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A CLINICAL STUDY OF 'MIG-17' NASAL DROPS IN THE MANAGEMENT OF ARDHAVABHEDAKAW.S.R. TO MIGRAINE

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ABSTRACT

Introduction: Migraine is one of the common causes of recurrent headache. According to IHS, Migraine constitutes 16% of the primary headache and affects 10-20% of the general population. The diagnosis is mainly based on clinical history. Moreover, unilateral headache with paroxysmal nature is the only symptom mentioned for the disease *Ardhavabhedaka* by ancient scientists. *Ardhavabhedaka* has been explained as *Tridoshaja* by *Acharya Sushruta*, *Vata- Kaphaja* by *Charaka* and *Vataja* by *Vagbhatta*. But the different quality of pain such as *Toda*, *Bheda*, etc. describes the *Vishama* nature of *Vata dosha*. **Aim and Objects:** To Evaluate 'Mig-17' Nasal Drops in the management of *Ardhavabhedaka* w.s.r. to Migraine. **Material and Methods:** Total 65 patients with Classical as well as modern signs and symptoms of *Ardhavabhedaka* w.s.r. to Migraine were selected randomly for the study from Ayulink Ayurveda Hospital, Ahmedabad. All patients are treated with 'Mig-17' Nasal drops. Assessment was done based on objective and subjective criterions.

Keywords: Migraine, Nasya, Mig 17, Shirahshoola, Nasal Drop

INTRODUCTION

According to IHS, Migraine is the most common neurovascular headache, which constitutes 16% of the primary headache and affects 10-20% of the general population. Hence WHO ranks Migraine among the World's most disabling medical illness¹. Ardhavabhedaka can be scientifically correlated with Migraine due to its cardinal feature 'half sided headache' which is also explained by commentator Chakrapani as Ardha Mastaka Vedana² also due to its paroxysmal nature. Ardhavabhedaka has been explained Tridoshaja by Acharya Sushruta³, Vata-Kaphaja by Charaka⁴ and Vataja by Vagbhatta⁵. The various types of pain explained by different Acharyas

suggest the *Vishama* nature of *Vata Dosha*. Moreover, the symptoms nausea, vomiting and giddiness are also seen, which shows the involvement of *Pitta Dosha*, which can be explained as under:

- Vomiting & burning sensation symptoms are seen when *Prana Vayu* combines with *Pitta*⁶.
- *Udana Vayu* with *Pitta* results in *murchha*, *daha*, *bhrama* and *klama*⁷.
- The symptom *Bhrama* is due to *Rajoguna* and *Pitta-Vata dosha* involvement⁸.

The modern drugs are not widely acceptable due to their drawbacks - drug dependence, drug withdrawal syndrome, relapse of headache within hours and chances of getting chronic headache⁹. In *Ayurveda*,

Nasya Therapy or Nasal administration of medicine is considered as master key for all *Urdhavajatrugata Vikaras*.

AIM AND OBJECTIVE:

To Evaluate 'Mig-17' Nasal Drops in the management of *Ardhavabhedaka* w.s.r. to Migraine

MATERIALS AND METHODS:

- **1.** Conceptual study:- All textual quotation & available commentaries along with their modern parallels were referred for this part.
- **2.** Clinical Study:- Detailed history & physical examination of the each Patient was done and were recorded in the Performa.

Methodology:

Purva karma (Pre operative process) -

- To Prepare treatment trolley and table
- To Check emergency box and refill if required
- Signing the Consent form by the patient
- Patient was asked to lie down on the bed in the supine position
- Blood pressure and Pulse were measured and noted in treatment record form
- Nasal bottle was shake well before use
- Purvakarma like Mukhabhyanga or Sthanik Swedana is not needed.

Pradhana karma (Main procedure)

- Without tilting the patient's head much, Put 1 or 2 drops of the medicine in each nostril
- Gently massage on the nose
- Patient was kept lying for 5 minutes

Paschata karma (Postoperative process)

- Patient was observed for 30 minutes
- Check & note patient's pulse and B.P.
- All data of pre and post treatment, viz B.P.

and Pulse, number of nasal drop (one or two) were noted in treatment record form

CRITERIA FOR SELECTION OF THE PATIENT:

- A special Performa for the present study was prepared in which detail history and physical examination on the basis of principles of Ayurveda & modern science.
- Patients were selected from the O.P.D. of AYULINK AYURVEDA HOSPITAL, AHMEDABAD.

