Lisdexamfetamine (lis-des-am-fet-a-meen)

**Venezuelan Classification**
Therapeutic: central nervous system stimulants
Pharmacologic: sympathomimetics

**Schedule II**

**Pregnancy Category C**

**Indications**
Management of attention deficit hyperactivity disorder (ADHD) (in adults and children).

**Action**
Blocks reuptake and increases release of norepinephrine and dopamine resulting in increased levels in extraneuronal space.

**Therapeutic Effects:**
Improved attention span in ADHD.

**Pharmacokinetics**
Absorption: Rapidly absorbed and converted to dextroamphetamine, the active drug.
Distribution: Unknown.
Metabolism and Excretion: 42% excreted in urine as amphetamine.
Half-life: less than 1 hr for lisdexamfetamine.

**TIME/ACTION PROFILE**

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO</td>
<td>rapid</td>
<td>1 hr</td>
<td>24 hr</td>
</tr>
</tbody>
</table>

**Contraindications/Precautions**
Contraindicated in: Hypersensitivity to lisdexamfetamine or other sympathomimetic amine; Advanced arteriosclerosis; Symptomatic cardiovascular disease including known structural cardiac abnormalities (may increase the risk of sudden death); Moderate to severe hypertension; Glaucoma; History of pre-existing psychosis, bipolar disorder, aggression, tics, Tourette's syndrome or seizures (may exacerbate condition); Use only if maternal benefit outweighs fetal risk. Use with caution in: Children 6 yr old (safety and effectiveness not established).

**Adverse Reactions/Side Effects**
CNS: behavioral disturbances, dizziness, hallucinations, insomnia, irritability, mania, psychomotor hyperactivity, sleep disturbance, restless legs, akathisia, hyperactivity, fatigue, anxiety, euphoria, tremor, agitation, excitement.
CV: sudden death, Raynaud's phenomenon.
EENT: blurred vision, poor accommodation.
GI: abdominal pain, appetite, dry mouth, nausea, vomiting.
Derm: rash.
Metab: weight loss.
Neuro: paresthesia.
Misc: long-term growth suppression.

**Interactions**
Drug-Drug: Serious adverse reactions including hyperpyrexia and hypertension may occur with monoamine oxidase inhibitors; avoid use within 14 days. Concurrent use of other sympathomimetic amines may result in additive effects and 1% risk of adverse reactions. Tricyclic antidepressants may increase blood levels and may result in 1% risk of adverse reactions. Antihistamines may increase sedating effects of antihistamines. May decrease effectiveness of antihypertensives. Effects may be increased by haloperidol, lithium, or chlorpromazine. May increase absorption of phenobarbital or phenytoin.

**Route/Dosage**
PO (Adults and Children 6–17 yr): 30 mg daily; may be increased by 10–20 mg/day at weekly intervals, up to 70 mg/day.

**NURSING IMPLICATIONS**

**Assessment**
- Assess child's attention span, impulse control, and interactions with others. Therapy may be interrupted at intervals to determine whether symptoms are sufficient to continue therapy.
- Monitor BP, pulse, and respiration before administering and periodically during therapy. Obtain a history (including assessment of family history of sudden death or ventricular arrhythmia), physical exam to assess for cardiac disease, and further evaluation (EKG and echocardiogram), if indicated. If exertional chest pain, unexplained syncope, or other cardiac symptoms occur, evaluate promptly.

**Nursing Considerations**
- Use cautiously in: History of pre-existing psychosis, bipolar disorder, aggression, tics, Tourette's syndrome or seizures (may exacerbate condition); Use only if maternal benefit outweighs fetal risk. Children 6 yr old (safety and effectiveness not established).

**Use During Pregnancy:** Canadian drug name.
Monitor growth, both height and weight, in children on long-term therapy.

- Laboratory Considerations: May cause plasma corticosteroid levels interfering with urinary steroid determinations.

Potential Nursing Diagnoses
Disturbed thought process (Side Effects)

Implementation
- PO: Administer in the morning without regard to meals. Afternoon doses should be avoided due to potential for insomnia. Capsules may be swallowed whole or opened and the entire contents dissolved in a glass of water. If solution method is used, consume immediately; do not store for future use. Do not divide capsules or take less than one capsule per day.

Patient/Family Teaching
- Instruct patient to take medication as directed. Advise patient and parents to read Medication Guide prior to initiation of therapy and with each renewal of Rx refill. If more than prescribed amount is taken multi-health care professional immediately. Instruct patient that these medications may be dangerous.
- Advise patient to check weight 2–3 times weekly and report weight loss to health care professional. If reduced appetite and weight loss are a problem, advise parents to provide high calorie meals when drug levels are low (at breakfast and/or bedtime).
- Advise patients starting therapy of risk of peripheral vasculopathy. Instruct patients to notify health care professional of any numbness, pain, skin color change from pale, to blue, to red, or evidence of sensitivity to temperature in fingers or toes, and call if unexplained wounds appear on fingers or toes. May require rheumatology consultation.
- Advise parents to notify health care professional if child has signs of heart problems (chest pain, shortness of breath, palpitations) or if new or worsening mental symptoms or problems, especially seeing or hearing things that are not real, believing things that are not real, or are suspicious occur.

Evaluation/Desired Outcomes
- Improved attention span, decreased impulsiveness and hyperactivity in ADHD.

Why was this drug prescribed for your patient?