Psychiatry Cheat Sheet

Jazzlyn Gallardo, D.O.

Normal TSH: 0.45 – 5.10 mIU/l
Check TSH again 4-6 weeks after each thyroid dose change.

**Levothyroxine**: starting dose 25 mcg/d
- Take thyroid meds on empty stomach as soon as patient gets up in the morning at least one hour before eating, which helps with absorption; don’t ever take thyroid meds with vitamins

**Therapeutic blood levels**
- **Lithium**: 0.5-1.0 mEq/l, run towards the lower end to minimize side effects
- **Depakote**: 50-125 mcg/ml
- **Lamictal**: 3-14 mcg/ml
- **Anafranil** (TCAs): 220-500 ng/ml

**Bipolar ‘Ceiling’ Drugs**
- Lithium: start at 300 mg qhs with food in stomach (“little old lady” dose) or 600-900 mg qhs in younger, healthier patients, & titrate upwards depending on clinical response, side effects, & blood levels, better for euphoric, rather than irritable, patients
- Depakote (valproic acid) – good for rapid cycling (4 or more moodswings per year)/mixed state/irritable mood in Bipolar with 500 mg qhs starting dose & Depakote titration upwards depending on clinical response, side effects, & blood levels
  - Must start Depakote titration again at low dose if patient stops medication
- Tegretol (carbamazepine)/Trileptal (oxcarbazepine) - second-line ceiling drugs
- Neuroleptics (preferably second generation)

**Bipolar ‘Floor’ Drugs**
- Lithium
- Lamictal (good for concomitant seizures)
- Anti-depressants (generally not used as mono-therapy in Bipolar Disorder)

**Lithium Management**
- “Little old lady” dose or for children: starting dose of 300 mg qhs (for healthy patients 600-900 mg qhs); Emergency: start at 600-900 mg qhs
- Titrate upward in 300 mg/d increments
- Obtain blood levels 7-10 days after initiating or changing the dosage of lithium (up or down).
  - Instruct patient to get blood work done 12 hours after they have taken their last dose (trough).
- For lithium-induced hypothyroidism, do not discontinue lithium, instead supplement with levothyroxine, starting at 25 mcg/d, checking results with repeat TSH in 4-6 weeks
- Also get creatinine clearance (CrCl) & TSH every 6-12 months for anyone on lithium plus other appropriate screening LAB

**Lamictal Management**
- Start at 25 mcg qhs (12.5 mcg qhs if on concomitant Depakote with corresponding half-strength increased doses thereafter) for 2 weeks, 50 mcg qhs for next 2 weeks, 100 mcg qhs for next 2 weeks on Lamictal
- Initial target dose at 200 mcg qhs (get blood levels after 7-10 days at this dose, 12 hours after dose)
- Increase by 100 mg/d thereafter as needed, but not sooner than 2 weeks at each dose (only 50 mg/d increase if concurrently on Depakote)
To allow the body to get used to the drug and to avoid Stevens-Johnson Syndrome (life-threatening rash)

- Must restart original titration protocol at 25 mg qhs if they miss Lamictal more than 3 days in a row

- Side effects: tremor, dizziness, word-finding problems, rash

**Medications that need Tapering** (basically everything except LiCO3)

**Medication Groups**

**Atypical Antipsychotics/Second-generation neuroleptics**

- **Abilify** (aripiprazole)
- **Geodon** (ziprasidone)
- **Seroquel** (quetiapine) – start 25 mg po qhs then increase by 25-100 mg/day
- **Zyprexa** (olanzapine) – start 5 mg po qhs, may adjust by 5 mg/day prn
  - if still cannot sleep within 3 hours of first dose, add another 5 mg
  - *Seroquel and Zyprexa have the most anti-histaminic properties, and are therefore weight gainers

**OTHERS:**

- Risperdal (risperidone)
- Latuda (lurasidone)
- Clozaril (clozapine)

