WORLD JOURNAL OF PHARMACEUTICAL RESEARCH
SJIF Impact Factor 8.074
Volume 7, Issue 17, 1295-1303. Research Article ISSN 2277– 7105

TO STUDY THE EFFECT OF ASHTMANGAL GHRUTAM IN THE MANAGEMENT OF MANDABUDDHITWA W.S.R TO MODERATELY MENTAL RETARDED CHILDREN

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Article Received on
13 August 2018,
Revised on 02 Sept. 2018,
Accepted on 23 Sept. 2018,
DOI: 10.20959/wjpr201817-13483

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INTRODUCTION

Ayurved, the complete health care system, is the outcome of the great power of observation, generalization and analysis of hundreds of investigators over thousands of years. Ayurved is based on Vedas. But its main aim is

स्वस्थस्यस्वास्थ्यरक्षणमातुरस्यविकारप्रशमनम्च।- च.सु.३०/२६

Kaumarabhritya, the Indian Pediatrics is one among the eight branches of Ayurved that deals with all the aspects of child health care. The branch of medicine emphasizes the importance of child care that has to be started even before the conception. It covers all aspects from genetics to dietetics in children. The traditional way of baby and child care was the backbone of the healthy generation of the past.

Mental retardation is a disorder consisting of below average intellectual functioning and impairment in adaptive skill, which is present upto 18 years of age. This is the period when the brain along with the entire nervous system is in a state of development in order to reach maturity. The growth and development indicates the physical and mental factors. The mental factors have utmost importance in child's personality development.

Mental retardation is a multi dimensional problem including psychological, medical, educational and social aspects with the social aspect being the most important. It is a social problem of great magnitude. Childhood disabilities form a substantial part of pediatric problems especially in India.

Mental retardation is a distressive clinical condition characterized by non-progressive impaired cognitive function. In India the prevalence of mental retardation is 6.9%. And it was found higher in Females comparatively. Hence I selected this topic for study.

AIMS AND OBJECTIVES

Aim- To study the effect of Ashtmangal Ghrutam in the management of Mandabuddhitwa w.s.r to moderately mental retarded children.

Objectives

1. To Study the details of Mental retardation according to Ayurved and Modern science.
2. To evaluate the effect of Ashtmangal Ghrutam on moderately mental retarded children.
3. To evaluate the effect of Goghriatm on moderately mental retarded children.

MATERIALS AND METHODS

Research Place: - Research done in our Ayurved Mahavidyalaya and in the school for mentally retarded children.

Study Design

Open randomized controlled trial design will be studied.

Trial Drug

Ashtmangal Ghrutam mentioned in Yogaratnakar in the context of Balrog chikitsa pg-448 is used as the study drug for internal administration.

Control Drug:- GoGhrutam.[Ch. Su. 25 & 27]

Method of Preparation of Drugs

Ashtmangal Ghrutam

Ashtmangal Ghrutam is prepared as per standard procedure mentioned for preparation of Snehapaka according to Sharangdhar Samhita.

Raw material purchased from local market.

Drug Standardization:- Standardization of the drug was done in the Laboratory of Dr. D. Y. Patil Ayurved College, Pune.

Inclusion Criteria: Randomly selected 70 diagnosed patients of moderately Mentally retarded Children were participated in research work, consent of parents was taken and they were registered into group A and Group B.

Group A – Ashtmangal Ghrutam given to 34 children.
Group B – GoGhrutam given to 36 children.

1) 2 to 5 gm dose of Ghrutam was given orally in early morning for two months.
2) Case Record Form prepared and Clinical history, examination and follow up documented on it.

Exclusion Criteria

1. Children below 5 years and above 15 years were not taken into study.
2. Children with major systemic disease like HIV, MR with epilepsy, MR with cerebral palsy were excluded.

Subjective criteria

The diagnostic criteria for MR is used for the subjective scoring of the symptoms of the disease.

Objective criteria

Effect of therapy is assessed on the basis of manasa bhava score and WISC score taken before and after the treatment. Eight of the manasa pariksa bhavas [Ch.Vi.8] and scoring pattern according to Wechsler Intelligence Scale for children were followed and considered for the assessment. The data obtained is used for statistical analysis.

Assessment by WISC

Wechsler Intelligence Scale for Children covering the age range of 5 to 15 years.

The WISC comprises of twelve tests, six verbal and six performances.
Verbal Performance

1. General Information 7. Picture completion.
2. General comprehension 8. Picture arrangement.

3. Arithmetic 9. Block design.
4. Similarities. 10. Object assembly.
5. Vocabulary 11. Coding.
6. Digit span. 12. Mazes.

The tests were selected so as to represent various mental functions.

