

**AUTISM SPECTRUM DISORDER IN AYURVEDA W.S.R. TO
UNMADA ROGA****¹Dr. Astitva Tyagi and ²Dr. M. N. Gupta**¹P.G. Scholar Kaumarabhritya, State Ayurvedic Collage and Hospital Lucknow, U.P. India.²Head of Deptt. Of Kaumarabhritya, State Ayurvedic Collage and Hospital Lucknow, U.P.
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Corresponding Author*Dr. Astitva Tyagi**

P.G. Scholar

Kaumarabhritya, State
Ayurvedic Collage and
Hospital Lucknow, U.P.
India.**INTRODUCTION**

Autism Spectrum Disorder (ASD) is a developmental disability caused by differences in the brain. People with ASD often have problems with social communication and interaction and restricted or repetitive behaviours or interests. People with ASD may also have different ways of learning, moving or paying attention. It is the world's third most common developmental disorder, so to spread awareness every year 2nd April is marked as Worlds Autism Day. According to National Institute of Mental Health, Autism is known as a "SPECTRUM" disorder because there is wide variation in the type and severity of symptoms people experience. According to WHO, 1 in 100 children has autism. In 2021- CDC reported that approximately 1 in 44 children

in the U.S. is diagnosed with an Autism Spectrum Disorder, acc to 2018 data – ASD is more common among boys (1 in 27) than among girls (1 in 116).^[1] Unfortunately, due to lack of knowledge, parents start treatment late and it gets tough for the child to overcome the complexities. Early interventions are very important to help a child to reach his or her potential and also can prevent disabilities in infants as well as toddlers. Autism Spectrum Disorder is not mentioned in any of the major Ayurveda Texts. However, its majority of clinical features like poor eye contact (दृष्टिधीरता), hyperactivity, flapping of hand (अंगविक्षेपण), solitary play (रहप्रीति) etc resembles features of Unmada, a disease of Manovahi Srotasa.

MATERIALS AND METHODS

Information regarding the conditions which is similar to Autism were referred from the classical Ayurveda texts, journals and various internet resources and were critically analyzed along with the clinical experiences in managing Autism.

History

Autism or autism spectrum disorder was first described by Dr. Leo Kanner in 1943 in classic paper entitled “Autistic disturbance of affectile contact” *Nervous child* 1943,2,217-250. Term Autism was used by psychiatrist Eugen Biculer in 1908 Autism means Morbid self admiration and withdrawal within self (*Journal of pharmaceutical and medical research*).^[2]

Definition

ASD is the name for a group of developmental disorders namely “Autistic behaviour, Asperger’s syndrome, Pervasive developmental disorder- Not otherwise specified (PDD-NOS) and childhood disintegrative disorder.”^[3] Clinically, children with ASD represents delayed speech and language, impairment of comprehension of language, fluent but unintelligible jargon, impairment of social interaction, poor eye contact, gaze avoidance, lack of reciprocal social smile, lack of imaginative play, hyperactivity, unusual interest in TV commercials, respective compulsive play activities. Flapping of hands, twirling, toe walking, excessive water plays are some of the odd behavioural manifestation. The majority of children with ASD in the retarded range, but 30% have an IQ of 70 or more. Some autistic children have “Islands of brilliance.”^[4]

Ayurvedic perspective

From Ayurvedic perspective, Autism falls into ‘Anukta Vikara’ category where in direct references are not found in the Ayurvedic Classics presenting all the aspects of this condition. To simplify the complexity of Anukta Vikara, the key is to understand it’s Diagnostic Triad viz. Dosha, Samuthan and Sansthana of vikara. Samuthan or Hetu is also the important aspect of any disease which is one of the feature of Panchnidan, it’s identification & prevention (nidan parivarjan) becomes first line of treatment.

Autism spectrum disorder (ASD) is a term for a group of developmental disorders described by:

- Lasting problems with social communication and social interaction in different settings
- Repetitive behaviors and/or not wanting any change in daily routines
- Symptoms that begin in early childhood, usually in the first 2 years of life

- Symptoms that cause the person to need help in his or her daily life. The term “spectrum” refers to the wide range of symptoms, strengths, and levels of impairment.

Clinical features of autism and their resemblance with Unmada^[5]

Table no 1: Clinical features of autism & their relation with features of unmada vyadhi described in Ayurveda.

