Symposium | Nurodevelopmental disorder：[Symposium 73] Recent Findings in Adult Neurodevelopmental Disorders

Sat. Sep 27, 2025 3:50 PM - 5:20 PM JST | Sat. Sep 27, 2025 6:50 AM - 8:20 AM UTC Session Room 2 (Main Hall B)

[Symposium 73] Recent Findings in Adult Neurodevelopmental Disorders

Moderator: Haruhisa Ohta (Showa Medical University Medical Institute of Developmental Disabilities Research), Dan Nakamura (Department of Psychiatry, Showa Medical University)

[SY-73-01]

Recent Findings in Adult Neurodevelopmental Disorders

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[SY-73-02]

Diagnosis and Treatment of Adult Developmental Disorders: A Study Using autism diagnostic observation schedule, second edition

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[SY-73-03]

Brain imaging research on neurodevelopmental disorders

*Haruhisa Ohta[1] (1. Showa Medical University (Japan))

[SY-73-04]

Gender Dysphoria as a subset of *Pervasive Social Dysphoria*: A Qualitative Analysis of the Life Story of Japanese Autistic adults with Gender Dysphoria

*Shoko Shimoyama[1] (1. Research Center for Advanced Science and Technology, The University of Tokyo (Japan))

[SY-73-05]

Understanding ADHD in Adults

*Pietro De Rossi[1] (1. Bambino Gesù Children's Hospital (Italy))

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Keywords：Neurodevelopmental Disorders、ASD、ADHD、adult

Developmental disorders in adulthood are an area that is attracting attention in both the field of mental health and society. However, research on developmental disorders in adulthood is still insufficient, as for a long time the focus has been on children and adolescents. Firstly, diagnosing developmental disorders in adulthood is often difficult. In adults with ASD or ADHD, other mental disorders often co-occur, and mood and anxiety disorders are particularly common. In cases where the main complaint is depression, the developmental disorder that lies behind it is often overlooked. Furthermore, it is not uncommon for cases of transient depression or mood swings to be diagnosed as bipolar disorder, rather than developmental disorders. Furthermore, the relationship between ASD and ADHD is still unclear. Although they were previously defined as not co-existing, current diagnostic criteria now recognize that they can co-exist. However, the similarities between the two in terms of clinical symptoms and other factors are significant, and it is not uncommon for specialist doctors to disagree on the diagnosis. Furthermore, in many cases, the characteristics of developmental disorders interfere with social life, such as work and study. Looking at Japanese society as a whole, there is a strong link between the characteristics of developmental disorders and social pathological phenomena such as bullying, truancy and social withdrawal, but it cannot be said that sufficient measures are being taken to address this. There are many areas of developmental disorders in adulthood that have not been sufficiently researched, but in this symposium, we would like to discuss some of the topics that have been in the news recently from several perspectives, including clinical pharmacology and diagnostic imaging.

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[SY-73-02] Diagnosis and Treatment of Adult Developmental Disorders: A Study Using autism diagnostic observation schedule, second edition

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Keywords：Autism Spectrum Disorder、Attention Deficit Hyperactivity Disorder、Autism Diagnostic Observation Schedule、Second Edition、Gaze measurement、Guanfacine

In this symposium, we will report on some studies on the diagnosis and treatment of developmental disorders in adulthood conducted at Showa University Karasuyama Hospital.

Although ASD and ADHD have been considered to be different developmental disorders, there are many overlapping symptoms, and the relationship between the two disorders remains unclear. So we compared ASD symptoms in adults with 50 ASD, 69 ADHD, and 31 neurotypical controls using the ADOS-2. As a result, it was revealed that there was a high degree of similarity in clinical symptoms between the two groups.

There are also many similarities between the symptoms of ASD and schizophrenia, and the similarity in their symptoms often makes differential diagnosis difficult. We conducted the ADOS-2 on 40 schizophrenia and 50 ASD, and compared the results between the two groups to identify similarities and differences in the symptoms of the two groups.

Furthermore, with the aim of establishing biological markers for the diagnosis of developmental disorders, we conducted eye gaze measurement in human motion scenes of two movies in adults with 22 ADHD and 26 normal subjects, and concluded that the eye movement patterns in ADHD were more similar to those of healthy controls than those of ASD.

