6.13: Erectile Agents

Sildenafil (Viagra) is commonly known to treat erectile dysfunction. This medication was originally developed for improvement of pulmonary hypertension, but has been found to be useful for additional indications. However, patients taking this medication cannot take nitroglycerin due to severe hypotension.

Mechanism of Action

Sildenafil inhibits phosphodiesterase (PDE-5) in the pulmonary smooth muscle and corpus cavernosum. This allows for relaxation in the smooth muscle.

Indications for Use

Sildenafil is used in the treatment of pulmonary hypertension and erectile dysfunction.

Nursing Considerations Across the Lifespan

Pediatric patients have shown to have an increase in mortality with sildenafil.

Dose adjustments are needed for patients with hepatic and renal impairment.

Use cautiously with geriatric patients with decreased hepatic, renal, and cardiac functions.

Adverse/Side Effects

Patients taking sildenafil may expect to experience hypotension, visual or hearing loss, priapism (male), headache, or vaso-occlusive crisis. If patients have priapism that lasts longer than 4 hours, they should seek medical attention.
Patient Education & Teaching

Patients should be instructed to take medications as directed and should seek immediate medical attention if chest pain occurs. Patients need education regarding the need to report priapism lasting longer than 4 hours or if they notice any dizziness or decrease in hearing ability.\[2\]

Now let’s take a closer look at the medication grid on sildenafil in Table 6.13.\[3\]

<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>Phosphodiesterase inhibitor</td>
<td>sildenafil</td>
<td>Do not administer with organic nitrates If priapism persists longer than 4 hours, seek medical attention</td>
<td>Decrease pulmonary hypertension Improving erectile dysfunction symptoms</td>
<td>Hypotension Visual loss, hearing loss Priapism Headache Vaso-occlusive crisis due to sickle cell anemia</td>
</tr>
</tbody>
</table>

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