نحوه برخورد با کودک ۸ساله با علایم مشکلات تحصیلی در درمانگاه پزشکی خانواده

ارائه دهنده: دکتر آیلین حفظ اللسان کارورز پزشکی خانواده استاد راهنما: آقای دکتر شفیعی ثابت

Chief Complaint

کودک ۸ساله با علایم مشکلات تحصیلی

Present illness

 An 8-year-old boy who lives in Tehran with his parents, who has been struggling in school for the past two years. His parents have noticed that he has difficulty paying attention, often daydreams in class, and forgets to turn in his homework. His teacher has also noticed that he is easily distracted and has difficulty completing tasks. He is often restless and fidgety in class, has difficulty sitting still, and sometimes blurts out answers before the teacher has finished asking the question. His parents have tried to help him by setting up a homework routine and providing extra support, but they are still concerned about his behaviour and academic performance.

 In spare time, he enjoys spending time with his friends, and participating in physical activities such as swimming, running and skating. He also enjoys participating in social events, and is often invited to play dates and birthday parties. It is noteworthy that he did not know his address or home phone number, could not print his surname, and recognized only a few pre-primer words. • While he interacts well with peers his own age, his parents note that he can be easily led and influenced by others. They also report that the boy gets upset when he does not receive recognition or feels that he has been ignored. His teacher notes that he sometimes acts 'socially immature', and that he often demonstrates attention-seeking behaviour.

 The boy describes difficulties with focusing, and sitting still in class. He recognizes that he is able to 'hyper focus' on some activities of interest, however he often has difficulty sustaining his attention at school. His parents and teacher indicate that he is restless, and often requires reminders to help him stay on task. He is described as "constantly running around" and presenting with difficulties listening and following instructions. His teacher indicates that he often blurts out answers and interrupts other students in the classroom. The boy recognizes this tendency in himself, but says that he 'can't stop' in spite of his best intentions.

• The boy has always had challenges falling asleep, and sometimes finds that he wakes up in the middle of the night. When he wakes up he finds that he has a difficult time getting back to sleep - sometimes staying awake for as long as an hour and a half.

 His mother reports difficulties at home with following routines and remembering instructions. His parents describe emotional reactivity as well as confrontational behaviours demonstrated both at home and at school. The teacher notes that he is very defiant towards listening to instructions, but generally interacts well with his peers. He is easily frustrated and emotionally impulsive. He has had several incidents of hitting, crying outbursts, and inappropriate behaviour. Behavioural concerns with aggression, lying, arguments, and disruptive behaviour were noted in pre-school program at age 4.

• PMH: neg

• DH: neg

Family History

• He is the only child to two parents, both of whom have completed post-graduate education. Parents are distant relatives There is an extended family history of Attention Deficit/Hyperactivity Disorder (ADHD).

Physical Examination

• Neurological and physical examination are normal.

CLINICAL FEATURES

- ➤ Core symptoms
 - Hyperactivity and impulsivity
 - Inattention
- >Impaired functioning

Hyperactivity and impulsivity

- Excessive fidgetiness (eg, tapping the hands or feet, squirming in seat)
- Difficulty remaining seated when sitting is required (eg, at school, work, etc)
- Feelings of restlessness (in adolescents) or inappropriate running around or climbing in younger children
- Difficulty playing quietly
- Difficult to keep up with, seeming to always be "on the go"
- Excessive talking
- Difficulty waiting turns
- Blurting out answers too quickly
- Interruption or intrusion of others

Inattention

- o Failure to provide close attention to detail, careless mistakes
- Difficulty maintaining attention in play, school, or home activities
- Seems not to listen, even when directly addressed
- Fails to follow through (eg, homework, chores, etc)
- Difficulty organizing tasks, activities, and belongings
- Avoids tasks that require consistent mental effort
- Loses objects required for tasks or activities (eg, school books, sports equipment, etc)
- Easily distracted by irrelevant stimuli
- Forgetfulness in routine activities (eg, homework, chores, etc)

Evaluation

- ➤ In children ≥4 years with symptoms
- ➤ Comprehensive evaluation is needed
 - Medical evaluation
 - Developmental and behavioral evaluation
 - Educational evaluation
 - Evaluation for coexisting disorders

• Tests not routinely recommended Quantitative EEG

Diagnostic criteria

DSM-5-TR

- ➤ For children <17 years
 - ≥6 symptoms of hyperactivity and impulsivity or
 - ≥6 symptoms of inattention.
- For adolescents ≥17 years and adults
 - ≥5 symptoms of hyperactivity and impulsivity or
 - ≥5 symptoms of inattention are required