Inclusion Criteria:

- Patients presented with the classical as well as Modern signs and symptoms of Ardhavabhedaka (Migraine).
- Patients of either sex aged between 8 − 70 years were included.
- Patients who are fit for Nasya Karma according to Ayurveda text books.

Exclusion Criteria:

- Patient who are not fit for Nasya Karma according to Ayurveda text books
- Fever
- Secondary Headache
- Pregnancy
- High blood pressure
- Low blood pressure
- During menses
- Child below 8 years
- Any Critical Condition of patient

PLAN OF STUDY:

The research study was designed of Single therapeutic group. Total 65 patients were registered. The selected patients who fulfilled the inclusive criteria were treated with 'Mig-17' Nasal Drops.

Table 1.1: Plan of Study

Group	No. Of Patient	Drug	Dose	Duration	Follow-Up
A	65	'Mig-17' Nasal	1 drop in	2 times in a week, Maxi-	Every 3
		Drop	each nostril	mum 8 times (4 week)	Months for 1 year.

Duration: The Gap between two treatments should be 3 days. (E.g. Monday – Thursday, Tuesday – Friday or Wednesday – Saturday). This nasal drop process should be performed any time

between 9 am to 6 pm.

Drug ('Mig-17' Nasal Drops) Formulation:

Each 10 ml drops contains-

Table 1.2: Contents of the Drug

Contents	Latin Name	Quantity	
Amalaki Churna	Emblica officinalis	5 gm	
Sunthi Churna	Zingiber officinalis	3 gm	
Aritha Churna	Sapindus mukorossi	1 gm	
Yastimadhu Churna	Glycyrrhiza glabra	1 gm	
Water		Q.S.	
Preservative- Sodium Benzoate		Q.S.	

CRITERIA FOR ASSESMENT:

- 1. Clinical improvement in sign & symptoms of disease.
- 2. On the basis of standard scale like pain score and

improvement in quality of life.

3. Assessment of the therapy has been done by preparing clinical Performa.

Table 1.3: Criteria For Assessment Of The Clinical Symptoms Depending On The Severity

Symptoms	Grade 0	Grade 1	Grade 2	Grade 3	Grade 4	
Severity	No head-	Mild headache, pa-	Moderate, but	Severe headache	Excruciating headache	
	ache	tient is aware only if	does not	can't ignore	can't	
of Headache		he/she pays attention	disturb	buthe/she can do	do anything	
		to it	the routine work	usual activities		
Duration of	Nil	1-3 hrs./day	3-6 hrs./day	6-12 hrs./day	>12 hrs./day	
Headache						
Frequency of	Nil	>30 days	15-30 days	2-15 days	Everyday	
Headache						
Aura	Nil	Lasts for 5	Lasts for 15	Lasts for 30	Lasts for 60	
		minutes	minutes	minutes	minutes	
Nausea	Nil	Occasionally	Moderate nausea	Severe nausea, dis-	Severe enough, small	
			but does not	turbing routine work	amount of fluid regurgi-	
			disturb the		tating	
			routine work		from mouth	
Vomiting	Nil	Only if	Vomiting 1-2	Vomiting 2-3 times	Forced to take medicine	
		headache dose not	times		to stop vomiting	
		subside				
Photophobia	Nil	Very mild	Photophobia on	Photophobia on ex-	Severe Photophobia in	

				exposure	to sun	posure to	in-	which patie	nt unable to
				light/brig	ght light	door light.		open	the eye.
Vertigo	Nil	Feeling	of gid-	Patient	feels	Revolving	signs +	Unconsciou	.S
		diness		as if ever	rything is	black outs			
				revolving	g				

Table 1.4: Overall Assessment of Therapy

100% Relief	Complete remission
75 - 99% Relief	Marked improvement
50 - 74 % Relief	Moderate improvement
25 - 49 % Relief	Mild improvement
0 - 24 % Relief	Unimproved

OBSERVATION AND RESULT:

All the patients of migraine of this series were examined in detail with respect to the special Performa. Before starting the treatment, symptoms present in all patients were graded and their values were noted as before treatment (BT). After completion of treatment, they were noted as after treatment (AT).

