Children's Hospital Of Wisconsin

Co-Management Guidelines

To support collaborative care, we have developed guidelines for our community providers to utilize when referring to, and managing patients with, the pediatric specialists at Children's Hospital of Wisconsin. These guidelines provide protocols for jointly managing patient cases between community providers and our pediatric specialists.

Pharmacologic Management of Pediatric Anxiety Disorders

Diagnosis/symptom:	Referring provider's initial evaluation and management:	When to initiate referral/ consider refer to Psychiatry Clinic:	What can referring provider send to Psychiatry Clinic?	Specialist's workup will likely include:
Signs and symptoms Atypical fears and worries. Fears and worries that interfere with school, home or activities.	**Diagnosis and Treatment Overview** • The basic anxiety maintenance cycle in all the anxiety disorders involves exposure to an anxiety trigger, anxiety rising to high levels, and some kind of escape behavior that produces immediate relief of anxiety. The relief is so rewarding that the escape behavior becomes habitual. • Cognitive- Behavioral Therapy(CBT) should be the first-line treatment for mild to moderate anxiety disorders with medications used in conjunction with CBT for more severe cases. • Selective Serotonin Reuptake Inhibitors(SSRIs) are considered the pharmacological treatment of choice for pediatric anxiety. They, however, require close supervision in the initial stages of treatment and at subsequent dosage alterations. The current recommendation by both the FDA and the American Academy of Child and Adolescent Psychiatry(AACAP) is that the patient *ideally* be monitored weekly for the first month(phone contact is sufficient), biweekly for the next month, and monthly thereafter.	If the patient fails both CBT and pharmacotherapy trials with utilizing two pharmacologic strategies (e.g., two different SSRI trials for Generalized Anxiety Disorder), consider referral to psychiatry. Prior to referral consider the Child Psychiatry Consultation Program (CPCP) http://www.chw.org/medical-care/psychiatry-and-behavioral-medicine/for-medical-professionals/psych-consult-site/	1. **Using Epic** • Please complete the external referral order **In order to help triage our patients and maximize the visit, the following information would be helpful include with your referral order:** • Urgency of the referral • What is the key question you would like answered? Note: The patient must call to schedule the appointment 2. **Not using Epic external referral order:** • In order to help triage our patients maximize the visit time, please **fax** the above information to **(414-607-5288**) • It would also be helpful to include:	**After referral to the Psychiatry Clinic:** Medication management, or recommendations and referral back to the referring provider to continue care

Updated by: Rosa K. Kim, MD and Fanisha Porter, MD
Updated on: June 2017

	• The FDA placed a "black box" warning on all antidepressants in October 2004, due to concerns of increased suicidal thinking in children and adolescents prescribed these medications. This was based on review of FDA clinical trials involving 4300 youth who received any of the currently available SSRIs. Analysis of the studies revealed a 4% risk of suicidal thinking got children on medication compared to 2% of those taking a placebo. A subsequent meta- analysis funded by the NIMH found a 3% risk of suicidal thinking for children on medication for depression compared to 2% of those taking placebo. **No suicides occurred in any of these studies.** For more information, please refer to www.parentsmedguide.org. **Treatment** • All SSRIs are equivalent in terms of symptom improvement, but they differ in side effect profiles and metabolism. • Possible side effects from SSRIs include increased energy, restlessness, behavioral disinhibition, stomach upset, and appetite change. Also, noted is QT prolongation in citalopram and escitalopram. They may rarely cause serotonin syndrome, Stevens-Johnson syndrome, or toxic epidermal necrolysis. The SSRIs are metabolized, in part, by the cytochrome P450 system and should be administered with caution when used with other medications metabolized this pathway. • If the first choice of SSRI is not tolerated or is ineffective, a trial of a different SSRI can be used. Consider referring to a child psychiatrist if multiple trials of SSRI have failed. • Beta-blockers maybe used as second-line agents for specific phobias and performance anxiety. • Benzodiazepines may be used during the initiation phase of SSRIs. They should then be tapered off. Benzodiazepines are more likely to cause disinhibition in children and adolescents than in adults. • When SSRIs are being discontinued, doses should be tapered slowly while the patient is monitored for potential symptoms recurrence. The exception to this is fluoxetine,		• Chief complaint, onset, frequency • Recent progress notes • Labs and imaging results • Other Diagnoses • Office notes with medications tried/failed in the past and any lab work that may have been obtained regarding this patient's problems. Note: The patient must call to schedule the appointment.	

	which, because its longer half-life, can be discontinued without being weaned, although patient should still be monitored for symptom recurrence. • Treatment should continue for at least 6-12 months following symptom remission. If patient does not tolerate medication discontinuance, long-term treatment is indicated. • SCARED rating scale links ○ http://psychiatry.pitt.edu/sites/default/files/Documents/assessments/SCARED%20Child.pdf ○ http://psychiatry.pitt.edu/sites/default/files/Documents /assessments/SCARED%20Parent.pdf • A general rule of thumb with these medications is to start low and go slow. • A relatively symptom free period of 8 to 12 months is considered appropriate treatment duration. At that point, a taper should be considered.			

