Pediatric Depressive Disorders

Dan Janiczak, MD

Child and Adolescent Psychiatrist

Sanford Behavioral Health- Bemidji, MN

Objectives

- Identify practice parameters for mild to severe depression in children and adolescents
- Summarize the evidence-based treatments for depression in children and adolescents
- Distinguish between the unique challenges of diagnosing depression in children

Clinical Case

- 15 yo young man who presents with c/o mood trouble starting around age 13:
  - Started to reflect more on family situation eg mom's death from suicide
  - Mood would be low for "some time" then return to baseline. Seemed to occur off and on.
    - When mood was low, had some low interest but still engaged in things he liked
  - In last 2 weeks, mood has been "sad", has had low energy, feeling like he is letting his family down, and wondering at times if life is worth living denying as an urge to die.
  - Stressors: difficulty performing in school, strain in relationship with grandmother/guardian

Epidemiology

- Prepubertal prevalence: 2-5%
- Adolescent 2016: 12 month 13%, lifetime 18%
    - Lower rates of treatment and medication in minority youth
    - 60% of teens received treatment but only a small amount received depression specific treatment
    - Females and older adolescents – higher rates and more severe episodes
- Average episode length – 27 weeks

What is depression?

- Distinguish:
  - Sadness – Common; expected response; not episodic
  - Demoralization – chronic unhappiness related to circumstance; up to severe
    - Change circumstance
  - Sadness without cause – anhedonia, physical; disproportionate to cause; unaffected by change in circumstance
- Post –DSM III

AACAP Practice Parameters

- Mild: trial of therapy with monitoring of symptoms
- Moderate: therapy and/or medications
- Severe: combined treatment
- Phases:
  - acute (achieve remission) – adequate trial 6-8 weeks target dose
  - continuation (6-12 mo after remission)
  - maintenance (longer if necessary)
- Assessment: family, school, peers

Pharmacotherapy

- How to decide?
  - Family history of response or side effects
  - Evidence base
- FDA:
  - Fluoxetine – 8 and above
  - Escitalopram - 12 and above
- Treat for 6-12 months after remission of symptoms
- Trial: target dose for 6- 8 weeks

Evidence base: Treatment of Adolescent Depression Study (TADS)

- Design: fluoxetine, placebo, CBT, combined fluoxetine + CBT
- Results week 12: response rates using CGI-I
  - Fluoxetine and CBT 71%
  - Fluoxetine 61%
  - CBT 43%
  - Placebo 35%
- Results week 36:
  - Combo 86%
  - Fluoxetine alone 81%
  - CBT 81%

Pharmacotherapy: more options

First-line pharmacological treatments for adult depression and evidence of their effects in pediatric populations

	Pediatric			
	Starting dose (mg/day)	**Typical dose range (mg/day)**	**Level of evidence in MDD**	**FDA indications**
Selective serotonin reuptake inhibitors				
Citalopram	10–20	20–40	C	–
Escitalopram	10	10–20	A	MDD (12+)
Fluoxetine	10–20	20–80	A	MDD (8+), OCD (7+)
Fluvoxamine	25–50	50–300	C	OCD (8+)
Paroxetine	10–20	20–60	C	–
Sertraline	25–50	100–200	A	OCD (6+)
Serotonin–norepinephrine reuptake inhibitors				
Venlafaxine	37.5	150–225	C	–
Duloxetine	30	40–60	C	GAD (7+)
Desvenlafaxine	25	25–100	C	–
Atypical antidepressants				
Bupropion	100	150–300	C	–
Mirtazapine	7.5–15	15–45	C	–
Vilazodone	5	10–20	C	–
Vortioxetine	5	10–20	C	–

Recommended Titration Schedules

Children

	escitalopram	sertraline	fluoxetine
Week 1	5 mg	12.5 mg	10 mg
Week 2	5 mg	25 mg	10 mg
Week 3	10 mg	50 mg	20 mg
Week 4	10 mg	50 mg	20 mg
Optional Increases - Child			
Week 5	10 mg	50 mg	20 mg
Week 6	15 mg	100 mg	40 mg
Week 7	15 mg	100 mg	40 mg
Week 8	15 mg	150 mg	40 mg
Week 9	15 mg	150 mg	40 mg
Week 10	15 mg	150 mg	40 mg

Adolescents

	escitalopram	sertraline	fluoxetine
Week 1	5 mg	25 mg	10 mg
Week 2	5 mg	50 mg	20 mg
Week 3	10 mg	50 mg	20 mg
Week 4	10 mg	100 mg	20 mg
Optional Increases - Adolescent			
Week 5	10 mg	100 mg	20 mg
Week 6	15 or 20 mg	150 mg	40 mg
Week 7			
Week 8	15 or 20 mg	150 mg	40 mg
Week 9			
Week 10	15 or 20 mg	200 mg	40 mg

Psychoeducation

- Adherence and expectations
- Side effects:
  - Common – GI, headache, insomnia, sedation
  - Less common –
    - Activation – energy, insomnia, disinhibition, impulsivity
    - Mania/hypomania
    - Suicidal ideation

FDA Suicide Warning update

- 2004 ‘black box’ warning: meta-analysis of 24 RCTs showing 4% vs 2% risk drug vs placebo
- Meta-analysis 27 trials – Bridge et al. 2007
  - Risk difference 0.7%
- More recent trials:
  - Newer rating scales used and addressed development of SI eg Columbia suicide rating scale
  - Similar rates in drug vs placebo

Psychotherapy

- Interpersonal psychotherapy/IPT
  - Improve interpersonal relationships
  - Decrease depressive symptoms
  - Problem solving skill
  - Communication skills
  - Affect recognition
- Cognitive Behavioral Therapy/CBT
  - Thoughts, feelings, behaviors
  - Identify thinking “traps” eg discounting the positive and challenging them
  - Behavioral activation

Challenges in Treatment

- How do we approach patients who are not responding?
  - Up to 40%
- TORDIA trial
  - Updated analysis: SSRI faster and greater improvement (compared to venlafaxine)
  - Switch to another SSRI after failed trial before moving to SNRI
- Limited augmentation strategies with strong evidence
  - Lithium, Mirtazapine, Bupropion, Atypical Antipsychotic, Psychostimulant