

Nursing Case Study: Managing Hypertension in an Elderly Patient

1. Introduction

Demographics: The patient is a 68-year-old African American male.

Presenting Symptoms: The patient presented with complaints of persistent headaches, episodes of dizziness, and blurred vision over the past two months.

Medical History: Past medical history includes type 2 diabetes mellitus and hyperlipidemia. The patient is a smoker with a 30-year history and has a sedentary lifestyle.

Initial Observations and Vital Signs: Blood pressure was recorded at 160/100 mmHg, heart rate at 78 bpm, and BMI at 32 kg/m².

Example of an Introduction Paragraph:

This case study explores the management of hypertension in a 68-year-old African American male, presenting with persistent headaches, episodes of dizziness, and blurred vision, symptoms he has been experiencing for the past two months. The patient's medical history is significant for type 2 diabetes mellitus and hyperlipidemia, and he has a long-standing history of smoking (30 years) combined with a sedentary lifestyle. Initial assessments revealed a blood pressure of 160/100 mmHg, a heart rate of 78 beats per minute, and a Body Mass Index (BMI) of 32 kg/m², indicating obesity. Given these factors, the patient's profile suggests a complex interplay of genetic predisposition, lifestyle choices, and age-related physiological changes contributing to his current health status. This introduction sets the stage for a deeper investigation into the differential diagnoses, with a primary focus on managing the identified condition of hypertension, examining the pathophysiology, proposing a comprehensive therapeutic plan, and reflecting on the educational insights gained from this case.

2. Differential Diagnosis Chart

Hypertension: Given the elevated blood pressure and symptoms. Rationale: Persistent high readings over several visits.

Hypothyroidism: Can cause similar symptoms. Rationale: Common in older adults, but less likely without weight gain or cold intolerance.

Primary aldosteronism: Might explain hypertension and symptoms. Rationale: Less common, but possible due to potassium imbalance.

Distinguishing Factors: Hypertension lacks the specific biochemical markers of primary aldosteronism and the systemic symptoms of hypothyroidism.

3. Primary Diagnosis

Diagnosis: Primary Hypertension.

Evidence and Reasoning: Diagnosis was based on the consistent elevation of blood pressure on multiple occasions, absence of secondary causes, and relevant risk factors (age, race, diabetes, hyperlipidemia, smoking, and obesity).

Differentiation: Lacked clinical and laboratory findings suggestive of secondary hypertension or other differential diagnoses.

4. Pathophysiology of Your Primary Diagnosis

Hypertension in this patient can be attributed to a combination of genetic predisposition, lifestyle factors (such as a high-sodium diet, sedentary lifestyle, and smoking), and age-related changes in blood vessel elasticity. These factors contribute to increased systemic vascular resistance and cardiac workload, leading to elevated blood pressure.

5. Therapeutic Plan

Pharmacologic Treatments: Prescribed lisinopril 10 mg once daily, to be adjusted based on blood pressure control. The ACE inhibitor helps reduce blood pressure by decreasing vascular resistance.

Non-pharmacologic Treatments: Recommended dietary modifications to reduce sodium intake, increase potassium-rich foods, regular physical activity, and smoking cessation.

Health Maintenance: Stress management techniques and routine monitoring of blood pressure at home.

Patient Education (Scripted): Explained the importance of medication adherence, lifestyle changes, and how to monitor blood pressure at home. Discussed the impact of smoking on heart health and provided resources for smoking cessation.

Follow-Up: Scheduled for a follow-up appointment in 4 weeks to reassess blood pressure control and medication side effects. Advised to seek immediate medical attention if experiencing chest pain, severe headache, or vision changes.

6. Use of Test Results

Blood tests (lipid profile, kidney function, and electrolytes) and an ECG were utilized to rule out secondary causes of hypertension and assess organ function. The results supported the diagnosis of primary hypertension and informed the therapeutic plan by confirming the absence of kidney disease or electrolyte imbalances.

7. Reflection on Personal Learning

This case reinforced the importance of a comprehensive approach to diagnosing and managing hypertension, considering both pharmacologic and non-pharmacologic strategies. It highlighted the challenge of addressing lifestyle factors in chronic disease management. The experience underscored the need for ongoing education in motivational interviewing techniques

to better support patients in making sustainable lifestyle changes. Future learning will focus on strategies for managing complex patients with multiple comorbidities.

This case study exemplifies how to use the provided template to organize and present clinical information systematically, ensuring a clear and educational approach to patient care and learning.

References

Scholarly Journal Articles, Peer-reviewed and focused on evidence-based strategies.