

Patient: Nicky Heartbreaker DOB: 1/1/59

- Nicky is a 64-year old male who developed diaphoresis and mid-sternal chest pain at 10/10 this morning while at work. He drove himself to the local Emergency Department.
- Past medical history: HTN, Hyperlipidemia, DM Type II, Smokes 1 ppd; Noncompliance; Family History CAD; Erectile dysfunction.
- Social history: Divorced, 2 adult children, 3 grandchildren, rents apartment, factory laborer
- **Home medications:** (patient has not refilled the first three medications and has not taken since beginning of April)
 - Atorvastatin 20 mg po QHS
 - Metformin 500 mg PO BID
 - Enalapril 10 mg PO BID
 - Sildenafil 25 mg PO Daily PRN
- Weight: 90kg
- Allergies: Contrast Dye

Emergency Department

- Vital Signs: T- 98⁰ F (oral); HR-55; RR-18; BP 80/60; SpO2-92%. Weight: 90kg
- A 12-Lead ECG was done which showed ST elevation in Leads II, III, and aVF. He was started on O2 2L per NC, and 2- 18-gauge IV's were started. Fast patches placed.

Diagnosis: _____Inferior_____ STEMI

- He was given the following: four- ASA 81 mg tablets (chewed), three- 0.4 mg SL NTG (has not taken Sildenafil within last 24 hours), Brilinta loading dose (180 mg), Morphine Sulfate 4 mg IV, a Heparin bolus and started on a drip per protocol, and an IV bolus of 2,000 mL of NS.
- The time between his arrival to the Emergency Department and arrival to the Cardiac Cath Lab was 30 minutes.

Cardiac Catheterization Lab

- Procedure: Left Heart Catheterization with PTCA to: Right coronary artery
Right radial: TR band placed
- 2 drug eluting stents
- Medications:
 - Versed 2 mg IV
 - Fentanyl 50 mcg IV
 - Bivalirudin (Angiomax): Supply 250 mg in 50 mL NS
 - Bolus: $0.75 \text{ mg/kg} (90 \text{ kg} \times 0.75 \text{ mg} = 67.5 \text{ mg}/250 \text{ mg} \times 50 = 13.5 \text{ mL})$
 - Drip: $1.75 \text{ mg/kg/hr} (90 \times 1.75 = 157.5 \text{ mg/hr}/250 \text{ mg} \times 50 = 31.5 \text{ mL/hr})$
 - Verapamil 5 mg IV
 - Diphenhydramine 50 mg IV
 - Solumedrol 125 mg IV
 - Famotidine 20 mg IV
- TRB band placed
- Stent card placed in chart

4C

- He has just arrived to 4C from the Cath Lab.
- Vital signs: T- 98.9^O F (oral); BP 108/56; HR- 118; RR- 24; SpO2- 91% on 2L NC
- You performed a 12-Lead ECG with the following findings: Atrial fibrillation
- Present condition: Chest pain free currently; complaint of fatigue & dyspnea; crackles present; low back pain 3/10; EF 35%
- Ecchymosis at right radial site; TR Band in place
- Medications: All but the IV fluid are medications the patient will also be prescribed at discharge
 - ASA 81 mg PO Daily
 - Brilinta 90 mg PO BID
 - Atorvastatin 40 mg PO QHS
 - Metformin 500 mg PO BID- Hold for 48 hours
 - Enalapril 10 mg PO BID
 - Acetaminophen 500 mg PO Q 4-6 hours PRN non-cardiac pain
 - D5 0.45 NS at 80 mL/hr- slowed this due to probable HF and fluid overload

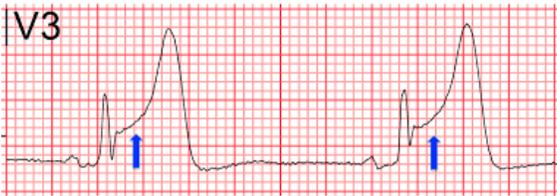
1-hour post simulation assignment and survey: due April 24, 2023 at 1600

Discharge Education: A copy of this document is on Edvance360 under Simulation Resources- use this electronic version to complete and submit the assignment.

