Treatment Resistant OCD in Youth
(Reinblatt and Walkup 2005)

- If partial response, add CBT
- Switch SSRIs
- Augmentation with atypical antipsychotics, esp risperidone with schizotypy and tics
- Augmentation with Clomipramine, Buspirone, Li, Pindolol, another SSRI or SNRI, clonazepam
- SSRI and Clomipramine
- Psychosurgery

Cognitive Behavioral Therapy

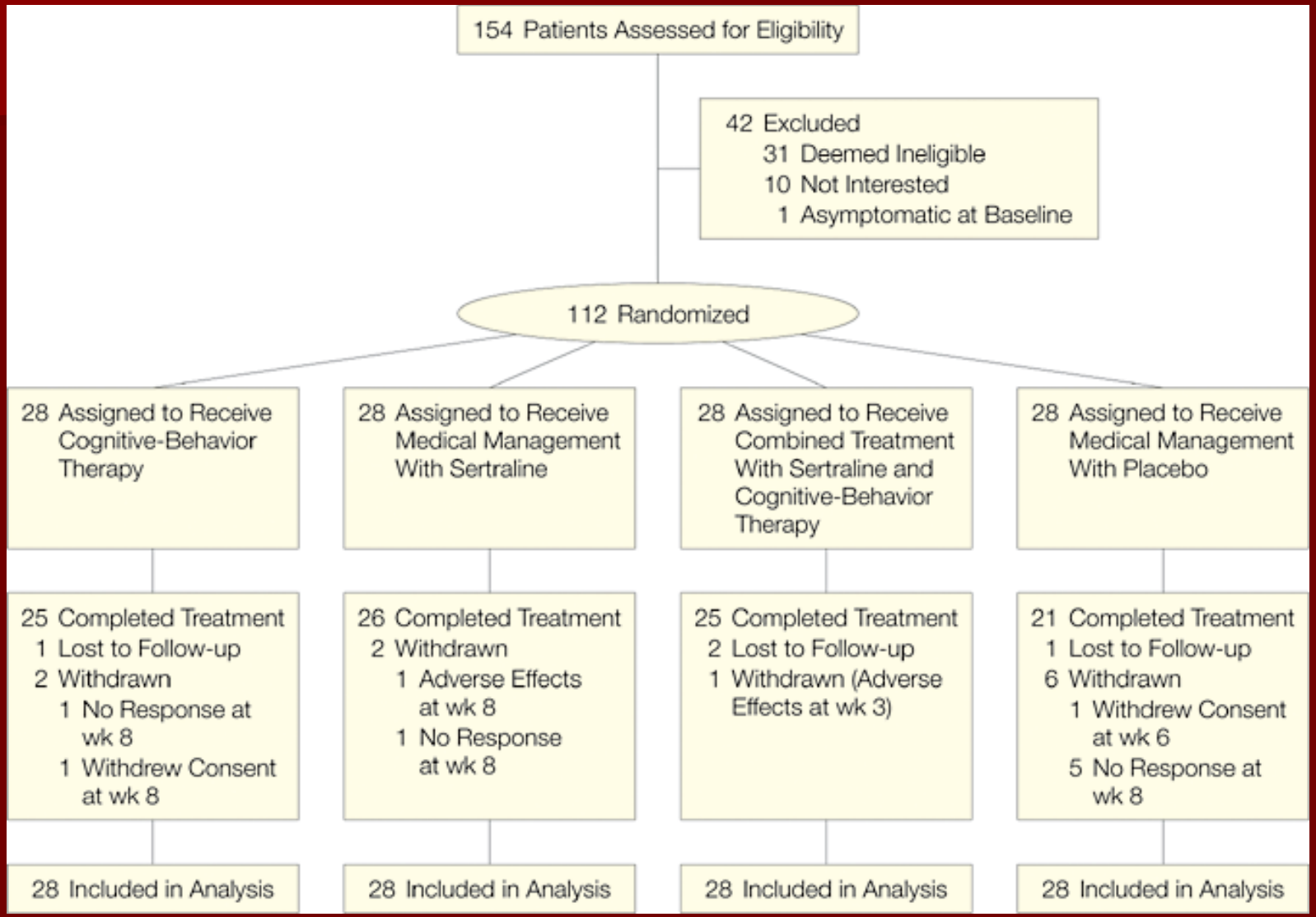
- Hierarchy-based Exposure and Response Prevention (March 1994, Scahill 1996, Franklin 1998): 14 sessions over 12 wks with toolkit approach, self-monitoring, mindfulness ('watch the Obsessions or Compulsions doing their own thing, not belonging to me')- use of "fear" thermometer
- Imaginal exposure for obsessions: in vivo
- Habit reversal for "just-so" phenomena
- Cognitive restructuring for negative thoughts
- Self observation, extinction, operant conditioning, and modeling used in adolescence: Behavioral rewards
- Flooding, graded exposure, and response prevention (March et al 1994)
- Family and group forms of treatment are effective as well (Barrett et al 2004)