- **Serotonin-Norepinephrine Re-Uptake Inhibitors (SNRIs)** for depression, OCD, panic disorder, anxiety, chronic pain

- **Effexor** (venlafaxine) - cheaper than Pristiq; start at 25 mg bid (take after breakfast & after lunch, may cause upset stomach)
- **Cymbalta** (duloxetine) - still more expensive than Effexor; starting dose 30-60 mg; may cause upset stomach
- **Pristiq** (desvenlafaxine) - first active metabolite of venlafaxine, just more expensive
- **Fetzima** (levomilnacipran) – as expensive as Pristiq

**Selective Serotonin Re-Uptake Inhibitor (SSRIs):** for depression, OCD, panic disorder, anxiety

- **Prozac** (fluoxetine) – preferred; long half-life (if patient misses dose, won’t go into discontinuation syndrome); relatively weight neutral; associated with decreased libido (or other sexual dysfunction, like delayed orgasm)
  - start at 10-20 mg po qam, take with food in stomach; can go up in 10-20 mg/d increments not more than every 2 weeks
- **Zoloft** (sertraline)
- **Luvox** (fluvoxamine)
- **Lexapro** (escitalopram) – not used as much due to potential QTc prolongation
- **Celexa** (citalopram) – not used as much due to potential QTc prolongation
- **Paxil** (paroxetine) – may cause severe discontinuation syndrome, weight gain

- **Remeron** (Mirtazapine) – helpful for anxious depression with insomnia, starting dose: 30 mg qhs

- **α2 Antagonist** (increases release of NE and serotonin) and potent 5-HT2 and 5-HT3 receptor antagonist
- sedation, weight gain
Tri-Cyclic Antidepressants (potentially dangerous/toxic—monitor with blood levels): tertiary TCA's block reuptake of NE and serotonin like an SNRI; treat major depression, fibromyalgia, anxiety disorders, enuresis, *Check patient’s pupil size for mydriasis/miosis to get a sense of their anticholinergic tone (larger pupils with greater anti-cholinergic effect). * Can precipitate manic episodes in Bipolars
  - *Anafranil* (clomipramine) – for OCD; increase by 25 mg/d increments not more than every 2 weeks
  - *Elavil* (amitriptyline) – tertiary TCA
  - *Tofranil* (imipramine) – for enuresis

MAO Inhibitors: increase levels of NE, serotonin, dopamine
  - *Parnate* (tranylcypromine) – has amphetamine-like effects; used if patient has failed on multiple, other anti-depressants
  - *Nardil* (phenelzine) – for anxiety/depression used if patient has failed on multiple, other anti-depressants
  - *Hypertensive crisis with tyramine ingestion* (in many foods, such as wine and cheese and aged protein products) and decongestants like Sudafed
  - Contraindicated with SSRIs or other antidepressants.
  - *Can precipitate manic episodes in Bipolars*

Benzodiazepines
  - *Xanax* (alprazolam)
  - *Klonopin* (clonazepam)
  - Others include Ativan, Valium, Dalmane, Librium, Halcion, Serax

CNS Stimulant
  - *Concerta* (methylphenidate)
  - Others include Ritalin, Dexedrine, Vyvanse

Strattera (atomoxetine) (NE re-uptake inhibitor, like Wellbutrin), both can be used as alternative treatments in ADHD/ADD

Beta Blockers
  - *Inderol* (propranolol) – reduce drug-induced tremor; start at 10 mg bid/tid; titrate up in 10 mg increments, contraindications include asthma & diabetes
  - Others include atenolol, metoprolol

Sleeping Aids
  - Melatonin - mild; good starting point; start with 3 mg one hour before bed; can be an adjunct to Remeron or Seroquel
  - trazadone
  - Antihistamines
  - Sedating neuroleptics: Zyprexa, Seroquel
• Sedating antidepressants: Remeron
• Tertiary tricyclics (potentially dangerous/toxic)