Firelands Regional Medical Center School of Nursing
 AMSN 2023: Comprehensive Simulation
Discharge Education (1H-Sim)



Directions: For **each** education topic, include specific information you would provide to Nicky Heartbreaker at discharge. The information must be specific to the patient, scenario, social determinants of health concerns, and be thorough and detailed (this will not be a brief list). Include handouts, video links, pictures, etc. that you could present for **at least 4** of the education topics. This assignment is due in the Comprehensive Simulation dropbox on Edvance360 at **1600 on April 24, 2023 (along with the simulation survey)**. If the assignment is late or not completed in full it will result in 1-hour missed simulation time, and will have to be completed prior to beginning the final exam on 4/28/2023 at 0800.

| Topic | Education |
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| Diagnosis | <ul style="list-style-type: none"> You had a very serious heart attack. The type of heart attack you had is called a STEMI, which stands for ST elevation myocardial infarction. Your heart attack may have been caused from accumulated years of lifestyle choices and your medical history. You have a history of high blood pressure, hyperlipidemia, type 2 diabetes, you smoke 1 pack of cigarettes a day, and you have a family history of coronary artery disease. I have attached pictures of what a normal heart rhythm looks like, versus what your heart rhythm looked like. <p>Normal heart rhythm:</p>  <p>ST elevation:</p>  <ul style="list-style-type: none"> Diabetes can increase the viscosity of your blood, meaning making your blood thicker, from the excess sugar which makes your blood at a higher risk for getting stuck to vessels. Hyperlipidemia means you have a higher percentage of fat in your blood, which will line your arteries and make it |

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| | <p>harder for blood to flow through. The chemicals that are in a cigarette can also cause your blood to clot. High blood pressure means there is excess force being pushed against your arteries, causing them to weaken. The combination of your history has put you at higher risk for a heart attack, and there is a still a risk of future heart attacks and other complications. Which is why it is important to start now on lifestyle changes.</p> <ul style="list-style-type: none"> • I have provided a website that will help you understand your type 2 diabetes. Type 2 Diabetes |
| <p>Medications</p> | <ul style="list-style-type: none"> • After having a heart attack, you may be overwhelmed with how many medications you have been prescribed. There are 5 different types of medications that you will be required to take by mouth daily, and it is very important to comply with the medication regimen. Provided are explanations of each medication and why you are taking it. • With a stent being placed in a very small artery into your heart, it is important to keep this stent patent, or open. To help keep the stent open and functioning, you are being placed on two different medications to keep your blood from clotting and closing off your stent. These are referred to as blood thinners. If your stent closes off, your heart will not receive the blood and oxygen it needs to survive and function properly. The two medications are ticagrelor (Brilinta) 90mg, and Aspirin 81mg, and together they are referred to as dual antiplatelet therapy. You will be on these medications until the inner-most layer of your artery heals over the stent, which will take at minimum 1 year. You will take your Brilinta twice a day, and your aspirin once. • While on Brilinta, you are at an increased risk for bruising and bleeding. Avoid potentially dangerous situations that could cause you to fall, such as climbing a ladder. Be mindful when doing simple tasks as well, such as washing dishes, to keep glass from breaking and potentially cutting your arm. Disclose your antiplatelet therapy prior to any dental procedures or surgeries. Notify your HCP promptly if you experience prolonged bleeding or dark, tarry stools. Notify your HCP if you experience severe shortness of breath. • Atorvastatin 40mg has been prescribed to you as another post-stent medication, but is also a medication you were on prior for your hyperlipidemia. Take this medication once at night. Lipids, or fat, in blood can build up and cause plaque that will start to block arteries. Atorvastatin is a very effective medication to prevent a repeat heart attack by helping to lower your bad cholesterol (LDL) and increased your good cholesterol (HDL). Do not stop taking your Atorvastatin without notifying a HCP. If you experience undesired side effects, such as muscle and joint pain, discuss this with your HCP instead of stopping the medication because an alternative medication with similar effects can be prescribed. • Metformin 500mg has been prescribed to you to take twice orally. Metformin is a medication that will help maintain your blood glucose levels for your type 2 diabetes, but is not a cure. When taking this medication, make sure you let your health care provider know if you are going to be going into any |

