Things You Might Not Know About Psychotropic Medications—But Wish You Did

John E. Dunne, MD
December 3, 2016
PAL Conference

Conflicts of Interest

None to report
I am employed by Seattle Children’s and PeaceHealth, Bellingham
Selective Serotonin Reuptake Inhibitors

• Only fluoxetine has demonstrated efficacy in treating depression in children and adolescents, Lancet, June 7 2016
Selective Serotonin Reuptake Inhibitors

- Only fluoxetine has demonstrated efficacy in treating depression in children and adolescents, Lancet, June 7 2016
- Anxiety is a common side effect of SSRI's, especially fluoxetine

- All SSRI's increase the QTc interval, not just citalopram
Selective Serotonin Reuptake Inhibitors

• Only fluoxetine has demonstrated efficacy in treating depression in children and adolescents, Lancet, June 7 2016
• Anxiety is a common side effect of SSRI’s, especially fluoxetine
• All SSRI’s increase the QTc interval, not just citalopram
• Infrequent SE: akathisia 2%, aggression 1.9 % BJM Jan 2016

• Long term use can increase risk of bruising and bleeding
Selective Serotonin Reuptake Inhibitors

- Only fluoxetine has demonstrated efficacy in treating depression in children and adolescents, *Lancet*, June 7, 2016
- Anxiety is a common side effect of SSRI's, especially fluoxetine
- All SSRI's increase the QTc interval, not just citalopram
- Infrequent SE: akathisia 2%, aggression 1.9 % *BJM* Jan 2016
- Long term use can increase risk of bruising and bleeding
- Vivid, realistic dreaming is common

Selective Serotonin Reuptake Inhibitors

- Only fluoxetine has demonstrated efficacy in treating depression in children and adolescents, *Lancet*, June 7, 2016
- Anxiety is a common side effect of SSRI's, especially fluoxetine
- All SSRI's increase the QTc interval, not just citalopram
- Infrequent SE: akathisia 2%, aggression 1.9 % *BJM* Jan 2016
- Long term use can increase risk of bruising and bleeding
- Vivid, realistic dreaming is common
- Sexual side effects are common, especially erectile failure
Selective Serotonin Reuptake Inhibitors

- Only fluoxetine has demonstrated efficacy in treating depression in children and adolescents, Lancet, June 7 2016
- Anxiety is a common side effect of SSRI's, especially fluoxetine
- All SSRI's increase the QTc interval, not just citalopram
- Infrequent SE: akathisia 2%, aggression 1.9 % BJM Jan 2016
- Long term use can increase risk of bruising and bleeding
- Vivid, realistic dreaming is common
- Sexual side effects are common, especially erectile failure
  - **Sertraline can cause significant weight increase in older children/adolescents but cause weight loss in younger children**

Selective Serotonin Reuptake Inhibitors

- Only fluoxetine has demonstrated efficacy in treating depression in children and adolescents, Lancet, June 7 2016
- Anxiety is a common side effect of SSRI's, especially fluoxetine
- All SSRI's increase the QTc interval, not just citalopram
- Infrequent SE: akathisia 2%, aggression 1.9 % BJM Jan 2016
- Long term use can increase risk of bruising and bleeding
- Vivid, realistic dreaming is common
- Sexual side effects are common, especially erectile failure
- Sertraline can cause significant weight increase in older children/adolescents but cause weight loss in younger children
  - **Atorvastatin has recently been shown to effectively augment SSRI treatment in adults**
SSRI’s and the Black Box Warning

- What is the data supporting the black box warning?
- There have been NO reported suicides attributed to SSRI treatment
SSRI’s and the Black Box Warning

- What is the data supporting the black box warning?
- There have been NO reported suicides attributed to SSRI treatment
- In 2004 there were an estimated 800 excess deaths by suicide among adolescents in the US, following the black box warning.

SSRI’s and the Black Box Warning

- What is the data supporting the black box warning?
- There have been NO reported suicides attributed to SSRI treatment
- In 2004 there were an estimated 800 excess deaths by suicide among adolescents in the US, following the black box warning.
- SSRI’s are NOT a treatment for suicidality
Anxiolytics

• For chronically anxious patients who have not fully responded to multiple trials of SSRI’s and adequate psychosocial treatments, only clonazepam should be added to supplement other treatments
Anxiolytics

- For chronically anxious patients who have not fully responded to multiple trials of SSRI's and adequate psychosocial treatments, only clonazepam should be added to supplement other treatments
- Clonazepam and buspirone are less likely to lead to abuse
- However, buspirone can increase the risk of serotonin reactions when used in combination with SSRI's
Anxiolytics

- For chronically anxious patients who have not fully responded to multiple trials of SSRI's and adequate psychosocial treatments, only clonazepam should be added to supplement other treatments
- Clonazepam and buspirone are less likely to lead to addiction
- However, buspirone can increase the risk of serotonin reactions when used in combination with SSRI's
- Other anxiolytics can be effectively used as a short term bridge for sleep onset and maintenance and for anticipatory anxiety

Atomoxetine
Atomoxetine does NOT have any anxiolytic properties

- Although approved by the FDA for dosing up to 1.2 mg/kg, in open, post-market studies showed that the median response dose was 1.4 mg/kg
Anxiolytics