Pediatric OCD Treatment Study (POTS)

- Compared efficacy of 4 different treatment options: Sertraline alone, sertraline +CBT, CBT alone & placebo alone; n=112; 12 weeks
- Randomized parallel groups
- Entry criteria CYBOCS=16; Mean of 24.6 with only ADHD meds allowed
- Sertraline- Upward titration from 25→200 mg/d over 6 weeks
- Outcome measure of remission: CYBOCS <10

POTS

(Team POTS,JAMA 2004)



POTS

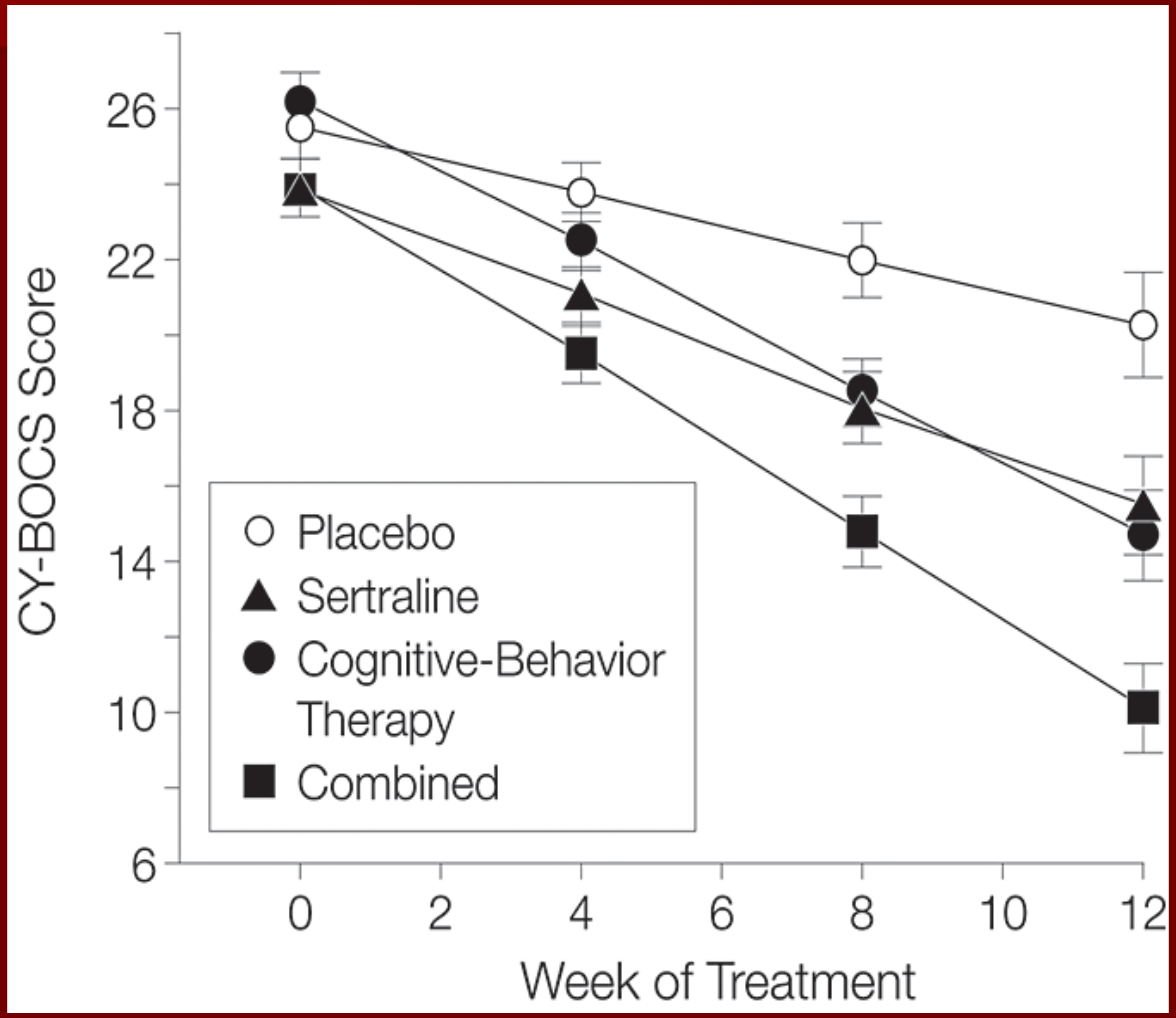
(Team POTS,JAMA 2004)

