

Clinical Draft:

Clinical Input

The patient is a 45-year-old male with a 2-week history of persistent dry cough and exertional dyspnea, worse at night. He has had similar episodes in the past that responded to inhalers. The patient is a non-smoker and has construction work exposure. The patient's age is 45 and gender is male.

Primary Diagnosis

- Persistent dry cough, which is a common symptom of asthma, often worse at night and triggered by specific factors such as exercise or exposure to allergens.
- Exertional dyspnea, indicating shortness of breath during physical activity, a hallmark symptom of asthma due to airway constriction.
- History of similar episodes in the past that were responsive to inhalers, suggesting a chronic condition like asthma that can be managed with appropriate medication.
- Construction work exposure, which could involve inhalation of dust, chemicals, or other irritants that might trigger or exacerbate asthma symptoms.
- Prior responsiveness to inhalers, which are a common treatment for asthma, further supporting the diagnosis of asthma.

Derived from published medical literature, including sources like the Mayo Clinic, MedlinePlus, and NHS, which provide comprehensive information on asthma symptoms, diagnosis, and management.

Differential Comparison

Condition	Likelihood	Key Alerts	Key Symptoms	Commonly Reported Clinical Findings	Risk Factors	Differential Indicators	Literatural First-Line Management	Tests Usually Considered	General Prognostic Overview
Condition	Likelihood	Key Alerts	Key Symptoms	Commonly Reported Clinical Findings	Risk Factors	Differential Indicators	Literatural First-Line Management	Tests Usually Considered	General Prognostic Overview
Asthma	High	Recurrent episodes of wheezing, coughing, chest tightness, and shortness of breath	Wheezing, cough, dyspnea	Variability in lung function, airway inflammation	Genetic predisposition, environmental factors	Response to bronchodilators, presence of allergens	Inhalers (bronchodilators, corticosteroids)	Spirometry, peak flow measurement	Variable, depends on control of symptoms and lung function
Chronic Obstructive	High	Progressive dyspnea, chronic	Dyspnea, cough,	Airflow limitation, lung hyperinflation	Smoking, environmental	Age, smoking history, lack of	Smoking cessation, bronchodilators,	Spirometry, complete	Progressive, with potential

Condition	Likelihood	Key Alerts	Key Symptoms	Commonly Reported Clinical Findings	Risk Factors	Differential Indicators	Literatural First-Line Management	Tests Usually Considered	General Prognostic Overview
Pulmonary Disease (COPD)		cough, sputum production	sputum production		exposures	reversibility with bronchodilators	pulmonary rehabilitation	blood count	for exacerbations
Pneumonia	Moderate	Fever, chills, cough, dyspnea	Fever, cough, sputum production	Consolidation on chest X-ray, positive blood cultures	Age, immunocompromised state	Acute onset, presence of fever, lobar consolidation on X-ray	Antibiotics, supportive care	Chest X-ray, blood cultures, complete blood count	Variable, depends on causative organism and host response
Acute Bronchitis	Moderate	Cough, dyspnea, chest discomfort	Cough, dyspnea	Normal or mildly abnormal lung function, absence of pneumonia	Smoking, environmental exposures	Acute onset, absence of systemic symptoms	Supportive care, bronchodilators if necessary	Chest X-ray to rule out pneumonia	Self-limiting, resolves within weeks
Pulmonary Embolism	Moderate	Sudden onset dyspnea, chest pain, syncope	Dyspnea, chest pain	Right ventricular strain on ECG, positive D-dimer	Immobilization, cancer, thrombophilia	Sudden onset, presence of risk factors	Anticoagulation, thrombolysis in severe cases	CT pulmonary angiography, D-dimer	Variable, depends on size and location of embolism
Lung Cancer	Low	Chronic cough, hemoptysis, weight loss	Cough, hemoptysis, weight loss	Mass on chest X-ray or CT, abnormal cytology	Smoking, environmental exposures	Chronic symptoms, presence of a mass on imaging	Surgery, chemotherapy, radiation therapy	Chest X-ray, CT, biopsy	Variable, depends on stage and histology
Tuberculosis	Low	Chronic cough, weight loss, night sweats	Cough, weight loss, night sweats	Abnormal chest X-ray, positive sputum smear or culture	Immigration from endemic areas, HIV infection	Chronic symptoms, exposure history	Antitubercular therapy	Chest X-ray, sputum smear and culture	Curable with appropriate treatment
Sarcoidosis	Low	Chronic cough, dyspnea, skin lesions	Cough, dyspnea, skin lesions	Bilateral hilar lymphadenopathy on chest X-ray, non-caseating granulomas on biopsy	Genetic predisposition, environmental exposures	Chronic symptoms, presence of granulomas on biopsy	Corticosteroids, immunosuppressants	Chest X-ray, biopsy, pulmonary function tests	Variable, depends on organ involvement
Interstitial Lung Disease	Low	Progressive dyspnea, dry cough	Dyspnea, cough	Ground-glass opacities on HRCT, restrictive lung function	Environmental exposures, connective tissue disease	Chronic symptoms, presence of fibrosis on	Corticosteroids, immunosuppressants, pulmonary rehabilitation	HRCT, pulmonary function tests, biopsy	Progressive, with potential for severe lung

