phentermine/topiramate (ten-ter-meen/toe-pyre-a-mate)  

**Pharmacology:** appetite suppressants  

**Schedule IV**  

**Pregnancy Category X**  

**Indications**  

Weight management as part of a program including calorie restriction and increased exercise in patients with an initial body mass index (BMI) of ≥30 kg/m² or a BMI of ≥27 kg/m² with at least one other risk factor (hypertension, type 2 diabetes mellitus or dyslipidemia).  

**Action**  

Phentermine—appetite and food consumption.  

Topiramate—appetite and enhances satiety.  

**Therapeutic Effects:** Weight loss.  

**Pharmacokinetics**  

**Absorption:** Phentermine—Unknown; Topiramate—80% absorbed following oral administration.  

**Distribution:** Phentermine—Unknown; Topiramate—Unknown.  

**Metabolism and Excretion:** Phentermine—metabolized by the liver; Topiramate—70% excreted unchanged in urine.  

**Half-life:** Phentermine—19–24 hr; Topiramate—21 hr.  

**TIME/ACTION PROFILE (phentermine—appetite suppression, topiramate—blood levels)**  

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO (weight loss)</td>
<td>within 8 wk</td>
<td>16–32 wk</td>
<td>unknown</td>
</tr>
</tbody>
</table>

**Contraindications/Precautions**  

Contraindicated in: Hypersensitivity/idiosyncrasy to sympathomimetics; OB: Pregnancy (may cause fetal harm); Lactation: Breast feeding should be avoided; Glaucoma; Hypothyroidism; During/within 14 days of MAO inhibitors; Severe renal impairment (CCr 30 mL/min); Severe hepatic impairment; History of suicidal thought/active suicidal ideation; Females with reproductive potential (negative pregnancy test and contraception required); History of substance abuse; Geri: Risk of adverse effects, consider age-related decrease in cardiac, renal and hepatic function, concurrent chronic disease states and medications.  

**Adverse Reactions/Side Effects**  

CNS: Seizures (following abrupt discontinuation), headache, insomnia, cognitive impairment, dizziness, tremor, drowsiness, seizures, tinnitus, hyperventilation, agitation, altered taste, abnormal movement, anxiety, amnesia, behavioral changes, confusion, diplopia, vertigo, dry mouth.  

EENT: Acute myopia, blurred vision, eye pain, secondary angle closure glaucoma.  

CV: Tachycardia, hypotension, palpitations.  

GI: Hepatotoxicity, altered taste, constipation, dry mouth.  

GU: Creatinine, kidney stones.  

Derm: Serious skin reactions including Erythema Multiforme, Stevens-Johnson Syndrome and Toxic Epidermal Necrolysis, alopecia, oligohydrosis (reduced sweating).  

Endo: Hypoglycemia.  

F and E: Metabolic acidosis, hypokalemia.  

Neuro: Paraesthesia.  

**Interactions**  

**Drug-Drug:** Risk of hypokalemia with non-potassium sparing diuretics.  

Risk of CNS depression with other CNS depressants including alcohol, some antihistamines, sedatives/hypnotics, antipsychotics, and opioid analgesics.  

Risk of uncontrolled blood pressure, blood levels of topiramate may be ↑ by carbamazepine or phenytoin.  

Concurrent use of topiramate with certain antipsychotics may ↑ risk of hyperammonemia.  

Concurrent use of topiramate with certain anticonvulsants may ↑ risk of metformin acidosis and kidney stones.  

Risk of hypertension with antihypertensive and diuretics.  