Table 2. Mean CYBOCS Score, by Treatment Group and Week (n = 28)

Week	CY-BOCS Score, Unadjusted Mean (SD)*			
	Cognitive-Behavior Therapy	Sertraline	Combined Treatment	Placebo
Baseline	26 (4.6)	23.5 (4.7)	23.8 (3.0)	25.2 (3.3)
4	20.6 (6.5)	18.5 (7.5)	18.1 (6.8)	22.4 (5.4)
8	18.1 (7.9)	16.9 (8.2)	14.4 (8.1)	22.5 (4.4)
12	14.0 (9.5)	16.5 (9.1)	11.2 (8.6)	21.5 (5.4)

Abbreviation: CY-BOCS, Children's Yale-Brown Obsessive-Compulsive Scale.
*Last observation carried forward used to impute missing values.

POTS
(Team POTS,JAMA 2004)



POTS

(Team POTS,JAMA 2004)

Table 3. Treatment-Emergent Adverse Events in Medication-Treated Patients*

Adverse Event	No. (%)		
	Sertraline (n = 28)	Combined Treatment (n = 28)	Placebo (n = 28)
Decreased appetite	5 (18)	4 (14)	0
Diarrhea	6 (21)	0	1 (4)
Enuresis	2 (7)	2 (7)	0
Motor overactivity	1 (4)	6 (21)	1 (4)
Nausea	7 (25)	5 (18)	1 (4)
Stomachache	8 (29)	4 (14)	2 (7)

*Data are for events occurring in at least 5% of sertraline-treated patients and with an incidence of at least 2 times that seen in placebo-treated patients in either the sertraline-alone or the combined-treatment group. Medication-related adverse events were not recorded for patients treated with cognitive-behavior therapy alone.

POTS: Outcome

- Mean daily dose of sertraline
  - ✓ With combined treatment:133 mg/day
  - ✓ Sertraline alone: 176 mg/day
- Effect sizes:
  - ✓ CBT: 0.97
  - ✓ Sertaline alone: 0.67
  - ✓ Combined treatment:1.4
- Remission rates (CYBOCS=10) for combined 53.6%; CBT alone 39.3%; sertraline 21.4% and placebo 3.6%

Pediatric Autoimmune Neuropsychiatric Disorders associated with Streptococcal infections (PANDAS)

