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AYURVEDIC MANAGEMENT OF BORDERLINE INTELLECTUAL DISABILITY" - A CASE REPORT

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ABSTRACT The word intelligence is derived from the Latin word 'Intelligere'. Intelligere means to understand or recognize. The term intelligence is defined by psychologist David Weschler as, "The global capacity of an individual to act purposefully, think rationally and deal effectively with his environment". Intelligence is a broad term that refers to an individual's ability to acquire knowledge, apply knowledge and perform complex cognitive tasks. An intelligence quotient (IQ) is a score derived from a set of standardized tests developed to measure a person's cognitive abilities in relation to their age group. The characteristic feature of borderline IQ is that they exhibit less positive and less sensitive behavior as compared to other children. Children with borderline intellectual functioning fall within an IQ band of 70-79 range. This condition often remains undiagnosed until the school age. Such children show the symptoms like poor academic performance, lack of attention to task and behavioral problem which may be due to the frustration and emotional immaturity. The parallel term that we can find in ayurveda classic for intelligence is "Buddhi". In Ayurveda, several plants are mentioned as 'Medhya Rasayana' which has the potential to improve the mental power and intelligence. A twelve-year-old boy was presented with the history of reduced memory, inability to recollect and not able to give attention in studies since childhood. For these complaints they have underwent IQ assessment with Malin's Intelligence Scale for Indian Children and reported with IQ of 72. Based on the history and examinations this condition was diagnosed as Buddhimandya/ Borderline Intellectual disability. After a thorough clinical examination and evaluation, a single course of treatment which comprises of Sarvanga Abhyanga, Shirodhara, Thalapodichil (Shirolepam) and Matrabasti was given. On discharge, medicines like Mandookaparni Vati, Kalyanakaavleha Choorna, Brahmi Ghrita, internally and Ksheerabala Tailam for head application were given for a period of 1 month and again proper evaluation was done. It was advised to continue the same medicine for a period of 6 months. The treatment procedures and the oral medications improved the overall language and social developments in this patient. The child was having IQ assessment score of 72 before treatment which was improved to 81, with said treatments and internal medications.

KEYWORDS : Intelligence, Buddhi, Medhya Rasayana, Intelligence Quotient, Buddhimandya, Borderline Intellectual disability

INTRODUCTION

The word intelligence is derived from the Latin word 'Intelligere'. Intelligere means to understand or recognize. The term intelligence is defined by psychologist David Weschler as, "The global capacity of an individual to act purposefully, think rationally and deal effectively with his environment"1. Intelligence is a broad term that refers to an individual's ability to acquire knowledge, apply knowledge and perform complex cognitive tasks.

An intelligence quotient (IQ) is a score derived from a set of standardized tests developed to measure a person's cognitive abilities (intelligence) in relation to their age group. It is many of time dependent on prenatal environment (like maternal nutrition and health status), natal events (like term of delivery, birth weight etc.) or post-natal environment and daily habits. The characteristic feature of borderline IQ is that they exhibit less positive and less sensitive behavior as compared to other children. Children with borderline intellectual functioning fall within an IQ band of 70-79 range.

Borderline intellectual functioning indicates a lower intelligence than the average but not having any intellectual developmental disorder or mental retardation. Difficulties with learning, reasoning, planning, abstract thinking, and judgment are the symptoms presented by the people with borderline intelligence. This condition often remains undiagnosed until the school age. Such children show the symptoms like poor academic performance, lack of attention to task and behavioral problem which may be due to the frustration and emotional immaturity.

According to the Census 2001, there are almost 21 million people with disabilities in India who constitute 2.13% of the total population2. The National Sample Survey Organization (NSSO) estimated that the number of persons with disabilities in India is 1.8% of the Indian population3. Both the surveys included persons with visual, hearing, speech, locomotor, and mental disabilities, but the distribution in each category according to the two surveys differs drastically. However, experts working in the field of developmental disabilities feel that the prevalence of mental disabilities is much higher.

The parallel term that we can find in ayurveda classic for intelligence is "Buddhi". The word Buddhi has originated from the Sanskrit word "Budh Grahane"4. It can be defined as a phenomenon by which knowledge is gained. Buddhi (Mahat) is said to be originated from 'Avyakta'5. Even though borderline IQ is not mentioned as a disease in separate chapters of the Ayurvedic classics, many references of conditions like Jada, Murkha, Alpabuddhitva, and Mandabuddhitva indicate impaired Buddhi. Ayurveda classics explains, Buddhi manifests in the 6th month of intra uterine life and is regarded as Atmaja Bhava6. Saankhya Shaastra has narrated four functions of Buddhi as Aalochana (Perception), Manana (Contemplation), Abhimaana (Pride), Avadhaarana (Determination).

In Ayurveda, several plants are mentioned as 'Medhya Rasayana' which has the potential to improve the mental power and intelligence. They are proven to have specific influence on higher brain functions, specifically to improve memory and intellect by their Prabhava. The first chapter of Chikitsa Sthana in Charaka Samhitha mentioned about Medhya Rasayana drugs. Among them priority is given to the drugs like Mandookaparni, Yashtimadhu, Guduchi & Shankhapushpi.[7]

CASE REPORT

HISTORY OF PRESENTING COMPLAINTS

A twelve-year-old boy was presented with the history of reduced memory, inability to recollect and not able to give attention in studies since childhood.

PAST HISTORY OF THE PATIENT

He was the first child of non-consanguineous marriage. He was a term baby delivered through normal vaginal delivery. Birth cry was present and his birth weight was 3000grams. He passed meconium with in 24hours and active breast feeding was started properly within an hour after delivery. There was a history of physiological jaundice for 3days. All the developments like gross motor and fine motor were said to be normal except language and social development. He was on breast milk exclusively for 6months. Weaning was stared at the age of 5months. He was on family food by the age of 1year. Mother had noticed the child is having reduced memory, inability to recollect, lack of attention span, and difficulty in articulation leading to poor school records. For these complaints they have underwent IQ assessment and reported with IQ of 72.