Regarding pharmacological treatment, Guanfacine extended-release (GXR) has emerged as a promising alternative to stimulant for the pharmacological treatment of ADHD. GXR is approved globally for treating ADHD in children and adolescents and was first authorized for adult ADHD in Japan in 2019. Since many countries and regions approve GXR only for pediatric ADHD, research on its efficacy in adults has rarely been conducted. We conducted a retrospective medical chart review in adults with ADHD who attended an ADHD specialty clinic at Showa University Karasuyama Hospital, and evaluated clinical outcomes in adults with ADHD treated with GXR in routine clinical practice.

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[SY-73-03] Brain imaging research on neurodevelopmental disorders

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Keywords：MRI、ASD、ADHD

Neurodevelopmental disorders are considered to be disorders of brain function, and brain imaging studies of neurodevelopmental disorders are actively being conducted. At Showa Medical University, MRI brain imaging studies have been conducted on ASD and ADHD in adults. Previous studies have reported that children with ASD have larger brain volumes, while those with ADHD have smaller brain volumes. Although ASD and ADHD share common pathologies, differences in brain volume have been observed between the two disorders. MRI can measure not only brain volume, but also white matter tracts and brain function. However, the number of studies directly comparing ASD and ADHD is insufficient and the differences between the two remain unclear. In this presentation, we will report on our study to understand the similarities and differences between ASD and ADHD in adults.

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[SY-73-04] Gender Dysphoria as a subset of *Pervasive Social Dysphoria*: A Qualitative Analysis of the Life Story of Japanese Autistic adults with Gender Dysphoria

*Shoko Shimoyama[1] (1. Research Center for Advanced Science and Technology, The University of Tokyo (Japan))

Keywords：autism、gender diversity、neurodiversity、gender dysphoria、pervasive social dysphoria

Recently, there has been increased attention on putative relationship between autism and gender dysphoria (GD). To understand the nature of co-occurrence, exploring these individual's experience is essential, but previous research has little focus on them. Therefore, Shimoyama and Endo (2024; 2025) explored the diverse GD experiences of Japanese autistic transgender adults. And we found that most of them not only accumulate distress over gender norms (i.e. GD) but pervasive social norms as well, which we termed ***pervasive social dysphoria (PSD)***. In other words, their GD, the gender-related conflict caused by the imposition of gender norms, was a subset of PSD—the conflict related to the broader sense of self caused by the imposition of pervasive social norms. Thus, the co-occurring phenomenon with autism may be PSD from the inner perspectives, which should be investigated in future. Additionally, the PSD concept has implications for understanding the social experiences of autistic people today. Within the conventional medical paradigm, autistic people have been viewed as having a disability, which WHO (1980, p. 143) defines as 'any limitation or lack of ability to perform an activity in the manner or within the range considered normal for a human being', due to their impairment (i.e. ASD; APA, 2013). However, our studies indicate that autistic participants found it difficult to perform 'normally' because social norms and their manner of sharing are not inclusive of autistic people. Additionally, their desires, and circumstances of experiencing uncertainty and burden from social norms were not accepted by society, which led them to develop PSD. This finding suggests a divergence in the conceptualization of autism between the conventional medical paradigm and the inner perspectives (Shimoyama & Endo, 2024, p. 2595). At the symposium, the implications of PSD and the importance of including autistic people's perspectives in autism science will be discussed.

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[SY-73-05] *Understanding ADHD in Adults*

*Pietro De Rossi[1] (1. Bambino Gesù Children's Hospital (Italy))

Keywords：ADHD、Adults、Update

Attention-Deficit/Hyperactivity Disorder (ADHD) is increasingly recognized as a condition that often persists into adulthood, posing significant challenges in diagnosis and management. This presentation provides an updated overview of key findings in the neurobiology of adult ADHD, highlighting recent insights from neuroimaging, genetic, and neurochemical studies that shed light on the disorder's complex pathophysiology. Special emphasis is placed on the evolving understanding of gender differences in clinical presentation, symptom expression, and treatment response, with women often being underdiagnosed due to subtler symptom profiles. Diagnostic challenges are also addressed, particularly in distinguishing ADHD from overlapping psychopathological conditions such as mood and anxiety disorders, substance use, and personality disorders. Additionally, the frequent co-occurrence of ADHD with other neurodevelopmental disorders, including Autism Spectrum Disorders and learning disabilities, is explored. The presentation reviews current best practices for pharmacological and non-pharmacological interventions in adults, considering both efficacy and tolerability. Emerging treatment approaches and long-term management strategies are also discussed. By integrating findings across disciplines, this presentation aims to support clinicians in improving diagnostic accuracy and optimizing individualized care for adults with ADHD, ultimately enhancing functional outcomes and quality of life.