Condition	Likelihood	Key Alerts	Key Symptoms	Commonly Reported Clinical Findings	Risk Factors	Differential Indicators	Literatural First-Line Management	Tests Usually Considered	General Prognostic Overview
						imaging			dysfunction

Further Research On Primary Diagnosis

- [National Institute of Health](#)
- [Johns Hopkins Medicine](#)
- [Stanford Medicine](#)
- [Massachusetts General Hospital](#)
- [Cedars-Sinai](#)

Google Links

- [Diagnosing Asthma](#)
- [Prescription for Asthma](#)
- [Specialist for Asthma](#)

Youtube Links

- [Diagnosing Asthma](#)
- [Prescribing Asthma](#)
- [Specialist for Asthma](#)

Specialty Domains Commonly Involved

- [Pulmonologist](#) for the management of asthma and other respiratory conditions.
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SOAP note Draft

Subjective (S)

- Chief Complaint: The patient presents with a 2-week history of persistent dry cough and exertional dyspnea.
 - History of Present Illness: The symptoms have been worsening over the past week, with the patient experiencing more frequent coughing spells and shortness of breath during physical activity.
 - Past Medical History: The patient has a history of similar episodes in the past that were responsive to inhalers.
 - Social History: The patient works in construction and has been exposed to dust and other potential irritants.
 - Family History: There is no significant family history of respiratory diseases.
 - Medications currently taken: The patient is currently taking no medications but has used inhalers in the past for similar symptoms.
 - Medications to be removed: None at this time.
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Objective (O)

- Vitals: The patient's vital signs are within normal limits, with a respiratory rate of 18 breaths per minute and an oxygen saturation of 98% on room air.
 - Physical Exam Findings: The physical examination reveals wheezing and mild distress during inhalation.
 - Respiratory: The patient has a history of respiratory issues, with a previous diagnosis of asthma.
 - Abdomen: The abdominal examination is unremarkable.
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Assessment (A)

- Symptom 1: The patient's primary symptom is a persistent dry cough.
 - Likely Diagnosis: [Asthma](#)
 - Differential Diagnosis: [Chronic Obstructive Pulmonary Disease \(COPD\)](#), pneumonia, and other respiratory conditions should be considered.
 - Investigations: Spirometry and peak flow measurement are planned to assess lung function.
 - Treatment: The patient will be started on inhalers, including a bronchodilator and a corticosteroid, to manage symptoms and reduce inflammation.
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Plan (P)

Referrals: The patient will be referred to a pulmonologist for further evaluation and management.

Follow-Up: The patient is scheduled to follow up in 2 weeks to assess response to treatment and adjust the management plan as necessary.

Common Comorbidities

Comorbidity Name	Relationship	Prevalence Note	Clinical Relevance	Monitoring Consideration
Comorbidity Name	Relationship	Prevalence Note	Clinical Relevance	Monitoring Consideration
Allergic Rhinitis	Frequently coexists	Seen in up to 80% of patients with asthma	Contributes to asthma symptoms and exacerbations	Monitor for nasal congestion, sneezing, and itchy eyes
Sinusitis	Often precedes	Common in patients with asthma, especially during exacerbations	Can trigger asthma symptoms	Assess for facial pain, headache, and nasal discharge
Gastroesophageal Reflux Disease (GERD)	May worsen	Present in approximately 50% of patients with asthma	Can trigger asthma symptoms, especially at night	Monitor for heartburn, regurgitation, and dysphagia

Progress Note Draft

Interval Events / Subjective:

The patient reports an improvement in symptoms over the past week, with less frequent coughing spells and reduced shortness of breath during physical activity.

Exam:

Vital signs are within normal limits, and the physical examination reveals decreased wheezing and improved lung sounds.

Labs Reviewed:

- Spirometry results show an improvement in lung function, with an increase in FEV1.

Imaging Reviewed:

- Chest X-ray findings are unchanged, with no evidence of pneumonia or other complications.

Assessment and Plan:**Clinical Impression:**

The patient's symptoms and lung function have improved with treatment, suggesting good control of asthma.

Asthma

The patient's asthma is well-controlled at this time, with minimal symptoms and good lung function.

Dx:

- Spirometry and peak flow measurement will continue to be used to monitor lung function and adjust treatment as necessary.

Tx:

- The patient will continue on the current inhaler regimen, with adjustments made as needed based on symptoms and lung function.

Chronic Problems:

The patient has a history of asthma, and management of this condition will continue.

Other Considerations:

The patient is advised to follow up in 2 weeks to reassess symptoms and lung function and to discuss any concerns or questions.