**Route/Dosage**  

**PO (Adults):**  

Initial dose—one phentermine 3.75 mg/topiramate 23 mg capsule daily for 14 days, then increase to one phentermine 7.5 mg/topiramate 46 mg capsule daily for 12 wk, then assess weight loss. If weight loss has not exceeded 3% of baseline, discontinue or escalate dose to one phentermine 11.25 mg/topiramate 69 mg capsule daily for 14 days, then one phentermine 15 mg/topiramate 92 mg capsule daily for 12 wk, if weight loss has not exceeded 5% of baseline, discontinue as success is unlikely. Discontinuation should proceed by taking the phentermine 15 mg/topiramate 92 mg capsule every other day for 1 wk.
Renal Impairment
PO (Adults): CCr \( \geq 30 \text{ mL/min} \) — daily dose should not exceed one phentermine 7.5 mg/topiramate 46 mg capsule daily.

Hepatic Impairment
PO (Adults): Child-Pugh score 7–9 — daily dose should not exceed one phentermine 7.5 mg/topiramate 46 mg capsule daily.

NURSING IMPLICATIONS
Assessment
- Monitor patients for weight loss and adjust concurrent medications (anti-hypertensives, antidiabetics) as needed. Evaluate weight loss after each 12-wk of therapy.
- Monitor directly for notable changes in behavior that could indicate the emergence or worsening of suicidal thoughts or behavior or depression.
- Discontinue phentermine/topiramate if these occur.
- Monitor BP and heart rate periodically during therapy; may cause increase in resting heart rate. May cause hypotension if patients treated with antihypertensives.

Test Considerations:
- What is a pregnancy test prior to starting therapy and monthly during therapy.
- May cause metabolic acidosis; monitor serum bicarbonate, prior to starting and periodically during therapy.
- May cause \( q \) serum creatinine; peak increases observed after 4–8 wks of therapy. Monitor serum creatinine prior to and periodically during therapy; if persistent elevations occur, decrease dose or discontinue therapy.
- May cause hypokalemia; monitor serum potassium periodically during therapy.

Potential Nursing Diagnoses
Disturbed body image (Indications)
Imbalanced nutrition: more than body requirements (Indications)
Deficient knowledge, related to medication regimen (Patient/Family Teaching)

Implementation
- Qsymia is only available through certified pharmacies that are enrolled in the Qsymia certified pharmacy network. Information can be obtained at www.QsymiaREMS.com or by calling 1-888-998-4887.
- PO: Administer once daily in the morning without regard to food. Avoid dosing in the evening; may cause insomnia.
- Patient/Family Teaching
  - Instruct patient to take phentermine/topiramate as directed. Do not stop taking without consulting health care professional. Discontinue gradually taking 1 dose every other day for at least 1 wk to prevent seizures.
  - Advise patient to notify health care professional if sustained periods of heart pounding or racing while at rest, severe and persistent eye pain or significant changes in vision, changes in attention, concentration, memory, and/or difficulty finding words; factors that can increase risk of acidosis (prolonged diarrhea, surgery, high protein/low carbohydrate diet, and/or concomitant medications).
  - Inform patients and families of risk of suicidal thoughts and behavior (behavioral changes, emergency or worsening signs and symptoms of depression, unusual changes in mood, or emergence of suicidal thoughts, behavior, or thoughts of self-harm). Advise that these should be reported to health care professional immediately.
  - May cause changes in mental performance, motor performance, and/or vision. Caution patients to avoid driving and other activities requiring alertness until response to medication is known.
  - Instruct patient to increase fluid intake to increase urinary output and decrease risk of kidney stones.
  - Advise patient to monitor for decreased sweating and increased body temperature during physical activity, especially in hot weather.
  - Advise patient to notify health care professional of all Rx or OTC medications, vitamins, or herbal products being taken and consult health care professional before taking any new medications. Advise patient in avoiding taking other CNS depressants or alcohol.
  - Phentermine/topiramate is teratogenic. Advise female patient to use effective contraception during therapy. Advise female patients to notify health care professional if pregnancy is planned or suspected or if breast feeding.

Evaluation/Desired Outcomes
- Decrease in weight and BMI. If 3% of baseline body weight is not lost by Week 12, increase dose or discontinue phentermine/topiramate. Evaluate after second 12 wk of therapy.
- Adverse effects may be related to changes in fluid intake. Monitor serum sodium levels periodically.