**Fludrocortisone** (floo-droe-kor-ti-sone)

**Therapeutic Uses**
- **Hormones**
- **Corticosteroids (mineralocorticoid)**

**Pregnancy Category:** C

**Indications**
- Sodium loss and hypotension associated with adrenocortical insufficiency (given with hydrocortisone or cortisone).
- Management of sodium loss due to congenital adrenogenital syndrome (congenital adrenal hyperplasia).
- Unlabeled Use: Idiopathic orthostatic hypotension (with increased sodium intake).
- Type IV renal tubular acidosis.

**Action**
- Causes sodium reabsorption, hydrogen and potassium excretion, and water retention by its effects on the distal renal tubule.

**Therapeutic Effects:**
- Maintenance of sodium balance and BP in patients with adrenocortical insufficiency.

**Pharmacokinetics**
- **Absorption:** Well absorbed following oral administration.
- **Distribution:** Widely distributed; probably enters breast milk.
- **Protein Binding:** High.
- **Metabolism and Excretion:** Mostly metabolized by the liver.
- **Half-life:** 3.5 hr.

**TIME/ACTION PROFILE (mineralocorticoid activity)**

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO</td>
<td>unknown</td>
<td>unknown</td>
<td>1–2 days</td>
</tr>
</tbody>
</table>

**Contraindications/Precautions**
- **Contraindicated in:** Hypersensitivity.

**Use Cautiously in:**
- HF
- Addison's disease (patients may have exaggerated response)
- OB, Lactation, Pedi: Safety not established.
- **Geriatric/Renal/Liver Impaired Patients:** Monitor closely.

**Adverse Reactions/Side Effects**


**Drug-Drug:** Use with thiazide or loop diuretics, piperacillin, or amphotericin B may produce prolonged neuromuscular blockade following the use of nondepolarizing neuromuscular blocking agents. Phenobarbital or rifampin may produce increased metabolism and decrease effectiveness.

**Drug-Food:** Large amounts of salt or sodium-containing foods may cause excessive sodium retention and potassium loss.

**Route/Dosage**

| **PO (Adults):** | **Adrenocortical insufficiency—** 100 mcg/day (range 100 mcg 3 times weekly—200 mcg daily). Doses as small as 50 mcg daily may be required by some patients. Use with 10–37.5 mg cortisone daily or 10–30 mg hydrocortisone daily. Adrenogenital syndrome—100–200 mcg/day. Idiopathic hypotension—50–200 mcg/day (unlabeled). |
| **PO (Children):** | 50–100 mcg/day. |

**NURSING IMPLICATIONS**

**Assessment**
- Monitor BP periodically during therapy. Report significant changes. Hypotension may indicate insufficient dose.
- **Monitor for fluid retention:** (weight daily, assess for edema, and auscultate lungs for rales/crackles).
- **Monitor patients with Addison’s disease closely:** and stop treatment if a significant increase in weight or BP, edema, or cardiac enlargement occurs. Patients with Addison’s disease are more sensitive to the action of fludrocortisone and may have an exaggerated response.
- **Lab Test Considerations:** Monitor serum electrolytes periodically during therapy: Fluid accumulation causes hyperkalemia.

**Potential Nursing Diagnoses**

| Deficient fluid volume (indications) | Excess fluid volume (side effects) |

**Patient/Family Teaching**
- Teach patient to carry a medical information card indicating use of fludrocortisone.
- Instruct patient to report inability to control fluid retention, weight gain, or edema.
- May cause hyperkalemia; instruct patient to report paresthesias, weakness, or twitching.
- May cause fluid retention. Instruct patient to weigh daily and report significant changes.
- May cause hypokalemia; instruct patient to report polyuria, polydipsia, muscular weakness, or paresthesias.

**Interactions**

- **Drug-Drug:** Use with thiazide or loop diuretics, piperacillin, or amphotericin B may produce prolonged neuromuscular blockade following the use of nondepolarizing neuromuscular blocking agents. Phenobarbital or rifampin may produce increased metabolism and decrease effectiveness.
- **Drug-Food:** Large amounts of salt or sodium-containing foods may cause excessive sodium retention and potassium loss.

**Adverse Reactions/Side Effects**


**Drug-Drug:** Use with thiazide or loop diuretics, piperacillin, or amphotericin B may produce prolonged neuromuscular blockade following the use of nondepolarizing neuromuscular blocking agents. Phenobarbital or rifampin may produce increased metabolism and decrease effectiveness.

**Drug-Food:** Large amounts of salt or sodium-containing foods may cause excessive sodium retention and potassium loss.
Implementation

● PO: Tablets are scored and may be broken if dose adjustment is necessary.

Patient/Family Teaching

● Instruct patient to take medication as directed. Take missed doses as soon as remembered but not just before next dose is due. Explain that lifelong therapy may be necessary and that abrupt discontinuation may lead to Addisonian Crisis. Patient should keep an adequate supply available at all times.

● Advise patient to follow dietary modification prescribed by health care professional. Instruct patient to follow a diet high in potassium. Amount of sodium allowed to varies with pathophysiology.

● Instruct patient to inform health care professional if weight gain or edema, muscle weakness, cramps, nausea, anorexia, or dizziness occurs.

● Advise patient to carry identification at all times describing disease process and medication regimen.

Evaluation/Desired Outcomes

● Normalization of fluid and electrolyte balance without the development of hypokalemia or hypertension.

Why was this drug prescribed for your patient?