Management of Patients

	Group A Study group	**Group B Control group**
Age group	5 – 15	5 – 15
Drug name	Ashtamangal ghrita	GoGhrutam
Time of administration	Rasayan kala	Rasayan kala
Route of administration	Oral	Oral
Duration	2 months	2 months
Follow up	15 days	15 days
Number of patient	34	36

Overall Assessment of the Results

The total effect of the therapy is assessed considering the overall improvement in signs and symptoms and clinical tests after the treatment. The total effect is assessed according to following classification.

Completely Cured	**Improvement above 80%.**
Markedly Improved	Patients showing 60% to 79% improvement was taken as markedly improved.
Moderately Improved	Improvement between 40% and 59% in the patients was taken as moderate improvement
Improved	Improvement in the range of 20% to 39% was taken as improved
Unchanged	Relief less than 20% was taken – unchanged

OBSERVATIONS

1. Distribution of total patients distributed in 2 groups.

Groups	**Patients registered**	**Patients completed the treatment**
Goghruta	36	30
Ashtamangal Ghrut	34	30

In the present study a total of 70 patients of Mental Retardation were registered. 36 patients in group ‘Goghruta’ and 34 patients in group ‘Ashtamangal G’ were registered. Out of these 30 patients in group ‘Goghruta’ and 30 patients in group ‘Ashtamangal G’ completed the treatment. Thus 60 patients in all completed the treatment.

Observations and effect of therapy observed on **60** patients who completed the therapy are being presented here.

2. Effect of Therapies on Manasa Bhavas on Ashtamangal Ghruta Group.

Manasa Bhavas	Mean		%	S.D	S.E	T	P
	B.T	A.T		+/-	+/-		
Medha	2.3	0.5	78.0	0.31	0.10	19	<0.001
Smrti	2.0	0.3	85.0	0.41	0.15	11.13	<0.001
Dhrti	2.4	0.6	75.0	0.42	0.13	13.50	<0.001
Vijnana	1.9	0.30	84.2	0.52	0.16	9.79	<0.001
Krodha	2.30	0.60	73.90	0.48	0.15	11.12	<0.001
Moha	2.10	0.60	71.42	0.52	0.16	9.0	<0.001
Bhaya	2.4	0.5	76	0.56	0.17	10.58	<0.001

3. Effect of Therapies On Manasa Bhavas on Go-Ghruta Group.

Manasa Bhavas	Mean		%	S.D	S.E	T	P
	B.T	A.T		+/-	+/-		
Medha	1.125	0.5	55.55	0.51	0.18	3.41	<0.05
Smrti	1.0	0.25	75.0	0.46	0.16	4.58	<0.01
Dhrti	1.5	0.38	74.66	0.64	0.22	4.96	<0.01
Vijnana	1.25	0.13	89.60	0.64	0.22	4.96	<0.01
Krodha	1.12	0.50	55.35	0.53	0.18	2.64	<0.05
Moha	0.88	0.12	86.30	0.70	0.25	3.0	<0.05
Bhaya	2.0	0.5	75	0.52	0.18	8.88	<0.001

4. Table Analysis of WISC scale.

Groups	Mean		%	S.D	S.E	T	P
	B.T	A.T		+/-	+/-		
Group Ashtamangal Ghruta	53.0	60.6	14.33	3.89	1.23	6.17	<0.001
Group Go-Ghruta	54.10	63.30	17.0	2.85	0.90	10.17	<0.001

The maximum increase in mean Wisc scale (14.33%) was found in group Ashtamangal ghrut which is statistically highly significant (P<0.001). In Group Goghruta the increase was by 17.0% and statistically the result was significant (P<0.01).

5. Overall effect of Therapies on 60 patients.

Effect	Group Ashtamangal Ghruta		Group GoGhruta		Total	
	No. of Patients	%	No. of Patients	%	No. of Patients	%
Cured	0	0	0	0	0	0
Markedly Improved	0	0	0	0	0	0
Moderately Improved	27	90	0	0	27	**34.6**
Improved	03	10	15	50	18	**26.9**
Unchanged	0	0	15	50	15	**38.4**
Total	**30**	-	**30**	-	**60**	-

DISCUSSION

In group Group Ashtamangal ghruta 90% patients (9) were reported moderately improved and 10% (1 patient) were reported improved. There were no patients reported as totally cured, markedly cured or unchanged.

In Group Goghruta 50% (4patients) were reported to be improved while 50% as unchanged. There were no cases reported to be cured, markedly or moderately improved.

