5.13: Leukotriene Receptor Antagonists

Montelukast is a leukotriene antagonist medication with a distinctly shaped tablet. See Figure 5.18. [1]

Mechanism of Action

Montelukast blocks leukotriene receptors and decreases inflammation.

Indications for Use

Montelukast is used for the long-term control of asthma and for decreasing the frequency of asthma attacks. It is also indicated for exercise-induced bronchospasm and allergic rhinitis.

Nursing Considerations Across the Lifespan

The medication is safe for children 12 months and older. It is available in granule packets and chewable tablets, as well as regular tablets.

Adverse/Side Effects

Montelukast can cause headache, cough, nasal congestion, nausea, and hepatotoxicity. [2]

Figure 5.18 Montelukast Tablets
Patient Teaching & Education

Patients should be instructed to take medications at the same time each day and at least two hours prior to exercise. They should not discontinue medications without notifying the healthcare provider.\[^{[3]}\]

Now let’s take a closer look at the medication grid on montelukast in Table 5.13.\[^{[4],[5],[6],[7]}\]

Table 5.13 Montelukast 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>Leukotriene inhibitor</td>
<td>montelukast</td>
<td>Use as directed; not to be used as “rescue” medication</td>
<td>Prevention and treatment of asthma and exercise-induced bronchoconstriction</td>
<td>Headache</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Typically 3-7 days to reach effectiveness</td>
<td></td>
<td>Cough</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Nasal congestion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Nausea</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Hepatotoxicity</td>
</tr>
</tbody>
</table>

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3. uCentral from Unbound Medicine. https://www.unboundmedicine.com/ucentral.\[^{[10]}\]
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