



# Identifying depression in childhood: Symptoms, signs and significance

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Over the past three months, an 11-year-old boy has become more withdrawn. His parents noticed that he is irritable, more often upset or angry than he used to be, and with little provocation. At home, he spends most of his time in his room watching television. His mother is concerned that he is becoming “a loner” and that he seems very troubled and unhappy. He no longer wants to play soccer nor have his friends over, activities he used to enjoy. He has been sleeping poorly and has gained 10 pounds over the past couple of months from constant snacking. His weight gain has led to teasing by his peers and several conflicts at school. He frequently complains of stomach aches and headaches. His teachers have told his parents that recently he seems to have difficulty concentrating, does not complete his homework and has failed two tests. Last week, he tried to run off the school property at recess. He said he was trying to run home.

He reports feeling sad and picked on, and he thinks nobody likes him. He is also tired during the day but has trouble sleeping at night; therefore, sometimes he takes a nap after school. He reports that school is “boring” and he can’t pay attention in class like he did earlier in the school year. He denies any significant conflicts with his friends or bullying beyond the new teasing about his weight, and says he “just doesn’t feel like going” when asked about his recent disinterest in his usual activities. He reports that sometimes he wishes he had never been born.

Prior to presentation, he had been a well-adjusted child and a good student, always a bit quiet but had friends and participated in activities he enjoyed. His developmental and past medical histories are unremarkable. There is no history of trauma or abuse. On the maternal side, his mother has a history of depression which has been well controlled for the past few years, his uncle attempted suicide when he was an adolescent and his grandfather has a history of alcohol abuse. His parents have always struggled financially.

## LEARNING POINTS

- Major depressive disorder (MDD) is a common condition that affects 5% to 9% of adolescents.
- Depression is a heritable condition; having a parent with MDD is one of the strongest predictors of childhood or adolescent depression.
- MDD is generally characterized by persistent feelings of sadness, anhedonia or irritability, which impair the individual’s ability to function and concentrate on daily tasks; changes in energy level, sleep and appetite are also present.
- Early-onset depression is a severe form of illness that is associated with increased lifetime psychiatric hospitalizations,

greater functional impairment and has a fourfold higher rate of suicide compared with adult-onset depression.

- Laboratory investigations are generally normal; routine neuroimaging is not indicated. Research studies have confirmed numerous neurobiological correlates of depression, including abnormalities of the neuroendocrine system and sleep cycle disturbances. Advanced neuroimaging techniques have noted decreased hippocampal volumes, altered cerebral perfusion and neurophysiological abnormalities.
- A high index of suspicion is needed, as children have limited ways in which to express their distress. Patients frequently seek assistance from the school system or other extracurricular programs, which delays presentation. As a result, symptoms of increased severity, such as suicidality, may be present at diagnosis. Rapid detection and treatment may be lifesaving.
- Physicians should gather as much of the history of depressive symptoms from the child or adolescent as possible, in addition to that from the parent or guardian. Children and adolescents are able to report on their feelings and are often better informants about their internal state than others.
- Depression screening tools available to physicians include the Child Depression Inventory or the Children’s Depression Rating Scale (Revised). Although these measures are not diagnostic instruments, they may help physicians augment their assessment.
- The CPSP study of early-onset (childhood) MDD was launched in January 2012. The study is necessary to define the incidence of the illness, common comorbidities and to describe current treatment of the condition. These are important for predicting burden of illness and planning targeted programs aimed at improving the course of depressive illness for patients lifelong.

## RECOMMENDED READING

- Korczak DJ, Goldstein BI. Childhood onset major depressive disorder: Course of illness and psychiatric comorbidity in a community sample. *J Pediatr* 2009;155(1):118-23.
- Williamson DE, Birmaher B, Axelson DA, Ryan ND, Dahl RE. First episode of depression in children at low and high familial risk for depression. *J Am Acad Child Adolesc Psychiatry* 2004;43(3):291-7.
- Zisook S, Lesser I, Stewart JW, et al. Effect of age at onset on the course of major depressive disorder. *Am J Psychiatry* 2007;164(10):1539-46.

## REFERENCES FOR DEPRESSION SCREENING TOOLS

- Kovacs M. The children’s depression inventory (CDI). *Psychopharmacol Bull* 1985;21(4):995-8.
- Poznanski EO, Grossman JA, Buchsbaum Y, et al. Preliminary studies of the reliability and validity of the children’s depression rating scale. *J Am Acad Child Psychiatry* 1984;23(2):191-7.

*The Canadian Paediatric Surveillance Program (CPSP) is a joint project of the Canadian Paediatric Society and the Public Health Agency of Canada, which undertakes the surveillance of rare diseases and conditions in children and youth. For more information, visit our website at [www.cps.ca/cpsp](http://www.cps.ca/cpsp).*

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