

Application of Course Knowledge: Raymond Collins Case Study

Description of Client's Situation

Raymond Collins, a 76-year-old male, presents to the clinic with persistently elevated blood pressure despite following his medication regimen and making lifestyle modifications. He has been monitoring his blood pressure at home, which remains high, with systolic averages consistently above 130 mmHg over the past three clinic visits. His current medication regimen includes Hydrochlorothiazide (HCTZ) 25 mg taken orally daily. A significant finding in his lab results is low potassium, and he has a history of hypertension along with an allergy to aspirin. Mr. Collins does not drink alcohol and has a smoking history, having quit 20 years ago.

Applicable Clinical Practice Guideline (CPG)

According to the Clinical Practice Guideline (CPG), the target blood pressure for older adults with hypertension is generally <130/80 mmHg, provided they can tolerate it without adverse effects. For patients on a thiazide diuretic like HCTZ, monitoring for electrolyte imbalances, particularly hypokalemia, is recommended. If blood pressure remains uncontrolled, the CPG suggests considering combination therapy or switching to a different antihypertensive class.

Assessment of the Client's Situation

Mr. Collins's persistent hypertension, despite adherence to HCTZ, and his low potassium levels suggest that his current treatment may not be optimally controlling his condition. HCTZ, while effective as an initial therapy, can contribute to hypokalemia, which could further complicate cardiovascular health. Based on the CPG recommendations, a pharmacological adjustment is necessary. Evaluations of individual patients and their co-morbidities and assessment of domains and components of frailty, together with weighted consideration of drug use, may help find the appropriate therapy (Guasti et al., 2022).

Recommendations may include switching to an ARB, a potassium-sparing diuretic, or combination therapy. ARBs like losartan can help manage hypertension and balance potassium levels. Spironolactone could address hypokalemia and enhance blood pressure control. A combination of a CCB, such as amlodipine, with an ARB or ACE could reduce blood pressure. Follow-up is necessary to ensure that adjustments benefit the patient.

Additional Questions and Follow-Up

Additional assessments and follow-up actions are necessary to optimize treatment for Mr. Collins. A more detailed history and physical examination will help identify symptoms of hypokalemia, like muscle weakness, or possible signs of other organ damage, such as vision changes or kidney dysfunction. Repeating labs to monitor potassium, magnesium, and sodium levels and additional lab tests, such as BUN and creatinine, for renal function. More information about Mr. Collins' lifestyle and dietary intake will also be necessary.

In conclusion, adjusting the treatment requires additional reassessments, just as the initial assessment. The follow-up plan should include regular blood pressure monitoring, ideally ambulatory or home monitoring. It is strongly recommended that treatment efficacy and side effects be assessed within 4-6 weeks of therapy adjustment.

References

- Guasti, L., Ambrosetti, M., Ferrari, M., Marino, F., Ferrini, M., Sudano, I., Tanda, M. L., Parrini, I., Asteggiano, R., & Cosentino, M. (2022). Management of hypertension in the elderly and frail patient. *Drugs & Aging, 39*(10), 763–772.
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