4.10: Alpha-2 Antagonists

Clonidine is an Alpha-2 antagonist.

**Mechanism of Action:** Clonidine reduces sympathetic outflow from the central nervous system and decreases peripheral resistance and renal vascular resistance.

**Indications:** Clonidine is used to treat hypertension (HTN) and attention deficit hyperactivity disorder (ADHD).

**Nursing Considerations:** Monitor blood pressure and pulse rate frequently. Dosage is usually adjusted to the patient’s blood pressure and can cause hypotension, bradycardia, and sedation. Rebound hypertension may occur if stopped abruptly.

**Patient Teaching & Education:** Patients should be taught the importance of adhering to the same dosing schedule each day. Patients may experience orthostatic blood pressure changes and should be cautioned against the use of alcohol while taking this medication. Additionally, patients may experience increased susceptibility to blood pressure changes when exercising and exposed to hot environments. If the patient experiences mental depression as a side effect of the medication, a different medication therapy may be needed.\(^1\)

Now let’s take a closer look at the medication grid on clonidine in Table 4.10.\(^2\)

Table 4.10 Clonidine Medication Grid

<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-2</td>
<td>clonidine</td>
<td>Monitor blood pressure and pulse</td>
<td>Treat</td>
<td>Hypotension</td>
</tr>
</tbody>
</table>

\(^1\)https://med.libretexts.org/Bookshelves/Nursing/Nursing_Pharmacology_(OpenRN)/04%3A_Autonomic_Nervous_System/4.10...

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agonist

rate frequently
Dosage is usually adjusted to patient’s BP and tolerance

hypertension or ADHD

Bradycardia
Sedation
Rebound hypertension if stopped abruptly

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**Alpha-2 Antagonists**

A2 antagonists are used in research with limited clinical application. [3]

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