Psychopharmacology Update

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Psychopharmacology Update

- Treatment of Depression
  - New thoughts on treatment of depression
  - Depression and comorbidities
  - Depression in children
- Treatment of Psychosis
  - New developments in treatment
  - Use of antipsychotics in children
- Treatment of ADD/ADHD
  - Monitoring for abuse of stimulants
- Treatment of Anxiety and Sleep Disorders
- Treatment of Bipolar Affective Disorder
- Treatment of Dementia

What's New

- A push for new drugs
- WHY?
  - Mostly because of patient intolerance
  - Maybe due to lack of efficacy
  - Can we develop anything stronger?
  - A few niche markets have cropped up
  - THE MARKET

Antidepressants

- For years, the question dictating drug development has been: How can we reduce side effects of these drugs to enhance compliance?
  - Subtext: To write more prescriptions?
- Not: DO WE HAVE EVIDENCE THAT THEY ARE REALLY WORKING TO RELIEVE DEPRESSION?
  - This can lead one to look to the wrong kind of evidence to guide practice.

Depression

- The most common psychiatric disorder
- One in 5 individuals with major depression receives adequate treatment.
  - Much lower in African Americans and Mexican Americans
- At least half of the antidepressants prescribed in the US are for people who do NOT meet the criteria for depression.

Do Antidepressants Work?

- New studies seem to indicate...maybe?
- 13 to 14 million Americans suffer from clinical depression/year.
- At least 32 million will have an episode at some point in their life.
- 57% of those affected seek treatment and are helped by medication.
- These drugs seem to work the best in very severe depression.
Drugs for Depression

- Controversial—are we over-treating? Under-treating?
- Do these drugs even work?
- How much of efficacy is related to a placebo effect?

Do Antidepressants Work?

- New data indicate that antidepressants are no better than placebo in mild to moderate depression.
  - Psychotherapy is the best treatment here.
  - But...for most patients, help is sought from a primary care provider, or insurance may not cover therapy, or they may not have access to counseling.
  - Should they at least try an antidepressant?

A Little History About SSRIs

- Does Serotonin enhance mood?
- Evidence from a SINGLE study with an obsolete agent suggested that elevations of serotonin and NE in the synapse were associated with reversal of depression.
  - This study was small and done in the 1950s.

Based on this Evidence...

- The class of SSRIs was built.
  - Even though subsequent studies proved that high doses of drugs that raise serotonin in the synapses of depressed patients showed NO enhancement of mood
  - And a new drug that is as effective as Prozac against depression works by lowering serotonin levels in the synapse.

Classifications of Antidepressants

- SSRIs
  - Citalopram (Celexa)
  - Escitalopram (Lexapro)
  - Fluoxetine (Prozac)
  - Paroxetine (Paxil)
  - Sertraline (Zoloft)
- SNRIs
  - Desvenlafaxine (Pristiq)
  - Duloxetine (Cymbalta)
  - Venlafaxine (Effexor)

Classifications of Antidepressants

- MAOIs
  - Phenelzine (Nardil)
  - Selegiline (Eldepryl)
  - Tranylcypromine (Parnate)
- Atypical +SSRI
  - Olanzapine + Fluoxetine (Symbyax)
- Atypical Antipsychotics
  - Aripiprazole (Abilify)
  - Olanzapine (Zyprexa)
Classifications of Antidepressants

- Tetracyclic Antidepressants
  - Mirtazapine (Remeron)

- Tricyclic Antidepressants
  - Amitriptyline (Elavil)
  - Desipramine (Norpramin)
  - Imipramine (Tofranil)
  - Nortriptyline (Pamelor)
  - Protriptyline (Vivactil)
  - Trimipramine (Surmontil)

- Bupropion (Wellbutrin)
- Nefazodone (Serzone)
- Trazodone

Antidepressant Therapy by Subtype

- Catatonic: ECT
- Melancholic: TCAs, bupropion, mirtazapine, and trazodone
- Atypical: SSRIs, T3, modafinil, and atomoxetine
- Seasonal: Phototherapy, SSRIs
- Hormonal: SSRIs, estrogens, Omega-3 FAs
- Bipolar: Lithium, antipsychotics, anticonvulsants, pindolol, pramipexole, and buspirone

Antidepressant Therapy by Symptom

- Insomnia: Mirtazapine, bupropion
- Hypersomnia: Bupropion, modafinil, T3, methylphenidate
- Decreased appetite: Mirtazapine
- Hyperphagia: Atomoxetine

So How Do I Treat…?

- Comorbidities associated with depression

Anxiety

- MAOIs should be considered, especially in the patient who does not respond to SSRIs.
  - Remember dietary and drug interactions
  - Mirtazapine, trazodone, or buspirone
  - Maybe a touch of Ativan
**ADHD**
- Sustained release bupropion may be a benefit
- Consider expense though... 30 pills/$100

**Sexual Dysfunction Secondary to SSRI Use**
- Bupropion
- Buspirone
- Mirtazapine
- Cyproheptadine
- Yohimbine
- Nefazodone
- Or switch antidepressants...

**Chronic Pain**
- Duloxetine (Cymbalta)
- Venlafaxine (Effexor)
- Milnacipran (Savella)—recently approved to treat fibromyalgia; approved to treat depression outside the US

**Obsessive-Compulsive Disorder**
- High-dose SSRIs
- Antipsychotics
  - Risperidone
  - Haloperidol

**New Indications for Antidepressants**
- Fluoxetine for bipolar, PMDD
- Paroxetine for PMDD
- Olanzapine/fluoxetine (Symbyax) for bipolar, treatment-resistant depression

**Other Treatments for Depression**
- Second generation antipsychotics
  - Risperidone, aripiprazole, and quetiapine
- Lithium
  - May augment SSRIs and prevent relapse
- Stimulants
  - May be efficacious in the elderly (Methylphenidate + citalopram)