5.8: Antitussives

Dextromethorphan is an example of an antitussive (see Figure 5.10[1]).

Photo showing various packages of Robitussin medications

Figure 5.10 Robitussin DM is an OTC medication that contains dextromethorphan and guaifenesin
Mechanism of Action

Dextromethorphan suppresses a cough by depressing the cough center in the medulla oblongata or the cough receptors in the throat, trachea, or lungs, effectively elevating the threshold for coughing.

Indication for Use

Antitussives are used for a dry, hacking, nonproductive cough that interferes with rest and sleep.

Nursing Considerations Across the Lifespan

This medication is not safe for children under the age of 4 years.

Adverse/Side Effects

The most common side effects include nausea and drowsiness. Some patients may experience a rash or difficulty breathing. High doses may cause hallucinations and disassociation, and the drug has been reported to be used as a recreational drug.[2]

Patient Teaching & Education: Patients should take care to avoid irritants that stimulate their cough. Additionally, antitussive medications can cause drowsiness, and patients should avoid taking them with other CNS depressants or alcohol.[3]

Now let’s take a closer look at the medication grid on dextromethorphan in Table 5.8.[4] [5] [6]

Table 5:8 Dextromethorphan Medication Grid

<table>
<thead>
<tr>
<th>Class/Subclass</th>
<th>Prototype/Generic</th>
<th>Administration Considerations</th>
<th>Therapeutic Effects</th>
<th>Adverse/Side Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antitussive</td>
<td>dextromethorphan</td>
<td>Take as directed</td>
<td>Temporarily relieves coughing due to minor throat and bronchial irritation as may occur with the common cold</td>
<td>CNS: sedation and dizziness Mild gastrointestinal effects</td>
</tr>
</tbody>
</table>

Administer undiluted
No alcohol due to CNS depression
Use with caution in patients with respiratory disease and with those taking monoamine oxidase inhibitors
(MAOIs)

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