Clinical Focus

Continuing education and moving points in medicine

Continuing Education Module 21: Brain disease

Depression in adolescents

The prevalence of depression in the young is rising and is possibly linked with societal and economic changes, write **Diarmuid Lynch and Fiona McNicholas**

Depression in childhood is increasingly recognised as an important clinical presentation both to child and adolescent mental health services (CAMHS) and GP services. Although depression exists in childhood, it is relatively rare (<2%) and has a different course and associated features, being more similar to conduct disorders than to typical adult depression.

Post puberty, the prevalence of depression increases exponentially, with rates of 5-8%. At this stage girls far outnumber boys. By the time adolescents reach 18, they will have had a one in five chance of having had a depressive episode.

There are concerns that the prevalence of depression in all ages is increasing, possibly linked with societal and economic changes, such as fragmentation of families, increased stresses as a result of more recent austerity measures, and increased use of alcohol and substance misuse, both known to increase the risk of depression.

Depression occurs along a spectrum from an adjustment disorder with depressive symptoms at the mildest end, which is self-limiting and occurring in response to a clear stressor, followed by a dysthymic disorder, characterised by mild depressive symptoms lasting longer than one year. At the most extreme end is a major depressive disorder.

Diagnostic criteria for adolescent depression are similar to those used in adulthood. Most notable is the presence of a pervasive low mood, with lack of enjoyment in previously pleasurable activities (anhedonia). These features should last in excess of two weeks, represent a clear change from premorbid mood state and impact on normal functioning. There are associated feelings of worthlessness, hopelessness and a negative view of the self, the world around them and their future, often referred to as Beck's cognitive triad of depression. These feelings often herald futility thoughts, ie. the belief that life is not worth living, and recurrent thoughts of death.

For a significant number, these thoughts lead to self-harming behaviour, with or without suicidal intent. Biological symptoms include loss of appetite (often with significant weight loss), sleeping difficulties, either insomnia or hypersomnia (almost every day) and psycho-motor agitation or retardation (almost every day; objectively observable, not solely subjective). Cognitive features include slowed thinking, poor memory and concentration problems (negatively impacting on performance in school).

For a minority of cases, feelings of guilt, rejection and low self worth may reach delusional intensity, and the young person may experience paranoid/persecutory delusions, nihilistic delusions (for example, where they may believe their insides are rotting) or delusions of guilt (for example where they believe they are responsible for negative, often unrelated life events). They may also experience auditory hallucinations, typically first person, telling them they are no good, and of more concern is if they experience command hallucinations, directing them to self harm. Olfactory, tactile or gustatory hallucinations are rare, and when present, generally mood congruent.

Aetiology

The aetiology of depression like many mental health disorders is multifactorial, including biological, social and psychological risk factors. A family history of depression is a large risk factor, particularly when associated with early age of onset in the parent. Adolescents whose parents had a major depressive disorder in

their adolescence are two to four times more likely to experience a major depressive episode themselves. However environmental factors, including family conflict, abuse, misuse of substances, social adversity, negative life events and a negative thinking style, with poor problem solving abilities, are also contributory.

There is some evidence that there is a gene-environment interaction, with a shorter allelic form of the serotonin transporter being a risk factor for augmenting the negative effect of stress. While alcohol and drugs are occasionally used by individuals to self-medicate, any mood ameliorating effects are transitory and these substances can be a risk for the onset of depression. Alcohol use in association with suicidal ideation has been considered a specific risk for suicidal behaviour and completed suicide. Up to 85% of individuals who die by suicide have had a mental health disorder, depression being the most common. This means that the recognition and treatment of depression should be a priority.

Outcome

Untreated, a typical depressive episode in the community will last about five to six months, depriving a young person of (or interfering with) academic success, socialisation, and positive relationships with their family. The risk for recurrence in adolescents is between 30-70% within five years. The risk of developing bipolar disorder in later years is 10-20%, especially if there is a family history of bipolar disorder or a manic switch following antidepressant treatment.

Adolescent depression has been associated with poor academic performance, occupational underachievement, and interpersonal difficulties with disruptions in social and family settings. There is higher risk of substance misuse, and poor physical health.

