6.11: Antilipemics

Antilipemic agents reduce hyperlipidemia that may lead to additional health problems such as stroke, myocardial infarction, angina, and heart failure. Medications should be used in adjunct with a healthy diet and exercise regime approved by the patient's health care provider.

Atorvastatin

**Mechanism of Action**

Atorvastatin inhibits HMG-CoA reductase and cholesterol synthesis, which reduces LDL (low density lipoprotein).

**Indications for Use**

This medication is used for hyperlipidemia and the prevention of cardiovascular disease.

**Nursing Considerations Across the Lifespan**

Do not use with patients who have hepatic disease.

This medication is contraindicated with patients who are pregnant or breastfeeding. Do not give to patients under 10 years of age.

Use caution with geriatric patients due to increased risk for myopathy.

**Adverse/Side Effects**

Patients who are pregnant or breastfeeding should not take this medication. A health care provider will assess routine
liver function for a patient taking atorvastatin. Nausea, diarrhea, dyspepsia, increase in blood glucose, rhabdomyolysis, myalgia, or muscle spasms may be produced by taking this medication. Rhabdomyolysis is a condition in which damaged skeletal muscle breaks down rapidly, causing muscle pain and weakness. Some of the muscle breakdown products are harmful to the kidneys and can cause kidney failure. There may be tea-colored urine or an irregular heartbeat with rhabdomyolysis. [1]

Patient Teaching & Education

Patients should take the prescribed medication as directed and avoid consuming grapefruit juice during drug therapy. The medication should be used with dietary modifications. If the patient experiences muscle pain, tenderness, or weakness, these should be reported to the healthcare provider. [2]

Now let’s take a closer look at the medication grid on atorvastatin in Table 6.11a. [3]

Table 6:11a Atorvastatin 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>HMG-CoA Reductase Inhibitors</td>
<td>atorvastatin</td>
<td>Take at the same time each day, with or without food</td>
<td>Reduce LDL</td>
<td>Rhabdomyolysis, myalgia, and muscle spasms</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Report muscle weakness, feeling tired, abdominal pain, or yellowing of skin or eyes</td>
<td></td>
<td>Abnormal liver enzymes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>May increase blood glucose</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Nausea, diarrhea, and dyspepsia</td>
</tr>
</tbody>
</table>

Ezetimibe

Mechanism of Action

Ezetimibe blocks the absorption of cholesterol in the small intestines to reduce LDL.

Indications for Use

This medication is used for treatment of hyperlipidemia and familial hypercholesterolemia.

Nursing Considerations Across the Lifespan

If medication is combined with HMG-CoA reductase inhibitors, do not give to pregnant or breastfeeding patients.
Adverse/Side Effects

Use with caution when ezetimibe is combined with additional medication. Patients may experience arthralgia, rhabdomyolysis, hepatic impairment, dizziness, upper respiratory infections, or diarrhea if they are taking this medication. Minimal side effects were reported with monotherapy.\[4\]

Patient Teaching & Education

Patients should take the prescribed medication as directed and avoid consuming grapefruit juice during drug therapy. The medication should be used with dietary modifications. If the patient experiences muscle pain, tenderness, or weakness, this should be reported to the healthcare provider.\[5\]

Now let's take a closer look at the medication grid for ezetimibe in Table 6.11b.\[6\]

<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>Cholesterol Absorption Inhibitor</td>
<td>ezetimibe</td>
<td>Take at the same time each day, with or without food</td>
<td>Reduce LDL</td>
<td>Arthralgia, rhabdomyolysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Report muscle weakness, feeling tired, abdominal pain, or yellowing of skin or eyes</td>
<td></td>
<td>Hepatic impairment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dizziness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Upper respiratory infection</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Diarrhea</td>
</tr>
</tbody>
</table>

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