KidneyCcompanion - Medical Prescription Analysis Report

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Report Date: 2025-12-19 14:15

Patient Information:

Name: John Smith

Age: 68

Gender: Male

Ckd Stage: Stage 3b

Egfr: 42

Potassium: 4.8

Sodium: 135

Serum Creatinine: 2.1

Blood Urea: 45

Has Diabetes: False

Has Hypertension: True

Medications:

1. Losartan - 50mg - Once daily
   Notes: For blood pressure control
2. Spironolactone - 25mg - Once daily
   Notes: Potassium-sparing diuretic

Clinical Insights:

The patient has an eGFR of 42 mL/min/1.73m², indicating CKD Stage 3b. Losartan, an ARB, is appropriate for hypertension and provides renoprotection. Spironolactone, a potassium-sparing diuretic, requires careful monitoring in CKD due to risk of hyperkalemia, especially with the current potassium level of 4.8 mEq/L which is near the upper limit of normal.

Risk Assessment:

1. Hyperkalemia risk: The combination of Losartan and Spironolactone significantly increases the risk of elevated potassium levels, particularly concerning given the patient's CKD Stage 3b and borderline potassium level. 2. Acute Kidney Injury: Both medications can affect kidney function, with ARBs potentially reducing GFR and diuretics affecting hydration status. 3. Hypotension: Combined antihypertensive effects may lead to excessive blood pressure reduction.

Recommendations:

1. Monitor serum potassium and creatinine within 1-2 weeks of initiation and periodically thereafter. 2. Educate patient on dietary potassium restrictions. 3. Consider reducing Spironolactone dose if potassium exceeds 5.0 mEq/L. 4. Monitor blood pressure regularly to avoid hypotension. 5. Assess for symptoms of hyperkalemia (muscle weakness, palpitations).

Drug Interactions:

Losartan and Spironolactone: This combination significantly increases the risk of hyperkalemia and should be used with caution in CKD patients. Regular monitoring of potassium levels is essential. The synergistic antihypertensive effects may also increase the risk of hypotension.

Follow-up Timeline:

Laboratory monitoring (electrolytes, renal function) within 1-2 weeks. Clinical follow-up in 4-6 weeks to assess blood pressure control and tolerability. More frequent monitoring if potassium rises above 5.0 mEq/L or if symptoms of hyperkalemia develop.

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