Assessment

A full clinical history enquiring about their mood, interpersonal relationship and family life is important. Current or past suicidal ideation or behaviour is an essential area to sensitively enquire about as both of these significantly increase the risk of death by suicide.

The clinician should enquire about any other comorbid disorders, for example substance misuse, anxiety, both known to frequently co-occur, and any past history of depression/mania. Using the assessment model of 'IFME' (Individual, Family, Medical and Environmental), functioning in each of these domains may be enquired about. Parents will corroborate the adolescent history and will also be able to offer their own insights into the level of impairment for the young person.

A school report will also give a level of any academic difficulties or decline, along with quality of peer relationships. Given the increasing recognition of the impact of bullying on the mental wellbeing of adolescents, it is important to enquire about this. The clinician may find the depression-specific diagnostic aids such as the Beck depression inventory (BDI), or Columbia Depression Scale (CDS) useful as clinical adjunct measures.

Treatment

The treatment of all mental health disorders follows a bio-psychosocial approach consideration being given to individual, family and environmental aspects along with the appropriate use of medication, when justified (IF-ME). Clinicians are guided by the NICE clinical guidelines on adolescent depression which recommends that in addition to psycho-education (considered as standard for all) adolescents should be offered six to eight weeks of CBT. Medication is used first-line if the presentation is severe or is added to CBT if treatment resistant. Depression presenting with psychotic features would also require the use of an antipsychotic.

In 2004, regulatory warnings were placed on SSRIs, following the recognition of the increased risk of suicidality in adolescents prescribed an SSRI. In the UK, the Medicines and Healthcare products Regulatory Agency, (MHRA) stated that all SSRIs are contraindicated in adolescent MDD except for fluoxetine. In Ireland, the Irish Medicines Board issued a statement reminding clinicians that no SSRI is licensed for adolescents.

Typically, adolescent depression is treated by child psychiatrists, but in areas lacking CAMHS services or where primary care clinicians engage in treatment, medication should be restricted to fluoxetine. In these cases, parents and adolescents should be alerted to the increased risk of suicidality, and the adolescent should be reviewed regularly and a safety plan put in place, ie. restricting lethal means, engaging a concerned third party, and an emergency clinical pathway when necessary. In certain cases where the level of depression is severe, chronic, treatment resistant or associated with high suicidal risk, an inpatient admission may be required.

Prognosis and future

For most adolescents, a depressive episode will be successfully treated as an outpatient. However, up to 70% will have a recurrent episode within five years. That means for the majority of adolescents presenting with depression, it will be a recurrent disorder. After treating the index episode, treatment needs to shift to relapse-prevention through promotion of mental health wellbeing, minimising depressive risks, and creating resilience within the young person, including cognitive strategies to help.

Teaching adolescents and parents about recognition of relapse is vital. Healthcare professionals should also focus on giving the young person the knowledge about how they can access mental health services when they need them.

There are a number of very helpful support groups in the community for adolescents (eg. AWARE, Headstrong, Spun Out) that might be helpful for the young person and their family to link with. Public health initiatives and school-based mental health programmes through the National Educational Psychological Service (NEPS) and the Social, Personal and Health Education Programme (SPHE) aimed at increasing the recognition of depression could significantly improve the outcome for adolescents at risk of depression.

Children with an anxiety disorder or children in whom a parent had a history of depression would benefit most from such intervention. From a public health perspective, the impairment burden is mostly associated with subsyndromal depression, so even a small reduction in depressive symptoms in a large number of sufferers may be associated with real positive outcomes.

Diarmuid Lynch is a psychiatry nursing student at TCD and Fiona McNicholas is a consultant child and adolescent psychiatrist at the Lucena Clinic, Rathgar, Dublin

References

1. Lewinsohn PM, Clark GN. Psychosocial treatments for adolescent depression. Clinical Psychology Review Volume 19, Issue 3, April 1999, 329-342
2. Kovacs M et al. Depressive disorders in childhood. Archives General Psychiatry 1984
3. Birmaher B et al. Childhood and adolescent depression: A review of the past 10 years. Part I Journal of the American Academy of Child & Adolescent Psychiatry Volume 35, Issue 11, November 1996, 1427-1439
5. NICE Clinical Guidelines on Depression: Clinical guidelines, CG28 - Issued: September 2005