- You were seen by ___ diabetes physician and your insulin regimen was adjusted.

WHAT DO YOU NEED TO DO WHEN YOU LEAVE THE HOSPITAL?

- Take all of your medications as prescribed (listed below)

- Follow up with your doctors as listed below

- Weigh yourself every morning. Your weight on discharge is 72.7 kg (160.27 lb).

Please call Dr. ___ office at ___ if your weight goes up by 3 lbs or more.

- If you have any questions or concerning symptoms after discharge, such as shortness of breath, leg swelling, or weight gain, please call our ___ Heartline at ___ to speak to a nurse practitioner or ___ cardiologist; this is available 24 hours a day, 7 days a week.

We wish you the best!

Your ___ Care Team

Followup Instructions:

___