Adult ADHD Fact Sheet

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1. Introduction
    a. Mental health condition exhibited by difficulty maintaining attention, as well as hyperactivity and impulsive behavior
    b. Can lead to unstable relationships, poor work/school performance, low self-esteem
    c. Always starts in early childhood but may be diagnosed later in life
        i. 40-60% of children with ADHD have ADHD-related problems in adulthood
2. Epidemiology
    a. Prevalence 4.4% United States, 3.4% internationally
    b. Potentially increased risk if:
        i. First degree relative with ADHD or another mental health disorder
        ii. Mother smoked, drank alcohol, or used drugs during pregnancy
        iii. Mother exposed to environmental poisons (PCBs) during pregnancy
        iv. Exposure to environmental toxins such as lead
        v. Premature infant
3. Pathogenesis
    a. Unknown
    b. Structural abnormalities
        i. Smaller volumes in frontal cortex, cerebellum, and subcortical structures
        ii. Subcortical abnormalities might normalize into adulthood
    c. Dysfunction in neurologic pathways
        i. frontosubcortical pathways and subcortical structures (caudate, putamen, globus pallidus)
        ii. Involved in **motor control** and **executive function**
        iii. Feedback to the cortex for **regulation of behavior**
        iv. Abnormalities in **reward processing** → lower reward anticipation, insufficient motivation, impulsive behavior, preference of immediate rather than delayed reward

    d. Hypoactivity of dopamine and norepinephrine in these circuits
    e. Genetics
        i. risk of parents and siblings of children with ADHD is 2-8x
        ii. several genes implicated
4. Clinical Manifestations
    a. Predominant features in adults differ from children
        i. Hyperactivity and impulsivity less obvious or overt (impulsivity may be seen in verbalizations rather than physical behavior)
        ii. Inattention more prominent
    b. Inattention
        i. Trouble focusing and concentrating
        ii. Difficulty making decisions and completing tasks
        iii. Poor time management
        iv. Disorganization
    c. Impulsivity
        i. Ending relationships
        ii. Quitting jobs
        iii. Criminal activity
        iv. Traffic accidents and violations
    d. Hyperactivity
        i. Fidgety or **restlessness**
        ii. Talking too much or interrupting others
        iii. Constant activity
        iv. Tendency toward very active jobs
    e. Emotional dysregulation (related to above)
        i. Inability to manage uncomfortable emotions when necessary and engage in appropriate behavior when distressed
        ii. Mood lability, irritability, anger outbursts, low frustration tolerance, motivational deficits
    f. **Some adults present with impairment only later in life when they confront new and increasingly complex tasks**
5. Comorbidities
    a. Mood disorders
    b. Anxiety disorders
    c. Substance use disorders
    d. Personality disorders (antisocial personality disorder, borderline personality disorder)
    e. Learning disabilities
    f. Intermittent explosive disorder

    g. Rate of comorbid psychiatric disorders increase with age
    h. Adults with ADHD commonly diagnosed and treated for comorbid condition while ADHD goes unrecognized and untreated
6. Assessment
    a. Clinical diagnosis
    b. Identify symptoms and behaviors consistent with DSM-5 diagnostic criteria
    c. Evaluate for psychosocial impairment
    d. Rule out other disorders
    e. Age of onset
        i. May need help from another adult informant
    f. Rating scales
        i. Conners' Adult ADHD Rating Scale (CAARS)
        ii. Wender Utah Rating Scale (short version)
        iii. Adult ADHD self-reporting Scale (ASRS)
    g. Brain imaging and EEG techniques actively being studied
7. Differential Diagnosis
    a. Includes common comorbidities
        i. Mood disorders
        ii. Anxiety disorders
        iii. Substance use disorders
        iv. Intermittent explosive disorder
    b. Psychotic disorders such as schizophrenia
8. Treatment
    a. Medication
        i. Stimulants recommended in adults without history of substance abuse or cardiovascular disease
        ii. Antidepressants (Desipramine or Atomoxetine) in patients with a history of substance abuse/dependence
        iii. Buproprion for patients with cardiovascular disease or other medical conditions in which stimulants are contraindicated
    b. Psychotherapy
        i. Cognitive-behavioral therapy (CBT)
        ii. Marital counseling and family therapy
        iii. Efficacious as an adjunct to medication
    c. Treat comorbidities
    d. Lifestyle changes
        i. Make a list of tasks each day
        ii. Break down tasks into steps
        iii. Use sticky pads to write notes
        iv. Keep an appointment book

        v. Carry a notebook or electronic advice to take notes
        vi. Set up systems to file and organize information
        vii. Follow a routine
        viii. Ask for help!
    e. Alternative medicine
        i. Yoga or meditation may help relax and learn discipline
        ii. Dietary changes such as eliminating foods that may worsen symptoms (work with a dietician or physician)
        iii. Vitamin/mineral supplements, herbal supplements and essential fatty acids lack evidence, consult your physician before starting
        iv. Neurofeedback training or EEG biofeedback requires more research to verify efficacy
9. Preparing for your appointment
    a. Make a list of symptoms and problems they have caused
    b. List of key personal information including major stresses or recent life changes
    c. Medication, caffeine, alcohol, tobacco, and drug use
    d. Come with questions
        i. Possible causes of symptoms?
        ii. Tests?
        iii. Treatment?
        iv. Alternatives?
        v. Other health conditions and how to manage together?
        vi. Specialists?
        vii. Generic alternative to prescriptions?
        viii. Brochures, websites or other resources?

Works Cited

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