• Weight gain: Seroquel, Depakote, mirtazapine, Paxil
• Weight neutral: Prozac, Lamictal, Tegretol

• Cogentin (benztropine) – anticholinergic remedy for extrapyramidal side effects from neuroleptics; H1 antagonist
  start at 1 mg bid, titrating upwards to 2 mg bid

• Terminology
  • Mixed state: feeling depressed yet manic “high” symptoms at the same time
    Reduced by Depakote/ Atypical Antipsychotics (Second-generation neuroleptics)
      o
  • Pharmacokinetic drug-drug interaction: one drug affects the blood level of the second drug
    o Example: Depakote and Lamictal
  • Pharmacodynamic drug-drug interaction: two drugs accomplish the same action or side effect
    o Cross-tolerance: one can be used to withdraw another
  • Recurrence: new episode of symptoms after having been taken off the medicine for more than 6 months
  • Relapse: old/original episode coming back less than 6 months after being taken off the medication
  • Response: 50% improvement in symptoms
  • Remission: PHQ-9 score of 4 or less (minimal to no depression or anxiety)
  • Serotonin syndrome: occurs with any drug that increases serotonin (e.g., MAO inhibitors, SSRI’s, SNRI’s) – hyperthermia, myoclonus, cardiovascular collapse, flushing, diarrhea (serotonin receptors activated in GI tract), seizures.

• Pearls
  • Anxiety and panic disorders generally respond to serotonergic drugs not norepinephrine ones.
  • Anti-convulsants/SNRI’s have anti-pain properties (especially chronic pain).
  • Generic drugs may be “porcelain clangers” (go through patient unabsorbed)
  • “The dose that got them well, keeps them well.” You typically don’t reduce the dose if they’re doing well.
  • Zyprexa and Seroquel: more sedation
  • Abilify, Geodon: less weight gain, more likely to cause EPS, less sedation
  • Clozaril/clozapine must get CBCs each week; terrible weight gain; seizures; gold standard for refractory psychosis with potentially less Tardive Dyskinesia (TD).

• Anticholinergic effects in tertiary TCAs
  • Blind as a bat (blurred vision)
  • Dry as a bone (dry mouth)
    o Remedy: tart substances; sugarless candy/gum or water with unsweetened lemon juice
  • Red as a beet (flushing)
  • Mad as a hatter (confusion)
  • Hot as a hare (hyperthermia)
• Can’t see (vision changes)
• Can’t pee (urinary retention)
• Can’t sh*t (constipation)

• Toxicities
• Typical Antipsychotics/Neuroleptics
  o Highly lipid soluble and stored in body fat; thus, very slow to be removed from body
  o Extrapyramidal system (EPS) side effects
    ▪ 4 hours: acute dystonia – muscle spasm, stiffness, oculogyric crisis
    ▪ 4 days: akinesia – parkinsonian symptoms
    ▪ 4 weeks: akathisia (restlessness)
    ▪ 4 months: tardive dyskinesia – stereotypic oral-facial movements and twisting/tapping of the lower extremities due to long-term antipsychotic use; often irreversible
  o Endocrine side effects (e.g., dopamine receptor antagonism → hyperprolactinemia → galactorrhea)
  o Side effects arising from blocking receptors
    ▪ Muscarinic – dry mouth, constipation
    ▪ Alpha adrenergic – hypotension
    ▪ Histamine – sedation
• Atypical antipsychotics
  o Fewer extrapyramidal/TD side effects than traditional antipsychotics
  o olanzapine/clozapine/quetiapine - significant weight gain (insulin resistance and hyperlipidemia)
  o Clozaril/clozapine – agranulocytosis (requires weekly WBC monitoring)
  o Geodon/ziprasidone – QTc prolongation
  o Seroquel/quetiapine – cataracts
  o Risperidal/risperidone – highest risk of all atypicals for developing EPS and hyperprolactinemia