Updated by: Rosa K. Kim, MD and Fanisha Porter, MD
Updated on: June 2017

Pharmacologic Treatment of Specific Anxiety Disorders

Medication	Dose/MDD	Available Doses	Starting Dose/ Titration	FDA Approval	Notes
Anxiolytics: SSRIs					
Fluoxetine (Prozac)	10-60mg daily	10, 20, 40, 60mg; 20mg/5ml soln	10-20mg; ↑ by 10-20mg	≥8yo for MDD ≥7yo for OCD	Has a long half-life; more likely to cause activation; use with caution in patients with QTc prolongation concerns
Sertraline (Zoloft)	12.5-200mg daily	25, 50, 100; 20mg/ml soln	12.5-25mg; ↑ by 25-50mg	≥6yo for OCD	More likely to cause GI symptoms when started; typically resolves within 2 weeks.
Citalopram (Celexa)	10-40mg daily	10, 20, 40; 10mg/5ml soln	10mg; ↑ by 10-20mg		Dose should not exceed 40mg daily because of possible risk of QTc prolongation at doses > 40mg
Escitalopram (Lexapro)	5-20mg daily	5, 10, 20; 5mg/5ml soln	5-10mg; ↑ by 5-10mg	≥12yo for MDD	Can cause QTc prolongation in overdose; can be sedating
Paroxetine (Paxil, Paxil CR, Pexeva)	10-60mg daily CR: 12.5-75mg	10, 20, 30, 40; 10mg/5ml soln; CR: 12.5, 25, 37.5 Pexeva: 10, 20, 30, 40	10mg; ↑ by 10mg; CR: ↑ by 12.5mg		More likely to cause sedation, weight gain, sexual side effects, and withdrawal symptoms.
Fluvoxamine (Luvox, Luvox CR)	25-300mg daily in divided doses	25, 50, 100	25mg daily; ↑ by 25mg; for short-acting: divide dose at 100mg total	≥8 yo for OCD	Used less often for depression, more for OCD.
Anxiolytics: Beta-Blockers					
Propranolol (Inderal)	10-80mg	10, 20, 40, 60, 80; 20mg/5ml, 40mg/5ml, 60mg/5ml soln	10mg; ↑ by 10mg		Potential side effect is depressed mood; contraindication is asthma; relative contraindications is diabetes; use 30 minute prior to performance or confrontation when treating specific phobia.
Atenolol (Tenormin)	25-100mg	25, 50, 100	25mg; ↑ by 25mg		Same as above.
Anxiolytics: Benzodiazepines					
Lorazepam (Ativan)	0.25-3mg	0.5, 1, 2; 2mg/ml soln	0.25mg BID; ↑ by 0.25mg	≥12yo	Do not use for longer than 3-4 weeks; taper gradually.
Clonazepam (Klonopin)	0.25-2mg	0.125, 0.25, 0.5, 1, 2	2mg daily		Same as above

Updated by: Rosa K. Kim, MD and Fanisha Porter, MD
Updated on: June 2017

Anxiolytics: Other					
Venlafaxine (Effexor, Effexor XR)	25-300mg daily	25, 37.5, 50, 75, 100 XR: 37.5, 75, 150, 225	37.5-75mg; ↑ by 37.5-75mg		More likely to cause activation; other potential side effects include HTN, dream disorder, tremor, hyponatremia; may also cause withdrawal symptoms; may be effective for social phobia; questionable efficacy for generalized anxiety disorder
Duloxetine (Cymbalta)	30-120 mg given over divided doses at 60 mg	20 mg, 30 mg, 40 mg, 60 mg	30 mg; ↑ by 30-60 mg, Max dose is 120 mg	7-17 yo for GAD	Potential side effects include HA, nausea, HTN, bleeding, liver failure. Do not use in hepatic impairment. Note: no evidence that doses > 60 mg confer additional benefit
Clomipramine (Anafranil)	25-250mg daily	25, 50, 75	25mg; ↑ by 25mg	≥10yo for OCD	Potentially fatal in overdose; may cause weight gain, GI symptoms, HA, vision changes, fatigue, tremor, orthostasis, hyperglycemia, agranulocytosis, hepatotoxicity
Buspirone (Buspar)	5-60mg	5, 7.5, 10, 15, 30	5mg BID or TID; ↑ by 5mg		Questionable efficacy
Hydroxyzine (Atarax)	10-50mg	10, 25, 50	10-25mg; ↑ by 10-25mg		Questionable efficacy
Prazosin (Minipress)	1-4mg daily	1, 2, 5	1mg; ↑ by 1mg		Alpha-1 antagonist; may cause orthostasis, reflex tachycardia, fatigue, and nausea; may target intrusive thoughts and hyperarousal in PTSD patients; give dose at bedtime
Clonidine	0.05-0.4mg	0.1, 0.2, 0.3	0.05mg; ↑ by 0.05mg		Alpha-2 agonist; may decrease PTSD symptoms; may be sedating and cause hypotension and bradycardia; abrupt withdrawal may cause rebound hypertension;
Guanfacine	0.5-4mg	1, 2	0.5mg; ↑ by 0.5-1mg		Alpha-2 agonist; may decrease PTSD symptoms; may be sedating and cause hypotension and bradycardia; abrupt withdrawal may cause rebound hypertension;
Quetiapine (Seroquel, Seroquel XR)	25mg-200mg; give IR in divided doses	25, 50, 100, 200, 300, 400 XR: 50, 150, 200, 300, 400	25mg; ↑ by 25mg		Atypical antipsychotic, which has been shown to target anxiety at lower doses. Must worry about potential adverse effects of this class, including sedation, weight gain, hyperlipidemia, metabolic syndrome, EPS, etc.

Updated by: Rosa K. Kim, MD and Fanisha Porter, MD
Updated on: June 2017