- Five clinical criteria of the PANDAS subgroup:
  - Presence of OCD and/or tic disorder (using DSM-IV criteria)
  - Prepubertal symptom onset
  - Episodic course characterized by acute, severe onset and dramatic symptom exacerbations
  - Neurological abnormalities present during symptom exacerbations
  - Temporal relationship between GABHS infections & symptom exacerbations

Treatment Guidelines for PANDAS

(Swedo et al, 1998)

- Assess for GABHS infection by 48 hour culture in child with abrupt onset OCD/Tic D/O. Treat positive culture with 10-day course of antibiotics
- If abrupt onset of OCD/tics occurred 4-6 weeks before visit→ Check ASO & Anti-Dnase-B + 48 hr GABHS throat culture→ Do not treat with antibiotics if culture is negative (despite ↑ titers)
- Obtain throat cultures at the time of relapse of OCD symptoms
- Immunomodulatory treatment (Plasma exchange or IVIG) only used for most severely affected patients

Refutation of PANDAS hypothesis (Kurlan and Kaplan 2004)

(1) Level of severity of tics and OCD symptoms not defined

(2) Age of onset the same as 'regular' TS and OCD. Further, there has been a post pubertal case reported

(3) Abrupt onset not clinically specific since tics may not be identified gradually e.g. at least 2 studies show 38-50% of children with TS described as acute onset with no diagnosis of PANDAS

(4) Does presence of choreiform movement suggest that diagnosis is Sydenham's?

(5) GABHS as causative agent hard to show since a) carrier states b) infection worsens any tics. There is imprecision in the temporal course of PANDAS

Clinical implications: PANDAS (Kurlan and Kaplan 2004)

- Only get Streptococcal culture when there are clinical signs and symptoms (otherwise carrier state can be confusing)
- Antineuronal antibodies and D8/17 are NOT reliable indicators (even though elevated D8/17 on B lymphocytes is a susceptibility marker for Rh-F)
- Do not use prophylactic antibiotics and do not use plasma exchange and IV immunoglobulin

Recent research in Pediatric OCD

SSRI meta-analysis in OCD
(Bloch et al, 2009)

- Meta-analysis to determine differences in efficacy and tolerability between different doses of SSRIs in OCD.
- 9 randomized DBPC studies with 2268 subjects reviewed: Higher doses of SSRIs had improved treatment efficacy, using either Y-BOCS score or proportion of treatment responders as an outcome.
- SSRIs' dose not associated with the number of all-cause dropouts.
- Higher doses of SSRIs associated with significantly higher proportion of dropouts due to side-effects.

Cognitive-behavioral family treatment (O'Leary, 2009)

- Cognitive-behavioral family treatment (CBFT) for childhood obsessive-compulsive disorder: 38 participants (age 13-24 years) from a randomized controlled trial of individual or group CBFT for childhood OCD assessed 7 years post-treatment.
- 7 years after treatment: 79% participants from individual therapy & 95% from group therapy did not have a diagnosis of OCD.
- No significant differences found between treatment conditions except that depressive symptoms were more for individual treatment.
- CBFT for obsessive-compulsive disorder is effective 7 years post-treatment.

Question 1

Early onset OCD is characterized by:

A) Increased comorbid tic disorders

B) Decreased comorbid ADHD

C) Onset of OCD precedes tics by many years

D) Minimal genetic loading

Question 2

Common comorbid diagnoses with OCD include all of the following except:

A) ADHD and ODD
B) Major depression and anxiety
C) Somatoform disorders
D) Motor tics

Question 3

The following medications are effective in the treatment of OCD, except:

A) Clomipramine

B) Fluoxetine

C) Desipramine

D) Fluvoxamine

Question 4

The POTS trial in OCD found that the greatest reduction in CYBOCS scores results from:

A) Sertraline alone
B) CBT alone
C) Combined CBT+Sertraline
D) Family Therapy

Question 5

Criteria for diagnosing PANDAS include:

A) Motor and vocal tics

B) Obsessive and compulsive disorder of childhood onset

C) Tourette Disorder

D) Sudden onset of OCD after a streptococcal infection

Answers

1) A
2) C
3) C
4) C
5) D