[Ka.Sa.] i.e. children who were not able of walk even after one year of age and were found to be mentally retarded were recorded as mentally retarded as a complication of Phakka roga. Their percentage was 29.21.

Role of alcohol intake, excessive sleep, dauhrda avimanana - in a pregnant lady as a cause of mental retardation is almost negligible as per this survey. Thus this data shows that the factors described by our Acharyas involved in causing mental retardation still exists. Although none of them is found as an absolute cause of jadata, but their role can not be completely ruled out. The United Nations declaration of the 'Rights of the Child (1959)', to which India is a signatory, gives the child pride of place, as also makes the people aware of his needs and rights and duties towards him. One of the ten basic rights of children as per U.N.O. of 1959 is that - "The physically, mentally or socially handicapped child shall be entitled for special treatment, education and appropriate care." Also according to India's National Health Policy (1983), there should be special treatment, education, rehabilitation and care of physically handicapped; emotionally disturbed or mentally retarded children. But as is clear from the clinical survey around 5% children were found to be mentally retarded. These children did not show the progress expected at their age, and had decreased social

company and behavioural maturity. In order to lead a normal healthy life they require quick and immense attention and adequate intervention.

Thus crux of all endeavors should aim at -

1. Critical evaluation of mental retardation.
2. Immediate intervention.
3. Prevention of mental retardation.

In the present dissertation work a total of 60 patients, amongst 70 patients registered completed the treatment, 30 in group Ashtamangal ghruta, 30 in Group Goghruta completed the therapy. The treatment was given for two months. The general information about the patients like their age, sex, socioeconomic status, chief and associated complaints dasavidha pariksa etc. and their I.Q. and manasa bhavas examined before and after the treatment were observed and recorded separately in tabular form. An attempt has been made to discuss each of these observations separately with special reference to their relation with manda buddhitva (mental retardation).

CONCLUSIONS

Conceptual

- References of the disease manda buddhitva are available in the Brhattrayi and Kasyapa Samhita in form of terms like jada and abuddha. Acharya Sarngadhara was the first to classify mandabuddhitva as one of the kaphaja nanatmaja vikaras.
- Amongst the causes of mandabuddhitva, the purva janma siddhantawhere the ill deeds of previous birth are responsible in causing dukha in form of disease etc. may be considered as etiology in many cases. The modern science says that “quite a proportion of children suffering from mental retardation may not fit into any of the known factors responsible to cause mental retardation” (Short textbook of Pediatrics). Other nidanas mentioned in classics include dauhrda avimanana, asatmya viruddha ahara sevana, akala prvahana etc.
- Birth asphyxia at the time of birth was visualized as an important causeof mental retardation, which was clear from the history of, delayed cry, cyanosis, forceps delivery etc. given by the parents of the patients.
- Person of kapha vata sharirika prakrti and tamasa pradhana manasika prakrti is more vulnerable to mental retardation.

- The garbhaja, janmottara and agantuja nidana through mechanism of causing manovaha strotas sanga by the vitiated dosas causes mandabuddhitva.
- Management of mandabuddhitva according to our classics has two approaches, namely – (i) Preventive and (ii) Specific treatment. The former includes various garbhopaghatakara bhavas, mithyaharavihara and akala pravahana. While the later includes various recipe like medhya rasayana etc. abhyasa and Yoga.
- The modern science has a multidisciplinary approach with spotlight onspecialized educational and therapeutic services.

Clinical

- In majority of the mentally retarded children avara satva, sara, samhanana, satmya are seen.
- The mental retardation is also associated with bodily defects proving Charakas words i.e.- "sariram hyapi sattvamanuvudhiyate satvam ca sariram"
- Mental retardation is observed in children from all religion, socioeconomic status and habitat.
- Impaired memory, delayed milestones and abnormal social behavior were observed in majority of the patients.
- Tamasa pradhana manasika prakrti and kaphavataja saririka prakrtimay be more vulnerable to mental illness like mental retardation.
- Ashtmangal Ghrutam was found most effective on all the eight manasa bhavas considered in this study(medha, smrti, dhrti, vijnana, soka, bhaya, krodha and moha) and has a highly significant effect over the I.Q. of the patients. Both verbal and performance I.Q. areimproved indicating its role on memory perception, judgement, orientation and technical skills.
- Goghrut is highly efficient in decreasing the bhaya while on other seven manasabhavas the results were significant but not as good as in group ashtamangal ghruta. this is also highly significant on increasing I.Q. but has major effect over the verbal I.Q. which signifiesthe beneficial effect of this combination on memory and perception.

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