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| | <p>procedure that requires contrast dye, because it can cause a major reaction that would lead to lactic acidosis. This medication is unlike insulin, where it will not directly lower your blood sugar but will make you more sensitive to the insulin your body is releasing. Therefore, you can still take this medication if you have not eaten and do not need to check your blood sugar before taking it. However, you should still routinely have your A1C checked at your healthcare provide visits. Metformin will not cure your diabetes, so a healthy lifestyle must be concurrently maintained.</p> <ul style="list-style-type: none"> • Enalapril 10mg has been prescribed to you to take twice a day. Enalapril is an ACE inhibitor that has been prescribed to you for your high blood pressure and to help reverse and prevent any structural changes that have happened to you heart from this heart attack. Your heart is not beating as efficiently as it should be, and by taking this medication it can help reduce and decrease symptoms associated. If a dry cough develops, notify your healthcare provider and other medication options can be discussed. During this therapy, it is important to be aware of symptoms of hypotension, or low blood pressure. Change positions slowly, and check your blood pressure and heart rate frequently. Do not abruptly stop taking enalapril. If you develop any swelling of your face, tongue, lips, or extremities, seek medical attention immediately. This medication will not cure your hypertension and should be combined with a low sodium diet, smoking cessation, weight reduction, and regular exercise. This video will help teach you how to measure your own blood pressure: How to Check your Blood Pressure • Acetaminophen 500mg has been prescribed to you for any non-cardiac pain you may experience. You may take acetaminophen on an as-needed basis every 4-6 hours, and you do not need to take it daily. For chest pain, or any pain similar to what you felt prior to your heart attack, call 911 immediately. |
| <p>Follow-up/ Compliance</p> | <ul style="list-style-type: none"> • With the procedure you had that placed a stent in your heart, we will be providing you a stent card that you can keep in your wallet. A stent card will provide information of your stent placement surgery you received so if you were ever to be in an unfamiliar hospital, the health care providers would have more pertinent information on your medical history. • Brilinta is a very effective, but expensive medication. Some hospitals are able to provide a discount for the first 3 month’s supply, but if the prescription ever becomes too much money and insurance does not cover the cost, do not stop taking it without consulting your HCP. There are alternative medications that provide a similar therapeutic response we can prescribe at a lower expense. Compliance to your dual antiplatelet therapy, or Brilinta and Aspirin, are a crucial part in keeping your stent functioning. • Medication compliance to all medications you are being discharged with is very important. If you have any questions or concerns with side effects, please call your health care provider. If you are concerned with the pricing of your medications, I can set up an available time for you to meet with a social services representative. • In about a week or so, you will be contacted to start a cardiac-rehabilitation program. It is very important that you attend each session. During cardiac |

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| | <p>rehab, you will gradually increase physical activity under monitored and expert supervision to evaluate your heart function. Cardiac rehab may be scheduled several days a week for a few months, so if this becomes conflicting with your work schedule, please contact your healthcare provider because an at-home service may be provided.</p> |
| <p>Puncture site care</p> | <ul style="list-style-type: none"> • Your stent was placed through a puncture site in your right radial artery. It is important to not submerge your right arm for 1 week, so during this time avoid swimming and take a shower instead of a bath. Avoid washing dishes that will cause your arm to be submerged. • Keep the bandaged area clean and dry. The bandage will come off in a couple of days. Do not bend at the wrist for the first few days at home. Try to use your left hand if you need help lowering yourself, or picking items up. • If your right wrist becomes red, swollen, is increasing in pain, or if pus is leaking of from the puncture site, call your healthcare provider. |
| <p>Diet</p> | <ul style="list-style-type: none"> • With your history of HLD, HTN, and type 2 diabetes mellitus, it is important to follow a low-sodium, heart healthy diet. Try incorporating more fruits, vegetables, and whole grains instead of salty snacks. Fruits and vegetables do not have to be fresh, they can be frozen to help decrease costs. However, try to avoid canned vegetables and other canned foods because there is a lot of sodium. If possible, avoid frozen meals or “tv dinners” because there is a lot of sodium in them. Try to look at labels when purchasing food to choose low-sodium options. Depending on what your physician thinks is best for your lifestyle, a low sodium diet aims to keep your daily intake roughly below 2,000mg. • Avoid adding salt when cooking meals. • Your HCP may recommend a “DASH” diet, which stands for Dietary Approaches to Stop Hypertension. |

DASH Eating Plan

The Benefits: Lowers blood pressure & LDL "bad" cholesterol.