Table 1.5: Showing Effect of Therapy in Subjective Parameters (n=59)

Symptoms	Mean		Mean Difference	% Relief
	BT	AT		
Severity of Headache	3.24	0.34	2.9	89.51%
Total Duration of Headache	3.19	0.41	2.78	87.14%
Frequency of Headache	3.27	0.46	2.81	85.93%
Aura	3.19	0.47	2.72	85.27%
Nausea	3.24	0.49	2.75	84.88%
Vomiting	3.13	0.47	2.66	84.98%
Photophobia	3.22	0.32	2.9	90.06%
Vertigo	3.15	0.19	2.96	93.96%

Table 1.6: Over All Effect of The Treatment

Effect of therapy	Out of 65 Patients	%	
Complete remission (100%)	32	49.23%	
Marked improvement (75-99%)	21	32.31%	
Moderate improvement (50-74%)	3	4.62%	
Mild improvement (25-49%)	2	3.08%	
Unimproved (0-24%)	1	1.54%	
Skipped	6	9.23%	

Probable Mode of Action of Mig 17 Nasal Drops: As per Modern science¹⁰:

It is aqueous base medicine. When it is administered into Nasal mucosa, it is absorbed through nasal membrane and enters into the venous sys-

tem. Through int. and ext. carotid artery, it reaches to the carvenous sinus and brain (cerebral part) where it stimulates autonomic and sensory nerves. Another probable mode of Action: The maxillary nerve, nasopalatine nerve, branches of greater pal-

atine nerves and olfactory nerves which are located in nasal cavity, are connected with the higher centers of the brain i.e., limbic system which contains amygdaloidal complex, hypothalamus, basal ganglia etc. so the drugs administered through nose stimulate the higher centers of brain which in turn effects the endocrine and nervous system functions.

As per *Ayurveda* science¹¹:

Nasa being the entry to shirsh (head), the drug administered through nostril reaches shringataka-a sira marma (Junctional place of Eye, Ears. Throat and opening of the vessels) by Nasa strotas and spreads in the brain. There it detach the morbid Doshas present above supraclavicular region and expels them out.

DISCUSSION

Migraine is caused by mainly Pitta and Vata Dosha. Some Classics describe it as Tridoshaja. 'Mig-17' Nasal Drop has been proved that it is capable for breaking the Samprapti (Pathogenesis) of Migraine. The drugs used in 'Mig-17' are indicated for Urdhvajatrugata Vikara in classics. Amalaki due to its Sheeta Potency lowers the aggravated Pitta. Yastimadhu removes the excessive kapha. Sunthi due to its hot property pacifies Vata and Kapha and increase penetration power of the formulation. In addition to Sunthi is also recognized by Modern science and they have done a research showing it effectiveness in Migraine¹². Aritha is described as Urdhva shodhana in classics, so it has the potency to clear the blocked channels (Strotoshodhana).

Urdhvajatrugata Rogas (Diseases of supraclavicular region) and their management have a special place in Ayurveda. Shirah (Head) being the prime seat of knowledge and also the prime controller of the entire body has been termed as Uttamanga (superlative organ)¹³. Hence, the diseases occurring in the Urdhvajatru have been very clearly highlighted in the Ayurvedic classics along with their management. Nasa (nose) has been

considered as the gateway of *Shirah*¹⁴. *Nasya karma* is indicated to uproot the deep-seated diseases of head.

CONCLUSION

'Mig-17' Nasal Drop has shown tremendous relief in all main and associated symptoms of Migraine.

- ❖ Migraine is mostly *Tridhosha* dominant disease.
- ❖ In *Ayurveda*, *Nasya* is described as the best treatment for Supra-clavicular disease.
- ❖ Here our drug ('Mig-17' Nasal Drop) is proved beneficial in treating Migraine.
- ❖ It has provided better relief than any other treatment available right now for the migraine.
- Very convenient and easy method to the patient.
- No side-effects are noted during study. In 2-3 patients, they experienced Mild Hypotension just after treatment which was managed easily.

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