The symptoms of hyperactivity/impulsivity or inattention must

- Occur often
- •Be present in more than one setting (eg, school and home)
- Persist for at least six months
- •Be present before the age of 12 years
- •Impair function in academic, social, or occupational activities
- •Be excessive for the developmental level of the child

- Positive or negative response to stimulant medication cannot be used to confirm or refute the diagnosis of ADHD.
- Stimulant medications improve behavior in children with ADHD, children with conditions other than ADHD (eg, learning disabilities, depression), and normal control children

DIFFERENTIAL DIAGNOSIS

- Developmental abnormalities or variations
- Neurologic or developmental conditions
- Emotional and behavioral disorders
- Psychosocial and environmental factors
- Medical conditions

INDICATIONS FOR REFERRAL

- Intellectual disability
- Developmental disorder (eg, speech or motor delay)
- Learning disability
- Visual or hearing impairment
- History of abuse
- Severe aggression
- Seizure disorder
- Coexisting learning and/or emotional problems
- Chronic illness that requires treatment with a medication that interferes with learning
- Children who continue to have problems in functioning despite treatment

DECISION TO USE

> medications combined with behavioral/psychological interventions school-aged children (≥6 years) and adolescents

medications as an adjunct to behavioral interventions preschool children (four through five years)

Before initiation of pharmacotherapy

- A comprehensive, cardiovascular-focused patient history, family history, and physical examination
- Screening for risk factors for bipolar disorder (eg, personal or family history of depression or mania) – Stimulant medications and <u>atomoxetine</u> have been associated with the development of mania or mixed episodes.
- The child's baseline height, weight, blood pressure, and heart rate
- A pretreatment baseline should be established for common side effects associated with pharmacotherapy for ADHD (eg, appetite, sleep pattern, headaches, abdominal pain).
- Adolescent patients : substance use or abuse.

Pharmacothrapy

- Stimulants (short acting and long acting)
 the first-line agent in school-aged child or adolescent (≥6 years)
- Selective norepinephrine reuptake inhibitors (eg, atomoxetine, viloxazine)
 - ☐ less effective than stimulants
 - may be more appropriate for patients with a history of illicit substance use or household members with a history of illicit substance use
- Extended release alpha-2-adrenergic agonists (eg, guanfacine, clonidine)
 - ☐ less effective than stimulants.
 - □are used when children respond poorly to a trial of stimulants or SNRI, have unacceptable side effects

Choosing among stimulants

Although amphetamines may be slightly more efficacious, methylphenidate is better tolerated.

- Short-acting forms
- Intermediate- or long-acting forms
- Combination of short- and long-acting forms

stimulant adverse effects

- Decreased appetite
- Poor growth
- Dizziness
- Insomnia/nightmares
- Mood lability
- Rebound
- Tics
- Suicidality and psychosis
- Diversion and misuse

سطوح پیشگیری

Primordial Prevention

Primary Prevention

Secondary Prevention

Tertiary Prevention

Quaternary Prevention

Primordial Prevention

۱ - آموزش صحیح به پزشکان و مراقبین سلامت جهت برخورد صحیح
 با کودکان با علایم بیش فعالی و نقص توجه

۲ - آموزش های لازم در سطح جامعه در مورد اهمیت ADHD واثرات آن

۳ - اطلاع رسانی به تمام افراد جامعه برای تشکیل پرونده الکترونیک سلامت جهت ثبت اطلاعات و سوابق شخصی و خانوادگی

۴ – اجتناب از سیگار، الکل و تولد زودرس کودک

Primary Prevention

آموزش به والدین جهت مراجعه به مراکز بهداشتی به منظور غربالگری از نظر سلامت روانی

Secondary Prevention

۱ - غربالگری از نظر سلامت روانی

۲ - رفتار درمانی بعنوان خط اول در کودکان قبل سنین مدرسه

۳ - دارودرمانی بعنوان درمان کمکی در کودکان قبل سنین مدرسه

۴ - دارودرمانی بعنوان خط اول درمان در کودکان سنین مدرسه و نوجوانان

Tertiary Prevention

۱ – مانیتور قد، وزن، فشارخون ضربان قلب

٢-مديريت عوار ض داروها

۳- ارزیابی از نظر عوارض ADHD ازجمله اعتیاد، افسردگی، افت عملکرد تحصیلی و شغلی

Quaternary Prevention

۱- عدم انجام تست های پاراکلینیک برای تشخیص ADHD

۲- عدم استفاده از داروها بعنوان خط اول درمان در کودکان قبل سنین مدرسه

نقش پزشک خانواده