| ✔ Eat This | ⚠ Limit This |
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|  Vegetables |  Fatty meats |
|  Fruits |  Full-fat dairy |
|  Whole grains |  Sugar sweetened beverages |
|  Fat-free or low-fat dairy |  Sweets |
|  Fish |  Sodium intake |
|  Poultry | |
|  Beans | |
|  Nuts & seeds | |
|  Vegetable oils | |

www.nhlbi.nih.gov/DASH



Exercise/Activity

- Physical activity should be increased gradually. The damage that the blocked artery caused to your heart has made your ejection fraction, or how well your heart pumps blood to the rest of your body, in a lower-than-normal range. You may feel exhausted because your heart is not beating as efficiently, so it is important to not push yourself too hard until your heart has healed.
- Take frequent resting breaks between activities.
- You may do light activity around the house, but no strenuous exercise until your doctor says it is okay to do so.
- You may resume sexual activity when you feel comfortable. Sexual activity can be comparable to a brisk walk, or walking up two flights of stairs, and just like other physical activity, can gradually be increased. We encourage to discuss any concerns with resuming sexual activity with your HCP or nurse at your next doctor's appointment.

Smoking cessation

- Smoking cessation is an important topic. Smoking has been a major risk factor that has contributed to your heart disease and hypertension. Continuing to smoke will lead to further cardiac disease and possibly death.
- Nicotine that is found in cigarettes have a direct effect to the blood vessels in your body, causing them to constrict, or narrow. When your blood vessels are more narrow, your heart has to work harder to pump blood to the rest of your body. Your heart has taken a large hit from your heart attack and health history, so smoking cessation will be a very important step to making a healthier lifestyle for yourself.

- I have attached a website that can help you start your quitting journey with resources and tips. [Quit Smoking](#)

WHAT HAPPENS WHEN YOU QUIT SMOKING

Within minutes of smoking your last cigarette, your body starts to recover:

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| <p>20 MINUTES</p> <p>Your heart rate and blood pressure drop.</p> | <p>1 YEAR</p> <p>Risk of heart disease drops to half that of a smoker.</p> |
| <p>24 HOURS</p> <p>Chance of heart attack decreases.</p> | <p>5 YEARS</p> <p>Risk of cancer of the mouth, throat, esophagus and bladder are cut in half.</p> |
| <p>2 - 3 WEEKS MONTHS</p> <p>Your circulation improves and your lung function increases.</p> | <p>10 YEARS</p> <p>Lung cancer risk is half that of a smoker.</p> |
| <p>1-9 MONTHS</p> <p>Coughing, shortness of breath and sinus congestion decrease.</p> | <p>15 YEARS</p> <p>Risk of heart disease is that of a nonsmoker.</p> |

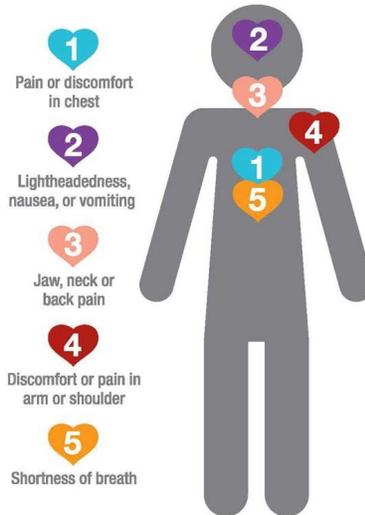


Signs and symptoms to report/Seek medical care

- If you feel as if you are having another heart attack, or experiencing unrelieved chest pain, pain lasting longer than 20 minutes, and a heavy, crushing, burning pain, do not delay **calling 9-11 immediately.**



Common Heart Attack Warning Signs



Learn more at [Heart.org/HeartAttack](https://www.heart.org/HeartAttack).

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- If you experience any symptoms of facial swelling or a rash, you may be having a reaction to your medications and need to call your healthcare provider.
- If you experience difficulty breathing, you may be having an adverse reaction to a medication and need to seek emergent medical attention.
- If you fall or hit your head, seek medical attention immediately. With the blood thinners you are taking, you are at a higher risk for internal bleeding.

Other

- After discharge, have your daughter drive you home and avoid operating heavy machinery or making important decisions for 24 hours. You were given a combination of fentanyl and versed, termed conscious sedation, that is still being metabolized out of your body. These medications can cause delayed reaction time and an impaired thought process.

The electronic version of this document is under Simulation Resources