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Management of Childhood - Onset Schizophrenia: A Literature Review

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ABSTRACT

Schizophrenia is one of the most common and well-known psychotic disorders that inhibits neurodevelopmental processes and has detrimental effects on cognitive, affective and social functions. Schizophrenia constitutes 1% of the general population, in the US there are more than 300.000 episodes of acute schizophrenia appearing per year. From epidemiological data on children and adolescents, it was found that less than 1/10.000 suffered from childhood schizophrenia, also found more in boys to adolescence, and the ratio was almost the same after adolescence as in adults. Early detection is needed so that schizophrenia that occurs especially in childhood does not develop into a chronic condition with a worsening prognosis.

1. Introduction

Childhood-onset schizophrenia (COS) is a chronic mental illness diagnosed in children before. The disease is a controversial diagnosis among clinicians and can be very difficult to diagnose for several reasons. Schizophrenia is a psychotic disorder characterized by bizarre delusion, auditory hallucinations, flat affect, low motivation. The psychotic nature of this disorder is quite disruptive to the child's emotional regulation, behavioural control and can reduce the child's ability to perform daily tasks crucial to adaptive functioning. Before the onset of schizophrenia, children often develop premorbid abnormalities, which are disturbances to a child's functioning that may serve as warning signs. These disturbances can manifest in various behavioural ways and may include introversion, depression, aggression, suicidal ideation and manic-like behaviours.¹

There seems to be a significant increase in the

number of cases of mental disorders in children and adolescents in this decade. A large amount of the current literature discusses bipolar disorder in children & adolescents, this indicates that this disorder has become a common clinical condition, accounting for 1% of the general population and nearly 17% of psychiatric cases. Besides, schizophrenia in children and adolescents, which is still a consistent disorder, although not as much as schizophrenia in adults, often leads to a worse prognosis if it is not detected and treated as early as possible.²

Integrated and comprehensive management is needed to overcome the problem of schizophrenia and bipolar disorder in children and adolescents. In addition to pharmacotherapy, non-pharmacotherapy is also given, for example psychosocial therapy: one of them is family psycho-educational therapy in the form of group discussions - between families and accompanied by social skills training for children and

their families.³⁻⁵

Atypical neuroleptics (risperidone, olanzapine, quetiapine and aripiprazole) are widely used for the treatment of mental disorders in children and adolescents. Aripiprazole, a new atypical neuroleptic, has received FDA (Food and Drug Administration) approval for the treatment of autistic disorders, schizophrenia and bipolar disorder in children and adolescents. Its pharmacologic effects can minimize the extrapyramidal and endocrine side effects (such as increased prolactin levels) commonly seen in neuroleptics. In bipolar disorder, there was improvement in manic symptoms (71%). Whereas in schizophrenia, there was a significant improvement in symptoms which could be assessed by the PANNS score.⁶⁻⁸

Childhood schizophrenia

Schizophrenia in childhood is a rare and severe form of schizophrenia, usually appearing before 12 years of age (but not less than 5 years of age), is chronic deteriorative with a high likelihood of relapse. Only about 12% experience complete remission (Maudsley), the rest experience partial remission or even persist into adulthood with negative symptoms that remain prominent. If there are psychotic symptoms that persist for more than 6 months, the possibility of complete remission is only about 15%, but if psychotic symptoms only appear for less than 3 months, the possibility of complete remission is greater.⁹⁻¹⁰

Schizophrenia is one of the most common and well-known psychotic disorders that inhibits neurodevelopmental processes and has detrimental effects on cognitive, affective and social functions. Schizophrenia constitutes 1% of the general population, in the US there are more than 300.000 episodes of acute schizophrenia appearing per year. From epidemiological data on children and adolescents, it was found that less than 1/10.000 suffered from childhood schizophrenia, also found more in boys to adolescence, and the ratio was almost the same after adolescence as in adults. Early

detection is needed so that schizophrenia that occurs especially in childhood does not develop into a chronic condition with a worsening prognosis. This requires: Accurate recognition of the symptoms of schizophrenia in order to make the diagnosis and intervention as early as possible. In early detection, one must pay attention to recognizing the manifestations of the acute disorder, the underlying factors and conditions, and also what factors can determine relapse. The negative symptoms of schizophrenia may appear in the prodromal phase, before the development of a complete syndrome of schizophrenia with both positive and negative symptoms.⁸⁻¹⁰

In theory, if the prodromal phase with negative symptoms can be detected early and treated with psychosocial or pharmacological interventions before psychotic onset, it may be possible to slow or prevent the onset of schizophrenia with complete syndromes (positive and negative symptoms). Apart from positive and negative symptoms, schizophrenia also has 3 other symptom components: affective, aggressive and cognitive.

Aggressive symptoms (assaultive, verbally abusive) usually overlap with positive symptoms (delusions, hallucinations), while affective (anxiety, suicidality, depression, loss of interest) and cognitive (poor attention, impaired executive function) symptoms overlap with negative symptoms (reduced speech). and range of emotions; loss of interest, social desire, sense of purpose / motivation)⁵

Management

Therapy for childhood schizophrenia is a multimodal approach: pharmacological intervention, family education, social skills interventions, appropriate educational tools. Recent studies have shown that early intervention in children and adolescents is carried out during the prodromal phase of schizophrenia with atypical antipsychotics and support. psychosocial can improve existing symptoms and slow or prevent the appearance of full blown schizophrenia.^{2,10}

Antipsychotic psychopharmacology

Atypical antipsychotics are currently the first-line therapy for children with schizophrenia, because of their minimal side effects compared to typical antipsychotics. The action of atypical antipsychotics is different from conventional / typical, that is, it acts as a serotonin receptor antagonist with some dopamine (D2) activity, but without the predominance of the D2 receptor antagonist. This condition makes it more effective in reducing the positive and negative symptoms of schizophrenia and minimizes the risk of extrapyramidal side effects. In a previous study, using aripiprazole at doses of 10 mg and 30 mg, found relatively low prolactin levels and light weight gain (<0.5 kg). In schizophrenia, there was a significant improvement in symptoms which could be assessed by the PANNS score.

2. Conclusion

Management of schizophrenia in children includes pharmacotherapy and therapy with a psychosocial approach.

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