4.9: Alpha-1 Antagonists

Tamsulosin is an Alpha-1 antagonist.

**Mechanism of Action:** Tamsulosin selectively blocks alpha receptors in the prostate, leading to the relaxation of smooth muscles in the bladder, neck, and prostate, thus improving urine flow and reducing symptoms of benign prostatic hypertrophy (BPH).

**Indications:** Tamsulosin is used to treat BPH.

**Nursing Considerations:** Avoid using with other alpha-blockers. Tamsulosin is contraindicated with strong CYP3A4 inhibitors such as ketoconazole. Assess and monitor blood pressure, especially after first dose because tamsulosin may cause orthostatic hypotension.

**Patient Teaching & Education:** Advise patients to change positions slowly because the drug may cause orthostatic blood pressure changes. Additionally, the patient should take the medication at the same time each day. The patient should follow up with their healthcare provider to assess the effectiveness of the medication.\(^1\)

Now let’s take a closer look at the medication grid on tamsulosin in Table 4.9.\(^2\)

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<table>
<thead>
<tr>
<th>Class/Subclass</th>
<th>Prototype/Generic</th>
<th>Administration Considerations</th>
<th>Therapeutic Effects</th>
<th>Side/Adverse Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha-1 antagonist</td>
<td>tamsulosin</td>
<td>Avoid using with other alpha-blockers</td>
<td>Relaxes smooth muscle in bladder/prostate to</td>
<td>Hypotension, especially after first dose. Advise patient to</td>
</tr>
</tbody>
</table>
Assess and monitor blood pressure, especially after first dose.

- Improve urine flow
- Change positions slowly

1. uCentral from Unbound Medicine. https://www.unboundmedicine.com/ucentral
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