Research in Autism Spectrum Disorders 6 (2012) 907–912

Contents lists available at SciVerse ScienceDirect

Research in Autism Spectrum Disorders

Journal homepage: http://ees.elsevier.com/RASD/default.asp

Mental and behavioral symptoms of person's with Asperger's syndrome: Relationships with social isolation and handicaps

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ARTICLE INFO

Article history:
Received 2 December 2011
Accepted 6 December 2011

Keywords:
Asperger's syndrome
Mental symptoms
Behavioral symptoms
Life history

ABSTRACT

People with Asperger's syndrome (AS) experience mental comorbidities, and behavioral symptoms that can deepen social isolation and handicaps. We compared the frequency of mental and behavioral symptoms, motor abnormality, and life history between adults with AS and those with no mental disorders but with disturbance of social functions and communication skills (ND) from our outpatient clinic. Participants with AS ($n = 99$) as compared with ND subjects ($n = 63$) showed significant higher rate of depressive mood, anxiety, unstable emotion, mood swings, oversensitivity to normal situation obsessive compulsive symptoms, persecutory idea, loss of energy, insomnia carelessness, restlessness, confusion in new environments, episodic agitation, inflexible adherence, egocentric behavior, self harm, circumscribed interest, poor lifestyle habits, non-athleticism, clumsiness, bulling at school, school non-attendance, social withdrawal, and lack of friendships. In AS, emotional instability and confusion in new environments might lead to social isolation. The findings demonstrated that individuals with AS experience greater social isolation and distress, as well as a wider range of mental and behavioral symptoms and disturbances of motor skills as compared to healthy subjects with disturbances of social functions and communication skills. These factors are interrelated and may be used as supplementary methods for differential diagnosis of AS from other conditions.

1. Introduction

Based on the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994) and the International Classification of Diseases (ICD-10; World Health Organization, 1993), Asperger's syndrome (AS) is a subtype of the Autism Spectrum Disorders (ASD) or Pervasive Developmental Disorders (PDD) and is characterized by markedly abnormal or impaired development in social interaction and a restricted and stereotyped repertoire of activities and interests, without a history of cognitive or language delay. According to the published epidemiologic study for AS in children 7–16 years of age, the population prevalence of AS is 0.36% and suspected AS cases comprise 0.7% (Ehlers & Gillberg, 1993).

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doi:10.1016/j.rasd.2011.12.004

Diagnosing AS is difficult, however, especially in adults (Ritvo et al., 2008). Because some primary caregivers often only remember a portion of the patient's developmental history during early childhood, it is difficult to collect accurate information for a differential diagnosis of AS in adults (Kanai et al., 2011). In addition, healthy adults with disturbances of social functions and communication skills would exist, and differential diagnosis between AS and such people is difficult. Therefore, efficient indicators for a precise diagnosis of AS are important in the clinical setting.

Data on psychosocial life circumstances and psychiatric comorbidity in adult PDD patients with normal intelligence are scare but suggest reduced social functioning. AS shows a substantially better outcome than autism (Cederlund, Hagberg, Billstedt, Gillberg, & Gilberg, 2008), however, people with AS often encounter negative social experiences such as isolation and marginalization (Balfe & Tantam, 2010; Howlin, Alcock, & Burkin, 2005; Yukawa et al., in press). Bullying at school and non-attendance are very common (Tantam, 2000), and the emotional impact may persist into adulthood (Tantam & Girgis, 2009). Howlin (2000) reported a relatively poor social and health profile for many adults with AS in adult, for instance, employment rates are low and 70% are unmarried and live with their parents (Balfe & Tantam, 2010).

Common mental symptoms of AS include depression, anxiety, social anxiety, panic disorder and unstable emotion as a result of isolation (Kanai et al., 2011; Kuusikko et al., 2008; Mukaddes, Haeguner, & Tanidir, 2010). Mood disorders and anxiety disorders have been described as important complications associated with PDD (Ghaziuddin & Zafar, 2008; Howlin, 2000; Wing, 1981). Obsessions and compulsions are also common in AS and are associated with distress (Russell, Mataix-Cols, Anson, & Murphy, 2005). People with AS often experience difficulties with attention and concentration, and problems coping with change leading to extreme aversion to anything novel situations. Sometimes they are confused by new environments and with respect to personal relationships. Severe anxiety and confusion may lead to an agitated state associated with bewilderment and unpredictable behavior (Howlin, 2000). Behavioral symptoms are also derived from specific characteristic of PDD expressed as restricted repetitive and stereotyped patterns and from co-morbid psychiatric symptoms or disorders. Behavioral symptoms may deepen social isolation and handicaps in adults with AS, for examples, inflexible adherence and roundabout speech may persistently annoy friends and caregivers, and depression is likely to induce loss of energy and produce poor lifestyle habits. Disturbances of motor skill, such as clumsiness and deficits of motor control, are also common in AS and may lower quality of life (Sahlander, Mattsson, & Bejerot, 2008).

Although research on the mental symptoms and behavior problems of adults with AS has been increasing in recent years, there is no study in which AS and healthy people, especially those with disturbances of social functions and communication skills, compared.

In Japan, the medical and educational services for persons with PDD are insufficient. For the treatment and research of PDD, a new outpatient clinic for adult with PDD opened at Showa University Karasuyama Hospital in 2008. At the hospital, all participants are referred by physicians from other clinics because of suspected PDD, or documented disturbance of social skill or communication skill. Most subjects at the clinic are axis I and/or axis II diagnosis based on DSM IV criteria, but participants who are neither diagnosis of axis I nor axis II are also seen.

In this study, we compared the frequency of mental and behavioral symptoms, motor abnormalities and life history in adults with AS and adults with social and communication problems who did not meet DSM-IV criteria for axis I and/or II (ND). We hypothesized that individuals with AS would show higher rates of mental and behavioral symptoms, motor abnormalities and lifetime distress.

2. Method

2.1. Participants and procedure

All participating patients provided written consent prior to completing the questionnaires and testing. The study was approved by the ethics committee of the Faculty of Medicine of Showa University. Analyses were based on clinical reports from 668 outpatients (mean age, 31.5 years [range 18–73]; 418 men and 250 women) who attended the outpatient clinic at Showa University Karasuyama Hospital for adult PDD between July 2008 and July 2010. All participants were 18 years and older and had complaints and/or suspected problems with social functions and of communication skills. Participants were asked to complete an interview sheet and the Autism-Spectrum Quotient (AQ) before clinical examination at the initial visit. The interview sheet comprised 5 main questionnaires: (1) major complaint; (2) history of visit to medical and educational organizations/consultation services; (3) problems in fetal and newborn period; (4) developmental delays (walking and language); and (5) education and occupation of the subjects and their parents. Participants were also required to bring records from elementary school to high school and a maternal and child health handbook. The maternal and child health handbook includes records of pregnancy, childbirth, and the neonatal and infant periods, and are provided by the local government office in Japan.

2.2. Assessment and instrument

2.2.1. Assessment of life history and clinical symptoms

A team of three experienced psychiatrists and a clinical psychologist performed the assessment. The assessment consisted of participant interviews about development and life history, especially with abuse, neglect, bulling at school, domestic violence, school non-attendance, social withdrawal, and lack of friendships from infancy to adolescence, and family