

Challenges in managing Major Depression in the child or adolescent

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Clinical Clerkship- 11/20/01

Major Depressive Disorder

Common to children and adolescents

Prevalence- 2% children, 4 to 8% adolescents

Gender- male:female= 1:1 childhood, 1:2 adolescence

Incidence- 20% cumulatively by age 18.

I. Characteristics-

- chronicity
- often recurrent
- poor psychosocial outcome
- comorbid conditions
- high risk of suicide
- high risk for substance abuse

II. Diagnosis:

A. Clinical presentation- presence of a Major Depressive Episode by DSM IV criteria

At least 2 weeks pervasive change in mood manifested by either depressed or irritable mood and/or loss of interest and pleasure. Also, one must have other characteristics, such as changes in appetite, weight, sleep, activity, concentration, energy level, self-esteem, and motivation (APA 1994). Symptoms must represent a change from previous functioning and produce impairment in relationships or in performance of activities. Symptoms must not be attributable only to substance abuse, use of medications, other psychiatric illness, bereavement, or medical illness.

B. Variable presentation in the child, adolescent vs. adult

Child- Less likely to verbalize feelings, thoughts. Children present with more symptoms of anxiety (phobias and separation anxiety), somatic complaints, auditory hallucinations. Irritability and frustration may be expressed as temper tantrums and behavioral problems.

Adolescent- More cognitive ability

Present with more sleep and appetite disturbances, delusions, suicidal ideation and attempts, and impairment of functioning; also, with irritability, anxiety, and anger.

Adult- Presents with more neurovegetative symptoms and less behavioral problems.

C. Differential Diagnosis:

Above criteria are met, and depressive symptoms cannot be only be caused by other conditions:

Non affective disorders- anxiety disorder, learning disability, disruptive disorders, ADHD, anorexia nervosa, substance abuse, premenstrual dysphoric disorder.

Adjustment disorder

General medical condition (cancer, hypothyroidism, lupus erythematosus, AIDS, anemia, diabetes, epilepsy.)

Medications- stimulants, neuroleptics, corticosteroids, contraceptives, and others.

Chronic Fatigue Syndrome

Bereavement

Bipolar disorder

Schizophrenia

III. Treatment plan:

A. Rating scales: Children's Depression Inventory (CDI), Clinical Global Impressions (CGI), and Child Depression Rating Scale (CDRS), used for screening, assessing severity, and monitoring for improvement by clinician.

B. Combination Psychotherapy and Pharmacotherapy

Psychotherapy alone is used for less severe forms depression, eg, early dysthymia.

C. Pharmacotherapy for depression:

SSRIs vs placebo successfully showed symptom reduction, but not increased psychosocial functioning, suggesting a combined Pharmaco and psychotherapy approach.

Antidepressants:

-First line- SSRIs- Studies showed 70 to 90% response to SSRIs for adolescents with MDD.
Fluoxetine, paroxetine, sertraline, fluvoxamine, citalopram – first two favored for youth.

Advantages:

Known efficacy in youth, good safety profile, low lethality if overdose, and once daily dosing.
Fluoxetine and Paroxetine DOCs for Major depression vs placebo for symptom reduction, (58% vs. 32%)
- no known long term side effects- although, not well studied yet

Disadvantages:

However, many SSRI treated pts had partial improvement and only 31% achieved full remission.
Some association was found between SSRIs and increased suicidality, but they are generally found to reduce risk of suicide.

Adverse effects: dose-dependent and subside with time

- mentally -pts may become impulsive, silly, agitated, daring.
- physiologically -pts may develop gastrointestinal symptoms, restlessness, diaphoresis, headaches, akathisia, bruising, appetite changes, sleep changes sexual dysfunction.
- abrupt disruption of SSRI treatment can induce withdrawal symptoms, e.g., paroxetine with a short half-life.
- P450 metabolism disturbance and possible interactions with other medications.

Traditional heterocyclic or tricyclic antidepressants (TCAs) and MAO inhibitors have not been shown effective for Major DPN in youth esp with life threatening side effects. Useful for youth with comorbid ADHD, enuresis, narcolepsy, augmentation strategies.