- Atomoxetine does NOT have any anxiolytic properties
- Although approved by the FDA for dosing up to 1.2 mg/kg, in open, post-market studies showed that the median response dose was 1.4 mg/kg
- There is no intrinsic upper limit to the dose/kg; recent study of fluoxetine + atomoxetine, slow 2D6 metabolizers + atomoxetine and atomoxetine alone (JAMA Psychiatry Online, Dec, 2015)

Other ADHD Medications
Other ADHD Medications

- Vyvanse® – an est. 10% are rapid converters through the lysinase system

- Stimulants may cause or intensify anxiety, depression, tics, skin picking, hair pulling, aggression or psychosis
Other ADHD Medications

- Vyvanse® – an est. 10% are rapid converters through the lysinase system
- Stimulants may cause or intensify anxiety, depression, tics, skin picking, hair pulling, aggression or psychosis
- Intuniv® may cause nocturnal enuresis or aggression

Other ADHD Medications

- Vyvanse® – an est. 10% are rapid converters through the lysinase system
- Stimulants may cause or intensify anxiety, depression, tics, skin picking, hair pulling, aggression or psychosis
- Intuniv® may cause nocturnal enuresis or aggression
- Bupropion is helpful for Tx of ADHD, especially in patients with irritability and/or impulsive anger
Other ADHD Medications

- Vyvanse® – an est. 10% are rapid converters through the lysinase system
- Stimulants may cause or intensify anxiety, depression, tics, skin picking, hair pulling, aggression or psychosis
- Intuniv® may cause nocturnal enuresis or aggression
- Bupropion is helpful for Tx of ADHD, especially in patients with irritability and/or impulsive anger
- Stimulants may be effective in PROMOTING sleep onset in hyperactive children (50%)

Other ADHD Medications

- Vyvanse® – an est. 10% are rapid converters through the lysinase system
- Stimulants may cause or intensify anxiety, depression, tics, skin picking, hair pulling, aggression or psychosis
- Intuniv® may cause nocturnal enuresis or aggression
- Bupropion is helpful for Tx of ADHD, especially in patients with irritability and/or impulsive anger
- Stimulants may be effective in PROMOTING sleep onset in hyperactive children (50%)
- Nasacort® 1% before application can minimize the dermal reaction to Daytrana®
Atypical Antipsychotics

- Elevations of prolactin with risperidone, olanzapine, paliperidone; how high is too high?
Atypical Antipsychotics

- Elevations of prolactin with risperidone, olanzapine, paliperidone; how high is too high?
- Risperidone can also cause bone marrow suppression, although not as severe as clozapine

Atypical Antipsychotics

- Elevations of prolactin with risperidone, olanzapine, paliperidone; how high is too high?
- Risperidone can also cause bone marrow suppression, although not as severe as clozapine
- Quetiapine is most sedating at his lowest doses and becomes less sedating with higher doses
Atypical Antipsychotics

- Elevations of prolactin with risperidone, olanzapine, paliperidone; how high is too high?
- Risperidone can also cause bone marrow suppression, although not as severe as clozapine
- Quetiapine is most sedating at his lowest doses and becomes less sedating with higher doses
- **Quetiapine is the last line of treatment with treatment-resistant OCD**

---

Atypical Antipsychotics

- Elevations of prolactin with risperidone, olanzapine, paliperidone; how high is too high?
- Risperidone can also cause bone marrow suppression, although not as severe as clozapine
- Quetiapine is most sedating at his lowest doses and becomes less sedating with higher doses
- Quetiapine is the last line of treatment with treatment-resistant OCD
- **Aripiprazole has a nonlinear dose response curve so that lack of response to a dose increase at low doses does not mean treatment failure**
Atypical Antipsychotics

- Elevations of prolactin with risperidone, olanzapine, paliperidone; how high is too high?
- Risperidone can also cause bone marrow suppression, although not as severe as clozapine
- Quetiapine is most sedating at his lowest doses and becomes less sedating with higher doses
- Quetiapine is the last line of treatment with treatment-resistant OCD
- Aripiprazole has a nonlinear dose response curve so that lack of response to a dose increase at low doses does not mean treatment failure
- Melatonin in standard doses (3-5 mg) can ameliorate metabolic side effects of atypical antipsychotics (Int Clin Psychopharm., July 4, 2016)

Mood Stabilizers
Mood Stabilizers

- Multiple deaths from agranulocytosis were associated with Depakote shortly after its release.
- Patients of Asian descent are at higher risk of Stevens-Johnson syndrome when treated with carbamazepine due to a genetic variant (HLA-B*1502).
Mood Stabilizers

- Multiple deaths from agranulocytosis were associated with Depakote shortly after its release.
- Patients of Asian descent are at higher risk of Stevens-Johnson syndrome when treated with carbamazepine because of a genetic variant (HLA-B*1502).
- Carbamazepine is a strong inducer of several CYP enzymes and should not be co-administered with oral contraceptives.
- Lithium is associated with lower rates of suicide in bipolar disorder.
Mood Stabilizers

- Multiple deaths from agranulocytosis were associated with Depakote shortly after its release.
- Patients of Asian descent are at higher risk of Stevens-Johnson syndrome when treated with carbamazepine because of a genetic variant (HLA-B*1502).
- Carbamazepine is a strong inducer of several CYP enzymes and should not be co-administered with oral contraceptives.
- Lithium is associated with lower rates of suicide in bipolar disorder.
- Lamotrigine is ineffective in treating or preventing mania in bipolar disorder.