

# **Medication Management of Depressive Disorders in Children and Adolescents**

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# First Line Medications

## SSRIs

Prozac (Fluoxetine): 5-60 mg

Zoloft (Sertraline): 12.5-150 mg

Paxil (Paroxetine): 5-40 mg

Celexa (Citalopram): 10-40 mg

Luvox (Fluoxamine): 25-200mg

# TADS-Treatment for Adolescents with Depression Study Team

- Multicenter, randomized clinical trial sponsored by NIMH
- Aim to evaluate the short and long term effectiveness of four treatments of adolescents with major depressive disorder
  - Fluoxetine, CBT, Fluoxetine+CBT, placebo

JAMA, Aug 2004

# TADS-Treatment for Adolescents with Depression Study Team

- Demographics:
  - 439 adolescents (12-17 y) with current MDD
  - 54.4% girls, 73.8% white, 12.5% AA 8.9% Hispanic
  - 86% experiencing first episode
- Co morbidity:
  - 15.3% anxiety, 13.7% ADHD, 13.2% ODD, 10.7%  
social phobia, 10.5% dysthymia

# TADS-Treatment for Adolescents with Depression Study Team

- **Compared to Fluoxetine alone and CBT alone, Fluoxetine+CBT was superior**
- **Fluoxetine alone was superior to CBT alone**
- **Rates of response**
  - Fluoxetine+CBT- 71.0%
  - Fluoxetine alone-60.6%
  - CBT alone- 43.2%
  - Placebo- 34.8%
- **SI was present at baseline in 29% and improved in four treatment groups**

# Antidepressants with FDA approval

- For depression: Prozac (Jan-'03)
- For OCD: Zoloft (age 6)  
Luvox (age 8)

- Fluoxetine:
  - 2002 (Emslie), 20mg fixed daily dose better than placebo
  - 2003 (Hughes and Emslie), placebo controlled pharmacokinetic study-response was variable

- Sertraline

- 2003 (Wagner)-RCT-376 patients mean dose was 131mg/day-safe and effective for children and adolescents

- 7 pts on meds had serious AE- SI & aggression

- 2001 (Nixon) six month open trial-mean dose 125mg in adolescents with MDD and dysthymia



- Paroxetine

- 2001 (Keller) RCT mean dose was 28mg/day compared to TCA and placebo

- Significantly more AE than placebo

- 2003 (Braconnier) double blind study compared to Clomipramine

- No placebo group, high discontinuation

- Citalopram

-2004 (Wagner) Double blind study, compared to placebo, mean dose 24mg/day-significant improvement for depression

AE: rhinitis, nausea, abdominal pain

SE and discontinuation similar to placebo

# First SSRI not effective

- Change to a different agent in same class
- Choose based on SE
- Reassess for co morbidity

# Characteristics of SSRI resistant depression

- Comorbidity-anxiety, ADHD, substance abuse
- Family Discord
- Greater initial impairment

# If two SSRIs fail change class

- If co morbid anxiety
  - If need alerting, consider Venlafaxine
  - If need sedation, consider Mirtazepine
  - If need activation consider Bupropion
  - If above fail consider Clomipramine

# Buspirone

- May be helpful for anxiety and augmentation of depression

# MDD with psychotic features

- Lack of data to support a choice, but newer atypicals preferred

# MDD with ADHD

- Begin with a stimulant for 2 weeks
  - If both respond, continue ADHD algorithm
  - If ADHD only responds, start MDD algorithm
  - If neither respond, proceed with MDD algorithm



# Tricyclics

- Used in children and adolescents for a wide range of symptoms (MDD, ADHD, enuresis)
- Studies have not shown efficacy in children and adolescents
- Concerns about safety and side effects
  - CV side effects, esp. in overdose
  - sedation, weight gain, dry mouth

# FDA Warning

- Oct 31, 2004
  - AACAP talking points
  - [www.parentsmedguide.org](http://www.parentsmedguide.org)
  - The American Psychiatric Association and the American Academy of Child and Adolescent Psychiatry have prepared a fact sheet to help patients and families make informed decisions about obtaining the most appropriate care for a child with depression.

# What prompted the FDA warning?

- In 2004, the FDA reviewed 23 clinical trials involving more than 4,300 child and adolescent patients who received any of nine different antidepressant medications.
- No Suicides occurred in any of these studies.

# What prompted the FDA warning?

- The FDA found that “adverse events” (thoughts of suicide or description of potentially dangerous behavior) were reported by approximately 4 percent
- In 17 of 23 studies, medication neither increased suicidal thinking nor induced new suicidal thinking
- All studies combined showed a slight reduction in suicidality over treatment

# What prompted the FDA warning?

- It's important to recognize that suicidal thoughts are a common part of depressive illnesses
- Research demonstrates that over 40% of children and adolescents with depression think about hurting themselves.

# What prompted the FDA warning?

- Treatment that increases communication about these symptoms can lead to more appropriate monitoring which decreases the actual risk of suicide.

# Did the FDA prohibit the use of antidepressant medications by children and adolescents?

- No
- Close monitoring by parents and physicians for worsening of depressive symptoms or unusual changes in behavior.
- The “black box” states the antidepressants are associated with an increased risk of suicidal thinking and/or behavior in a small proportion of children and adolescents.

# Do antidepressants increase the risk of suicide?

- There is no evidence that antidepressants increase the risk of suicide
- The FDA reported an increase in spontaneous reports of suicidal thoughts and/or behavior among children receiving medication, but there is no evidence that these suicidal thoughts or behaviors leads to an increased risk of suicide



# Do antidepressants increase the risk of suicide?

- CDC 1992 to 2001, rate of suicide among American youth ages 10-19 declined by more than 25%
- CDC reports nearly 1 in 6 adolescents think about suicide in a given year

# What factors other than depression increase the risk of suicide?

- Previous suicide attempt
- Presence of serious mental disorder
- Loss of or separation from parent
- End of a romantic relationship
- Physical or sexual abuse

# Does talking about suicide signal increased likelihood of SIB

- Psychiatrists and other mental health professionals have found that when a young person talks about suicidal thoughts, it often opens the door to discussion regarding the need to take special safety precautions or protective measures

# Can my child keep taking the antidepressant being prescribed?

- Research suggests increased risk of suicidal thoughts in the first 3 months of treatment
- One antidepressant medication Fluoxetine, or Prozac is formally approved by the FDA for treatment

# How can I help monitor my child?

- Monitor for evidence of improvement over 6-8 weeks
- Weekly follow-up for the first month
- Then every other week for the next month