

#### History of the Present Illness:

A 62-year-old man presents with a history of recurrent chest discomfort that has been ongoing for the past six months. He describes the pain as a pressure-like discomfort located in the center of his chest, which typically occurs during physical exertion, such as brisk walking or climbing stairs, and is relieved by rest. He has noticed these episodes of chest discomfort occurring more frequently in the last two months and with less exertion than before. Additionally, he reports experiencing episodes of chest discomfort after consuming heavy or spicy meals, which he initially attributed to indigestion. There are no nocturnal symptoms, and he denies any radiation of pain to his left arm, jaw, or back.

# Past Medical History and Family History:

The patient has a significant medical history of hypertension for the past 10 years, which is well-controlled with medications. His family history is notable for his father, who had a heart attack at the age of 68.

# Medications and Allergies:

He is currently taking a daily regimen of aspirin, metoprolol, and amlodipine for his hypertension. No known drug allergies.

The patient is a retired teacher and leads a relatively sedentary lifestyle since his retirement. He quit smoking 15 years ago after a 20-year history of smoking one pack of cigarettes per day. He consumes alcohol occasionally, with an average of two drinks per week.

#### Physical Examination:

Unremarkable





# Differential Diagnosis Draft

This differential diagnosis was drafted by a large language model fine-tuned on complex diagnostic cases curated by the Glass Health Clinical Team.

The following diagnoses are options that a clinician may want to consider and investigate but should never replace a clinician's judgment.

Comprehensive Review of the Case: The patient is a 62-year-old man with a history of hypertension, well-controlled with medications, who presents with recurrent chest discomfort for the past six months. The discomfort is described as pressure-like, located in the center of his chest, and typically occurs during physical exertion such as brisk walking or climbing stairs. The episodes of chest discomfort have been occurring more frequently in the last two months and with less exertion than before. The patient also experiences chest discomfort after consuming heavy or spicy meals, which he initially attributed to indigestion. There are no nocturnal symptoms, and he denies any radiation of pain to his left arm, jaw, or back. His family history is notable for his father, who had a heart attack at the age of 68. He is currently taking aspirin, metoprolol, and amlodipine for his hypertension and has no known drug allergies. The patient is a retired teacher and leads a relatively sedentary lifestyle since his retirement. He quit smoking 15 years ago after a 20-year history of smoking one pack of cigarettes per day. He consumes alcohol occasionally, with an average of two drinks per week. His physical examination is unremarkable. No laboratory data, imaging data, or other studies are mentioned in the case.

#### Most Likely Dx:

a. Stable Angina: The patient's symptoms of chest discomfort during physical exertion and relief with rest, along with his history of hypertension and family history of heart disease, are suggestive of stable angina. The presence of abnormal results on a stress test or coronary angiography could further suggest this diagnosis.

# Expanded DDx:

- b. Unstable Angina: The increase in frequency and decrease in the amount of exertion needed to trigger the patient's chest discomfort could suggest a progression to unstable angina. The presence of ST-segment depression or T-wave inversion on an ECG during an episode of chest discomfort could further suggest this diagnosis.
- c. Gastroesophageal Reflux Disease (GERD): The patient's chest discomfort after consuming heavy or spicy meals could be indicative of GERD. The presence of heartburn, regurgitation, or a positive response to a proton pump inhibitor trial could further suggest this diagnosis.

### Alternative DDx

- d. Prinzmetal's Angina: This form of angina is caused by a spasm in a coronary artery and can occur at rest. The presence of transient ST-segment elevation during episodes of chest discomfort could further suggest this diagnosis.
- Hypertrophic Cardiomyopathy: This genetic disorder can cause chest pain during exertion. The presence of a systolic murmur that increases with Valsalva maneuver or standing could further suggest this diagnosis.
- f. Aortic Stenosis: This condition can cause chest discomfort during exertion. The presence of a systolic ejection murmur heard best at the right second intercostal space could further suggest this diagnosis.
- g. Pericarditis: This inflammation of the pericardium can cause chest pain. The presence of a pericardial friction rub or ECG changes could further suggest this diagnosis.
- h. Cholecystitis: Inflammation of the gallbladder can cause chest discomfort, especially after meals. The presence of right upper quadrant pain or a positive Murphy's sign could further suggest this diagnosis.
- Esophageal Spasm: This condition can cause chest discomfort, especially after meals.
  The presence of dysphagia or a positive response to nitroglycerin could further suggest this diagnosis.
- j. Panic Disorder: This psychiatric condition can cause chest discomfort. The presence of other symptoms of panic attacks, such as palpitations, sweating, or a fear of dying, could further suggest this diagnosis.





Clinical Plan Draft

BASED ON YOUR DDX

# This clinical plan was drafted by a large language model.

The clinical plan draft contains a suggested assessment, diagnostic options, and treatment options that a clinician may consider but should never replace a clinician's judgment.

# **Recurrent Exertional Chest Discomfort**

The patient is a 62-year-old man with a history of well-controlled hypertension who has been experiencing recurrent chest discomfort for the past six months. The discomfort, described as pressure-like and located in the center of his chest, typically occurs during physical exertion and has been increasing in frequency and occurring with less exertion over the past two months. The patient also experiences chest discomfort after heavy or spicy meals, which he initially attributed to indigestion. His family history is significant for heart disease, and he has a past smoking history. The differential diagnosis includes stable angina, unstable angina, gastroesophageal reflux disease (GERD), Prinzmetal's angina, hypertrophic cardiomyopathy, aortic stenosis, pericarditis, cholecystitis, esophageal spasm, and panic disorder.

#### Dx:

- · Electrocardiogram (ECG)
- · Stress test
- Coronary angiography
- · Esophagogastroduodenoscopy (EGD)
- · Complete blood count (CBC)
- Basic metabolic panel (BMP)
- · Lipid profile
- Troponin levels
- · Thyroid function tests
- · Esophageal manometry

### Tx

- · Continue aspirin, metoprolol, and amlodipine
- Lifestyle modifications: increase physical activity, maintain a healthy diet, and weight management
- · If stable angina is confirmed: consider adding nitroglycerin for acute episodes
- · If GERD is confirmed: consider a trial of proton pump inhibitors
- · If unstable angina is confirmed: consider adding clopidogrel and statin therapy
- If other diagnoses are confirmed: treatment will be tailored accordingly.