EXAMINATION

On examination the child was moderately built and nourished. Anthropometric measurements included the hight was 148cm and the weight was 37kg. The child was afebrile. The pulse rate was 78/min and the respiratory rate was 19/min. there was no pallor, no clubbing, no cyanosis, no lymphadenopathy and no oedema. All the systemic examinations were normal except memory. Malin's intelligence scale for Indian children, IQ assessment given score as 72.

INVESTIGATIONS

HEMOGLOBULIN	: 11.6g/dl
Thyroid Stimulating Hormone (TSH)	: 1.82 IU/dl
MRI Brain	: Normal
IQ Assessments	: Score 72

TREATMENT GIVEN: Based on the history and examinations this condition was diagnosed as Buddhimandya/ Borderline Intellectual disability. After a thorough clinical examination and evaluation, a single course of treatment which comprises of Sarvanga Abhyanga, Shirodhara, Thalapodichil (Shirolepam) and Matrabasti was given.

TREATMENT GIVEN:

SI No	Procedure	Medicine	Days
1	Sarvanga Abhyanga	Dhanwantharam Taila	First 5 days
2	Shirodhara	Ksheerabala Taila	Next 7 days
3	Thalapodichil (Shirolepam)	Amalaka and Kachooradi Churnam	Next 5 days
4	Matrabasti	Brahmi Ghritham	Next 7 days

Advise at the time of discharge:

SI No	Days	Medicine	Dose	Time
1	30	Mandookaparni Vati	1BD	After food
2	30	Kalyanakam Churnam	3gms BD	With honey after food
3	30	Brahmi Ghrita	5ml night	Before food
4	30	Ksheerabala Tailam	Head application	Before bath

Discharge medicines were given for a period of 1 month and again proper evaluation was done. It was advised to continue the same medicine for a period of 6 months.

OUTCOME OF THE TREATMENTS: As per the mother's statement, appetite has improved considerably well and in general health status of the child has improved. He is able to recollect and reproduce the studied portions. There was marked improvement in the skills of communication and replying to the questions. Improvement in social development and academic performance was also noted.

Scale	Grading BT	Grading AT
Malin's Intelligence Scale for Indian Children	72	81

DISCUSSION

In this case study the patient presented with the history of reduced memory, inability to recollect and not able to give attention in studies since childhood. Based on the history and examinations this condition was diagnosed as Buddhimandya/ Borderline Intellectual disability. There is no direct reference of Intellectual disability in Ayurvedic classics, so looking into the presentations the condition was understood as Buddhimandya and the drugs which are having Medya properties were adopted for the management. The patient was given Sarvanga Abhyanga for 5days and it was followed with Shirodhara for 7 days. Thalapodichil (Shirolepam) was done using combination of Amalaka Churna and Kachooradi Churna for 5days. Matrabasti with Brahmi Ghrita was given for next 7 days. On discharge, medicines like Mandookaparni Vati, Kalyanakaavleha Choorna, Brahmi Ghrita, internally and Ksheerabala Tailam for head application were given for a period of 1 month and again proper evaluation was done. It was advised to continue the same medicine for a period of 6 months. The treatment procedures and the oral medications improved the overall language and social developments in this patient. He is able to recollect and reproduce the studied portions. There was marked improvement in the skills of communication and replying to the questions. Improvement in social development and academic performance was also noted. Malin's Intelligence Scale for Indian Children was used to screen the IQ. The child was having IQ assessment score of 72 before treatment which was improved to 81, with said treatments and internal medications.

CONCLUSION

In this case, by the end of six months of treatment there were marked improvement in the IQ, language and social development of the child. The drugs mentioned under Medhyarasayanas specific to brain tissue are proved to promote the cognitive functions of the brain. Panchakarma compounded with Medhyarasayanas drugs are very effective in treating children's with Buddhimandya/ Borderline Intellectual disability.

REFERENCES

1. D. Wechsler. The measurement and appraisal of adult intelligence. Williams & Wilkinds, Baltimore, 4th edition, 1958
2. New Delhi: Registrar General Office; 2003. Census of India. Disabled population by type of Disability, age, sex and type.
3. New Delhi: National Sample Survey Organization and Ministry of Statistics and Programme Implementation Government of India; 2003. National Sample Survey Organization. Disabled persons in India: NSS 58th round (July-December 2002)
4. Haricharanavasu, Vrindadasa, Shabdakalpadruma, Vol-3, 3rd edition, Varanasi, Chawkamba Samskrit series office, 1967, Pp-434.
5. Acharya J. T. (ed). Agnivesha: Caraka Samhita with Ayurveda Deepika commentary of Chakrapanidutta 2009 reprint edition, Varanasi: Choukamba Surabharati Prakashan; 2009. Shareera Sthana. Chapter -1/66 P 296
6. Acharya J. T. (ed). Agnivesha: Caraka Samhita with Ayurveda Deepika commentary of Chakrapanidutta.2009 reprint ed. Varanasi: Choukamba Surabharati Prakashan; 2009, Siddhi Sthana, p 314 Chapter 3/16.
7. Charaka, Charaka Samhita of Agnivesha, elaborated By Caraka and Dridhabala with the Ayurveda Dipika commentary, by Sri Cakrapanidatta, edited by Vaidya Yadavji Trikamji Acharya, Published by Chaukambha Surabharati Prakashan, Varanasi, Reprint- 2013, Chikitsasthana 1st Chapter, 3rd pada, sloka no 30-31, p.no-385, Pp- 738.