An Update on the Treatment of Obsessive Compulsive Disorder In Children and Adolescents

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• What is OCD?
• Pattern of maladaptive, recurrent, and unwanted thoughts (Obsessions), which cause significant anxiety
• This anxiety leads to repetitive acts (Compulsions) designed to decrease this anxiety
• These acts decrease anxiety only transiently, leading to an increasing amount of time spent in these obsessive-compulsive loops
Obsessive Compulsive Disorder in Children

• What causes OCD in children?
• Genetic causes (80% concordance rate in identical twins, 47-50% in fraternal twins)
  – Roughly 20-22% of kids with OCD have a family history of OCD
• Infections?
  – PANDAS (Pediatric Autoimmune Neuropsychiatric Disorder Associated with Streptococcal infections)
Obsessive Compulsive Disorder in Children

• How common is it?
  – Estimated at 1-4% of the general pediatric population

  – Estimates are that as high as 80% of adults with OCD had their onset in childhood

  – Two major peaks of age of onset
    • Puberty (~11 years old)
    • Young adulthood (18-21 years old)
Obsessive Compulsive Disorder in Children

• What does OCD look like in children?
• Four major symptom groups
  – Forbidden thoughts
  – Cleaning
  – Symmetry
  – Hoarding

– At 5 year follow-up, 60% of children maintained the same symptoms as on presentation (Fernandez de la cruz et al, 2012)
The pathogenesis of OCD remains unknown. No consensus genetic markers have been identified in either pediatric-onset, or adult-onset, OCD. Thought to be related to dysfunction in the connections between the basal ganglia, frontal cortex, and thalamus.
Obsessive Compulsive Disorder in Children

• Most children with OCD also have symptoms of other disorders
  – Only 1 out of 5 children have OCD alone (Ivarsson et al, 2008)—more common in boys
  – At least 50% have tics (motor or vocal)
  – 40% have an additional anxiety disorder
  – 25% have an additional mood disorder
  – 9% have oppositional disorder
Treatment of Pediatric OCD

- POTS (Pediatric OCD Treatment Study) I: First multi-site trial to compare the efficacy of CBT, vs SSRI, vs CBT+SSRI, vs placebo
- No difference in efficacy between SSRI/CBT, though both superior to placebo
- 39% of CBT group were deemed “excellent responders”
- 21% of SSRI group were deemed “excellent responders”
- 54% of combined SSRI+CBT Group

Pediatric OCD treatment (POTS II Trial, Franklin et al., 2012 and POTS team 2004)

• If a child’s OCD symptoms do not remit following SSRI therapy, 70% have an additional 30% or greater decrease in symptoms with the addition of CBT to SSRI management.
## SSRIs and Dosing Guidelines for Children/Adolescents

<table>
<thead>
<tr>
<th>Medication</th>
<th>Pediatric Dosage</th>
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<tbody>
<tr>
<td>Citalopram (Celexa®)</td>
<td>10 – 60 mg/day</td>
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<tr>
<td>Escitalopram (Lexapro®)</td>
<td>10 – 20 mg/day</td>
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<tr>
<td>Fluvoxamine (Luvox®)</td>
<td>50 – 300 mg/day</td>
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<tr>
<td>Fluoxetine (Prozac®)</td>
<td>10 – 80 mg/day</td>
</tr>
<tr>
<td>Paroxetine (Paxil®)</td>
<td>10 – 60 mg/day</td>
</tr>
<tr>
<td>Sertraline (Zoloft®)</td>
<td>50 – 200 mg/day</td>
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</table>

**OTHER:** Clomipramine (Anafranil®), a tricyclic antidepressant (TCA), for 50 – 200 mg/day.
What is the long-term outcome? (Mancebo et al., 2014, Palermo et al, 2010)

- With treatment, the odds of attaining remission at 3 year follow-up was 27%
- Partial remission was 53%
- Of those who attained remission, 79% remained in remission throughout the follow-up period
- An additional study found a 42% remission rate during a 12 year follow-up
- Response to treatment, severity at initial presentation and comorbid disorders have all been shown to affect treatment response in children
What is the long-term outcome?

• Additional factors which affect treatment outcome may be related to family dynamics/genetic factors:
  
  – “Family accommodation”—negative outcome
  – Psychiatric disorders in first degree family members
  – Family history of OCD
## OCD vs. PANDAS/PANS

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<td><strong>Age</strong></td>
<td>Typically see first onset between 8 – 12 years old</td>
<td>Typically affects children between 4 – 14 years old.</td>
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<tr>
<td><strong>Timeline</strong></td>
<td>Subclinical symptoms become gradually more severe over time.</td>
<td>Acute, dramatic onset of symptoms.</td>
</tr>
</tbody>
</table>
| **Symptoms**   | Patient may experience a wide range of symptoms, cycling between obsessions that cause anxiety, and compulsions to reduce that anxiety. | Sudden, rapid-onset of obsessive-compulsive behavior, as well as possible movement and behavioral abnormalities, including:  
• Severe separation anxiety  
• Anorexia or disordered eating  
• Urinary frequency  
• Tics and/or purposeless motor movements  
• Acute handwriting difficulty |
| **Treatment**  | Team up with an OCD specialist in the mental health field for ERP treatment with SSRIs as indicated. | Test for active infections, treat any active infections thoroughly, and team up with an OCD specialist for ERP treatment with SSRIs as indicated. |
Conclusions

• OCD is common in children
• The cause(s) remain unknown
• MANY children with OCD get significantly better!
• CBT should be tried for every child with OCD
• CBT and SSRIs confer the highest change of remission of symptoms
• www.iocdf.org (Find a provider Link)
Conclusions for treatment of Pediatric OCD

• Consider CBT for every child with OCD
  – Plus or minus SSRI

  – CBT and SSRIs have the greatest chance at bringing about treatment remission in kids