Drug-Induced Psychiatric Disorders

**Drug-induced mania**
- Drugs that may cause manic symptoms: corticosteroids, antidepressants, hallucinogens, stimulants (sympathomimetics), antiparkinson’s drugs, thyroxine
- Antidepressant-induced switch to mania: some patients initially diagnosed with MDD can emerge as bipolar disorder during antidepressant treatment
- Symptoms to look out for: problems or marked changes in “TIES”
  - Thoughts: suicidal or violent
  - Irritability
  - Energy
  - Sleep

**Drug-induced delirium**
- Delirium: clouding of consciousness, attention impairment, disorientation, illusions, hallucination
- Sundowning: agitated, confused state in the evening (seen with Alzheimer’s and dementia)
- Delirium ≠ dementia

<table>
<thead>
<tr>
<th>Delirium</th>
<th>Dementia</th>
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</thead>
<tbody>
<tr>
<td>Onset</td>
<td>Sudden (acute) over hrs to days</td>
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<tr>
<td>Course</td>
<td>Fluctuating</td>
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<tr>
<td>Duration</td>
<td>Days to weeks</td>
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<tr>
<td>Consciousness</td>
<td>Often impaired, fluctuates rapidly</td>
</tr>
<tr>
<td>Attention</td>
<td>Impaired</td>
</tr>
<tr>
<td>Psychomotor</td>
<td>Increased or decreased</td>
</tr>
<tr>
<td>Reversibility</td>
<td>Usually</td>
</tr>
</tbody>
</table>

- Causes of delirium: alcohol/sedative withdrawal, infections, electrolyte disturbances, structural brain lesions, postoperative states
- Antipsychotics are effective in treating delirium symptoms
  - Haloperidol, aripiprazole, quetiapine, risperidone, olanzapine, ziprasidone
  - Avoid benzodiazepines due to abuse potential
- Drugs that may cause delirium
  - Quinolone antibiotics: inhibit GABA (inhibitory) from binding to receptors → CNS excitation
  - Opioids: release GABA break on DA release → ↑DA release in nucleus accumbens
    - Yes: morphine, codeine
    - No: fentanyl, hydrocodone
  - Corticosteroids (>15mg): stimulate DA neurons in VTA → ↑DA release in nucleus accumbens

**Drug-induced depression**
- 1st drug to cause depression: reserpine
- Contraindications to interferon: depression, suicidal ideation, severe mania
- Inverse relationship between ACh and catecholamines (DA & NE)
  - Drugs that ↑ACh will ↓DA and ↓NE by inhibiting VMAT
  - With no DA or NE in vesicles for release, a possible side effect can be CNS mental depression
- Drugs that may cause depression
  - Corticosteroids, cocaine withdrawal, sedative-hypnotics, L-DOPA, anticancer drugs, contraceptive implants, propranolol, clonidine, methyldopa, reserpine, interferon-α, interleukin-2, mefloquine, Accutane (requires registration)