ANXIETY DISORDERS IN CHILDREN WITH EPILEPSY

Anxiety disorders are the most common psychiatric disorder in childhood and are often underdiagnosed in typically developing children and in those with epilepsy. Anxiety disorders in children with epilepsy can have a negative impact on child functioning and quality of life. It is important to screen for anxiety symptoms and refer to mental health specialists for diagnosis and treatment as appropriate. There is mounting evidence that a number of youth who develop anxiety disorders actually experienced some of these symptoms prior to the onset of their seizures. Therefore, it is important to begin asking and assessing for anxiety disorders and other emotional struggles at the youth's first appointments following diagnosis of epilepsy.

Features of Anxiety Disorders

Symptoms of anxiety disorders in children with epilepsy often differ from those in adults, but can be similar to the symptoms seen in children with anxiety disorders without epilepsy.

- Crying, irritability, and angry outbursts, worry, thought rumination, nervousness, and negativity.
- Angry outbursts and tantrums can cause the child to be perceived as disobedient or oppositional, when they actually reflect efforts to avoid an anxiety-producing situation.
- Inattention is sometimes misinterpreted as possible attention deficit hyperactivity disorder when it is really related to the anxiety disorder.
- Children, including those with epilepsy, may present with different types of anxiety disorders:
    - Generalized anxiety disorder- chronic and excessive worry not limited to any specific object or situation
    - Separation anxiety disorder - inappropriate fear and distress when separated from home or an attachment figure
    - Social phobia - discomfort and fear in one or more social settings
    - Specific phobia - fear of an object or situation
    - Panic disorder - unexpected, recurrent episodes of intense fear. Panic disorders in pediatric patients are likely to occur in adolescent years.

Considerations related to epilepsy:

- The anxiety disorder may be related to
    - dysfunction in neural structures involved in emotional processing.
    - a reaction to having seizures, such as fear of triggers for seizures or the wish to avoid settings in which seizures may occur and lead to embarrassment or teasing.
    - A family history of anxiety disorders in first degree relatives.
    - The use of antiepileptic drugs that have negative psychotropic properties (e.g., barbiturates, levetiracetam, topiramate, zonisamide, perampanel, vigabatrin) or rapid discontinuation of antiepileptic drugs with anxiolytic properties (e.g., gabapentin, pregabalin, benzodiazepines) in children with a past and /or family histories of anxiety disorder.
- Managing epilepsy, adjusting to anti-epileptic drugs (AEDs), fear of having seizures, and changes in lifestyle can all be factors associated with the development of anxiety symptoms after seizures begin.
- Anxiety symptoms in a child may also reflect the parents' anxiety symptoms.

Epidemiology

- Rates of anxiety disorders are thought to be higher in children with epilepsy compared to healthy peers.
- Studies in the US have found rates of anxiety disorders in pediatric epilepsy as high as 35.8%.
- Anxiety symptoms can fluctuate during the duration of epilepsy.
- Predictors of anxiety disorders in children with epilepsy: younger age of onset, possibly polytherapy.
- Gender and duration of epilepsy do not predict anxiety disorders in children with epilepsy.

Diagnosing anxiety in children with epilepsy

- Because parents and children can differ in reports of the child's anxiety symptoms, it is important to ask both children and parents about symptoms.
- Parent, teacher and self-report questionnaires are available depending on the age of the child. Elevated scores identified on screening indicate further assessment by a mental health professional is warranted for diagnosis and treatment as necessary. Two free tools are:
    - Strength and Difficulties Questionnaire (SDQ; http://www.sdqinfo.com), which assesses mental health symptoms including anxiety, in children as young as age 2 years.
    - Screen for Child Anxiety Related Disorders (SCARED) for children age 8 years and older (http://pediatricbipolar.pitt.edu/resources/instruments).
- For those not comfortable with using standardized questionnaires, parents and children may be asked about symptoms such as changes in school performance, refusal to go to school, worries about being separated from parents/caregivers, frequent physical complaints not associated with epilepsy or medication side effects, struggles with sleep, increased irritability, mood swings, obsessive behaviors or focus on something, difficulty self-soothing when something upsetting happens, significant changes in social interactions/friendships.

Treatment

Anxiety disorders in children can be treated. Early treatment and intervention can improve coping and prevent or reduce future difficulties, such as loss of friendships, failure to reach social and academic potential, and feelings of low self-esteem. Treatment of anxiety disorders is needed:

- If anxiety problems interfere with the child or adolescent's usual activities, including separating from parents, attending school and making friends, epilepsy care providers should consider seeking an evaluation from a qualified mental health professional (e.g., psychologist, psychiatrist)
- There are no controlled trials of psychotropic medication in children with epilepsy; treatment recommendations are based on results of trials with children without epilepsy.
    - Selective serotonin reuptake inhibitors (SSRIs) and serotonin norepinephrine reuptake inhibitors (SNRIs) are used for anxiety (and depression) in children and adolescents.
    - SSRIs and SNRIs, when used at therapeutic doses, do not reduce seizure thresholds.
- Controlled trials indicate that cognitive behavioral therapy (CBT) is effective in children with or without epilepsy. CBT focuses on the relationships between thoughts, feelings, behaviors, and body sensations.
- Some children may benefit from a combination of psychotropic medication and CBT.
- Community based interventions including support groups (in person and online) as well as camps/retreats may be beneficial.
- It may be important to include goals to address anxiety disorders in the school setting through an Individual Education Plan (IEP) or 504 plan.

References

Connolly SD, Bernstein GA & Work Group on Quality Issues. (2007). Practice parameter for the assessment and treatment of children and adolescents with anxiety disorders. J Am Acad Child Adolesc Psychiatry, 46(2), 267-283.

Dunn, DW, Besag F, Caplan R, Aldenkamp A, Gobbi G, Sillanpaa M. (2016). Psychiatric and behavioural disorders in children with epilepsy (ILAE Task Force Report): Anxiety, depression and childhood epilepsy. Epileptic Disord. 18(S1), S24-S30.

Jones JE. (2014). Treating anxiety disorders in children and adolescents with epilepsy: What do we know? Epilepsy Behav, 39, 137-142.

Websites on anxiety which may be helpful to children, teens and parents:
https://my.clevelandclinic.org/health/articles/anxiety-disorders

http://webcache.googleusercontent.com/search?q=cache:NY04awkseaoJ:resources.beyondblue.org.au/prism/file%3Ftoken%3DBL/0835+&cd=2&hl=en&ct=clnk&gl=us

http://www.worrywisekids.org/

https://www.youthbeyondblue.com/understand-what's-going-on

http://youth.anxietybc.com/

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