Clinical features of autism	Features of unmada
Social interaction difficulties	
Spoken language (if present) may include unusual features , such as: vocalizations that are not speech-like; odd or flat intonation. frequent repetition of set words and phrases (echolalia); reference to self by name or “you” or “she” or “he” beyond age 3 yr. Reduced and/or infrequent use of language for communication—for example, use of single words, although able to speak in sentences.	अबद्धवाक्यत्वं
Not look at face or difficulty in making eye contact \ Reduced or absent social use of eye contact\Gaze switching	दृष्टि अधीरता चाक्षुषोरकुलता पर्याकुला
Prefer being alone\not interested in making friends	रहस्यकामता विविक्तप्रियता अल्पचक्रमण
Not reacting to sign of affection	तूष्णीभावा
Difficulty in understanding other persons feeling	शिरसः शून्यता हृदय शून्यता
Laughing\crying at wrong place or time	अस्थानहास्यमित
Communication difficulties	
Don't talk or communicate much, Reduced or absent responsive social smiling, Absent or delayed response to name being called, despite normal hearing.	मंदवाकचेष्टा तूष्णीभावा
Speak robotically	अबद्धवाक्यत्वं सततमनियतनाम च गिरामुत्सर्गः
Reduced or absent enjoyment of situations that most children like—for example, birthday parties, Reduced or absent sharing of enjoyment	मूढचेता न सुखम न दुःखम
Difficulties in understanding homophones or homonyms	स्मृति बुद्धि संज्ञा भ्रमतययं मूढता
Trouble with understanding gestures and facial expressions	सम्मोह मूढता

Restricted behavior	
stimming or Repetitive “stereotypical” movements such as hand flapping; body rocking while standing; spinning; finger flicking, Repetitive or stereotyped play—for example, opening and closing doors.	अक्षि भ्रु ोष्ठं स हनु हस्त पाद अंगविक्षेपणम
Have limited interest in surrounding or activity Reduced or absent awareness of personal space, or unusually intolerant of people entering their personal space	तूष्णीभाव विविक्तप्रियता भ्रम
Difficulties in coping with changes in routine	स्थानमेकदेशे
Sensitivity	
Greater sensitivity	भयभीत
Avoiding certain things because they don't like texture of it	अन्न न अभिलाषा
Eating things that aren't food	विरुद्ध दुष्ट अशुचि भोजनानि
Attraction to specific noises	
Good attention to details. Over focused or unusual interests	ध्यान
Reduced or absent imagination and variety of Reduce or absent imagination and variety of pretend play	मूढता, स्मृति, बुद्धि संज्ञा भ्रमतययं

Hetu and Samprapti (pathogenesis)

Knowledge of acquisition (ज्ञानोत्पत्ति) is disrupted in Unmada. Jnanotpathi occurs only when Manas is in tune with Atma (soul), Indriya (sense organ), and Indriyarth (objects). Doshas get vitiated in the person of low level of satva guna. It causes delusion of mind after these doshas polluted manovahi strot. ASD (childhood unmada) is a disorder of Intellect & Mental Impairment (बुद्धिमनो ष्टिकार) with variable etiology. Researches suggests that it develops from a combination of genetic & non genetic or environmental influences that may affect child during intra uterine lives and also even after birth (उन्मादहेतुर्भयहर्भपूर्वमनोभर्घात).

In the etiopathology of Unmada and ASD, the definition of genetic deficiencies (Beeja dushti), antenatal psychological stress, non-congenial dietetics (Virudha ahara) disrupting metabolism (gut-brain axis), defective parental psychological background (parental genetic makeup) and a defective child-rearing mechanism (refrigerated parentage, neglected childhood, monitoring addiction and all the factors which causes मनोभिघात in children) play a key role. avoid various defective dietary regimens (विरुद्ध दुष्ट अशुचि भोजनानि), avoiding wrong posture and too much physical exertion (विषम चेष्टा) otherwise, that may lead to

difficulty in childbirth and various psychological disorders. Excessive sleep, over-consumption of alcohol by a pregnant woman can result in low IQ, poor memory, or hyperactivity. In the fourth month of pregnancy, the fetal heart, which is the seat of consciousness, becomes active, thus expressing its desires through the mother, which is called Daurhruda. The wishes and wishes of Daurhrudini, if not honored and satisfied, can lead to autism.

Treatment in Ayurveda^[6]

There are three main therapeutic streams promoted by Ayurveda in the treatment of Autism Spectrum Disorders (Unamada). They're:

Daiva Vyapasraya (Confidence Building Treatment)-rites and rituals to fend off unknown evil powers (environmental forces like microorganisms) and also to secure the mind and the body.

Yukti Vyapasraya (rational medical management)-rational prescribing of medications, therapies, diet, and activities to maintain the body balance. Dosha pacifying therapy (Samsamana) and Bio cleaning Therapy (Samsodhana or Panchakarma) are the mainstay in yukti vyapashraya chikitsa.