Discharge Document Draft

Primary Diagnosis:

- The patient was admitted with a primary diagnosis of asthma exacerbation.

Secondary Diagnoses:

- There were no secondary diagnoses during this hospital stay.

Hospital Course:

The patient was treated with bronchodilators and corticosteroids, with significant improvement in symptoms and lung function.

Exam on Discharge:

The patient's vital signs were within normal limits, and the physical examination revealed improved lung sounds and decreased wheezing.

Significant Labs/Imaging:

- Spirometry results showed an improvement in lung function.
- Chest X-ray findings were unchanged.

Operations/Procedures:

- No surgical procedures were performed during this hospital stay.

Discharge Medications:

- The patient was discharged on a regimen of inhalers, including a bronchodilator and a corticosteroid.

Required Outpatient Follow Up:

- The patient is scheduled to follow up with a pulmonologist in 2 weeks.

Disposition:

The patient was discharged home, with instructions to continue on the current medication regimen and to follow up as scheduled.

General DISCHARGE Information Draft

Dear Patient,

You were admitted to the hospital with an exacerbation of asthma. During your stay, you were treated with medications to help manage your symptoms and improve your lung function.

On Discharge:

BEGIN:

- Inhalers: Continue to use your inhalers as directed to control symptoms and prevent exacerbations.

STOP:

- No medications are to be stopped at this time.

Continue taking your other medications as before, including any prescribed by your primary care physician.

Follow Up With:

- Your pulmonologist in 2 weeks to assess your condition and adjust your treatment plan as necessary.

Emergency Instructions

If you experience severe symptoms such as difficulty breathing, chest pain, or severe coughing, please seek immediate medical attention.

Closing

It was a pleasure taking care of you during your hospital stay. If you have any questions or concerns, please do not hesitate to contact your healthcare provider.

PATIENT Education Draft

Asthma

What is it?

Asthma is a chronic condition that affects the airways in the lungs, causing symptoms such as wheezing, coughing, and shortness of breath.

Common Signs/Symptoms

- Wheezing
- Coughing
- Shortness of breath

Causes or Risk Factors

- Genetic predisposition
- Environmental factors, such as exposure to allergens or irritants

Possible Complications

- Asthma exacerbations, which can be severe and require hospitalization

Treatment Options

- Inhalers, including bronchodilators and corticosteroids

When to Seek Help

- If you experience severe symptoms, such as difficulty breathing or chest pain

Regular follow-up with your healthcare provider is important to monitor your condition and adjust your treatment plan as necessary.

Disclaimer

This patient education handout is for informational purposes only and should not be considered a substitute for professional medical advice.

HISTORY AND PHYSICAL Draft

Chief Complaint:

The patient presents with a 2-week history of persistent dry cough and exertional dyspnea.

History of Present Illness:

The patient's symptoms have been worsening over the past week, with more frequent coughing spells and shortness of breath during physical activity.

Past Medical History:

- The patient has a history of asthma, with previous episodes responsive to inhalers.

Surgical History:

- No significant surgical history.

Family History:

- No significant family history of respiratory diseases.

Social History:

- The patient works in construction and has been exposed to dust and other potential irritants.

Medications:

- The patient is currently taking no medications but has used inhalers in the past for similar symptoms.

Exam:

- Vitals: The patient's vital signs are within normal limits.
- General: The patient appears to be in mild distress due to respiratory symptoms.
- HEENT: The head, eyes, ears, nose, and throat examination is unremarkable.
- Neck: There is no lymphadenopathy or jugular venous distension.
- Cardiac: The heart sounds are normal, with no murmurs.

- Pulmonary: There is wheezing and mild distress during inhalation.
- Abdomen: The abdominal examination is unremarkable.
- Genitourinary: The genitourinary examination is unremarkable.
- Musculoskeletal: The musculoskeletal examination is unremarkable.
- Extremities: There is no edema or clubbing.
- Skin: The skin examination is unremarkable.
- Neurological: The neurological examination is unremarkable.
- Psychiatric: The patient is alert and cooperative.

Labs reviewed and notable for:

- Spirometry results show a decrease in lung function.

Imaging reviewed and notable for:

- Chest X-ray findings are unchanged, with no evidence of pneumonia or other complications.

ASSESSMENT AND PLAN Draft

Clinical Impression:

The patient presents with symptoms consistent with an asthma exacerbation, including wheezing, coughing, and shortness of breath.

Problem #1: Asthma

The patient's symptoms and history are consistent with asthma, and the patient has a history of similar episodes responsive to inhalers.

Dx:

- Spirometry and peak flow measurement will be used to assess lung function and monitor response to treatment.

Tx:

- The patient will be started on a regimen of inhalers, including a bronchodilator and a corticosteroid, to manage symptoms and reduce inflammation.

Problem #2: Chronic Asthma Management

- The patient will be educated on the importance of adherence to the medication regimen and follow-up appointments to monitor disease control.

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Sources