Typical approach to administration of SSRIs in children and adolescents:

Give adequate and tolerable doses for first 4 weeks and monitor for signs of improvement.

If there is minimal improvement, increase the dosage.

If there is no signs of improvement, continue therapy for 6 weeks, and then if there are still no signs for clinical improvement, consider alternative strategies:

-Second line when SSRIs fail: venlafaxine, bupropion, nefazodone, trazodone, mirtazapine. Little studies on these meds for safety and efficacy profiles in youth.

-If monotherapy fails - augment with mood stabilizers - lithium, carbamazepine, valproic acid, although efficacy of mood stabilizers have not been well studied in depressed youth, although helpful in bipolar children.

Pharmacologic treatment for MDD:

Treat a 1st major depressive episode 4 to 6 months until normalization, maintenance therapy for recurrent depression up to 5 years.

Maintenance for chronic depression indicated for 2 to 5 years

Maintenance for dysthymia for 1 to 5 years

IV. Treatment resistant depression- considerations

Inadequate drug dosage, inadequate duration of drug trial, inadequate duration of psychotherapy, poor medical skill of psychotherapist, lack of compliance with treatment, comorbidities with other psychiatric disorders, medical illness, undetected bipolar depression, depression of PTSD, or chronic stress.

*Alternatively, for those needing urgent response to treatment, eg. depressed pts at suicidal risk or severely anorectic- consider electroconvulsive therapy.

V. Suicidal Risk:

22% adolescents with major depression reported a prior suicide attempt.

Suicide Risk:

20 to 35% all suicides due to MDDs., 15 times the risk of suicide for young men with bipolar disorder

VI. Electroconvulsive Therapy (ECT) alternative:

80-90% ECT treatments in US are performed for MDD

ECT has an acute positive effect on reducing suicide risk.

Most efficacious for the most severely depressed pts

Child and adolescent response rate to use of ECT (18 years and less):

Depression-63%

Mania-80%

Schizophrenia-42%

Catatonia-80%

Unfortunately, there is no evidence for long term improvement, and recurrence for suicide risk can occur. ECT is also less useful for pts with concurrent mental/medical disease, or DPN refractory to meds.

Indications for ECT:

- 1) Urgent need for a rapid response
- 2) Less risk with ECT than adverse effects of other treatment alternative
- 3) Pt history of better response to ECT
- 4) Strong pt preference

As last resort therapy:

ECT alternative therapy for treatment of major depression is not well studied in the youth age group, thus it is used as last resort therapy. It is believed that the negative stigma of ECT therapy in younger patients has prevented use in youth.

Current literature promotes the safety of ECT:

Mortality in all ages: 1/10,000 - 1/1000 pts

VII. Comorbidities:

43% had at least 1 other concurrent diagnosis - anxiety(18%), substance abuse(14%), disruptive behavior disorders(8%). 20% depressed youth develop bipolar mood disorder over time. Comorbidities thus present another challenge to pharmacotherapy.

Comorbid anxiety or dysthymia predicts poorer response and persists after an episode of MDD.

VII. Chronicity and recurrence:

Mean length of a major depressive episode in youth ranges from 7 to 9 months, with remittance within 1.5 to 2 years. The recurrence rate is high for early onset depression (onset under age 21)- 48% to 60% youth have recurrence depression within 5 year follow-up.

As clinical rule, more than 2 episodes major depression indicates a lifelong medication treatment plan. *Cyclic acceleration* of recurrent major depression- Recurrence pattern tends to be a gradually worsening cycle with shorter interim remission periods and progressively worsening episodes.

Functional and structural alterations can occur in the brain with recurrent depressive patients.

In conclusion, it is crucial for the early identification, diagnosis, and implementation of aggressive treatment of early onset MDD in children and adolescents as the burden can be devastating to an afflicted individual's daily functioning, educational opportunities, and a stress for his/her family and social surroundings. Early onset MDD tends to follow a lifelong pattern with recurrent episodes fostering permanent mental and cognitive changes in the brain. Thus appropriate management and treatment when diagnosed is critical and can be lifesaving.

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