1. Samsaman chikitsa

Medhya Rasayana or Brain Tonics are specifically grouped into 4 nootropic herbs, namely Mandukaparni (*Centella asiatica*), Yastimadhu (*Glycyrhiza glabra*), Guduchi (*Tinospora cordifolia*), and Shankhapushpi (*Convolvulus pleuricaulis*). When used together, they have a pacifying effect on all 3 Doshas (Vata, Pitta & Kapha). Brain tonics reduce anxiety and stress, increase immunity, and mental ability. They prove useful in addressing the physical and mental ailments in autistic patients. Suvarnaprashana is classically mentioned to improve coognitive functions (conscious intellectual activity, मेधाष्टिबलिधधन) also best known for disorders of idiopathic origin (ग्रहापहम) in children.

2. Samshodhana \ panchakarma

In vataj unmada snehapaan should be administered but if there is obstruction in channels because of avaran then mild unctuous evacuations in small quantity should be given. In pittaj unmada purgation should be given after unction and sudation, and in kaphaj unmada emesis should be given after unction and sudation. After completion of vaman and virechan post-

evacuation diet should be prescribed, thereafter nirhua, anuvasana and shiro-virechana should be administered according to doshas. By administration of these therapeutic measures, heart, sense organs, head and bowel (kostha) get cleansed, as a result of which mind get refreshed and the patient regains memory as well as consciousness.

Takradhara^[7] has also been indicated in unmada and found to be very effective. Siropichu (Head application of oil), Sirolepam (Head application of Medicated paste), Takrasirodhara (Pouring medicated butter milk over forehead) Patra potliswedam (Sudation with warm medicated sacks) are found beneficial in such cases. Author also found some herbomineral medicines like Unmada gajankush rasa, Krishra chaturmukh rasa and Rajat bhasma beneficial for restoration of cognitive function.

Satvavajaya Chikitsa (Mind or Self-Management Techniques)-cognitive, behavioral, and spiritual skills and training strategies for the development and maintenance of mental faculties.

CONCLUSION

In Ayurveda, pathogenesis of Autism can be understood as any imbalance in the form of bhramsa (aberration) of Dhi, Dhriti or Smriti, whether collectively or singularly due to indulgence in unwholesome action, termed as pragyaparadha which leads to sarvadosh prakopa and various types of derangements in buddhi as well as in physiological functioning. ASD is one of the most steadily rising complex neurodevelopmental disorder in past few decades, but a definite treatment protocol is still lacking, also exact pathophysiology of the disease is not clearly known. Such disorders of unknown etiology or owing multiple origin is described in ayurveda as “Anukta Vyadhi” and can be managed on the basis of Doshas Dominancy, nidan, vyadhi adhisthan etc. Although clinical presentation of ASD is clearly comparable to Unmada, it has not been particularly described in context of children. In present scenario, several behavioural disorders in children are emerging due to changing in environment and lifestyle pattern of parents, Autism Spectrum Disorder or we may say “Childhood Unmada” is one of them. The condition requires a long-term care and multi-dimensional approach. Ayurveda can open up a new window in the management of autism and similar condition.

REFERENCES

1. cdc.gov/ncbddd/autism

2. Harris J. Leo Kanner and autism: a 75-year perspective. *Int Rev Psychiatry*, Feb, 2018; 30(1): 3-17. doi: 10.1080/09540261.2018.1455646. Epub 2018 Apr 18. PMID: 29667863.
3. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 4th ed. Arlington, VA: American Psychiatric Publishing, Inc., 2000; 69–84.
4. Suraj Gupte - *The Short Textbook of Pediatrics*, 11th Edition
5. Kashinatha Satri and Dr. Gorakha- natha Chaturvedi ed. *Charaka Samhita 2, chikitsa sthan unmada chikitsa adhyaya* Chaukhamba Sanskrit Sansthan, Varanasi. Kashinatha Satri and Dr. Gorakha-natha Chaturvedi ed. *Charaka Samhita 1, nidan sthan* Chaukhamba Sanskrit Sansthan, Varanasi, reprint, 2006; 761: 26-262.
6. Kashinatha Satri and Dr. Gorakha- natha Chaturvedi ed. *Charaka Samhita 2, chikitsa sthan* Chaukhamba Sanskrit Sansthan, Varanasi, reprint, 2006; 761: 26-262.
7. Dr. D.V. Panditrav et al., translator, *shaharsyogam hindi-sanskrit anuvad*, CCRAS, 1990, New Delhi, Chapter- dharakalp 13/15, 521.