## **CLINICAL STUDIES ON MIGRAINE**

What is a migraine and how is it different from other types of headaches? The migraine is one of the worse headaches a person can experience. It is described as a throbbing or pulsating pain that can be on one side of the head. It can begin in a specific area and then spread while it builds in intensity. A migraine is associated with nausea and vomiting. The person will also be sensitive to light, sounds and even certain smells. Sleeping can be difficult and many people become depressed. They can last for a couple of hours or for several days.

A person that suffers with migraine headaches will most likely have recurring episodes but they usually become less painful with age. There are two main types of migraines. The most common type is the "migraine without aura" and it can be felt on one side of the head or both . this type normally causes photophobia, nausea, vomiting, fatigue and mood swing.

The second types is the "migraine with aura". Aura is a neurological phenomenon that is usually visual and they happen between ten and thirty minutes before the pain begins. The person will normally experience hallucinations or wavy images and bright shimmering lights at the edge of their vision. Some people experience a temporary loss of vision which is accompanied by dizziness, vertigo, numbness of the face, tongue and other extremities along with speech abnormalities and weakness.

Some of the other types of migraine headaches that are uncommon are called basilar artery, adomind, headache-free, carotidynia, ophthalmoplegic and status migrainosus. Some women suffer from menstrual migraines right before their cycle begin and some will develop this condition when pregnant or after they begin menopause.

### To learn more about dealing with migraine headaches

It is not known at this time what causes a person to have this type of headache but studies show that many times patients with this condition have a family history of migraines. they usually inherit sensitivity to the "triggers" that can cause inflammation in the nerves and blood vessels surrounding the scalp and brain. These triggers are what makes a person have the migraine for the first time and some of them include certain types of alcohol such as red wine, caffeine, over-exertion, fatigue, environment, perfume, stress and certain medications.

The treatment used for this condition will depend on the type of migraine the person experiences. Your medical history and attempt to create a treatment plan that will reduce the number of headaches you have , length of time you experience the problem and reduce the severity of the symptoms. The ultimate goal is to eliminate them completely if possible. A variety of the symptoms. The ultimate goal is to eliminate them completely if possible. A variety of medications used along with plenty of rest is the most common treatments . it's best to avoid the triggers that set off the headaches whenever possible.

## Ten Ways to Avoid Migraine

There isn't just one cause for the headaches and is a problem with migraine prevention. There are very many triggers for migraines and trying to avoid them all would be an exercise in hermitry. There are a few things you can do to avoid migraines and here are the top ten.

- 1) Cut the caffeine. Taking in too much can lead to a headache of monstrous proportions. Cut it back slowly.
- 2) While we're talking about caffeine, let 's also talk about nutrasweet. Aspartame has been the culprit for many people who have complained of migraines. Avoid it and you may well avoid a horrendous headache.
- 3) There are more reasons to give up smoking than you can count, but avoiding migraines is another reason to put on the list. Secondhand smoke is just as likely to cause a migraine headache as actual smoking. You do have the right to not have to be around their smoke, especially if their smoke is causing headaches.
- 4) Establish a regular pattern of sleeping and waking. In fact, get as anal-retentive as you can about this .a regular pattern of going to bed at the same time and getting up at the same time, on weekends as well as weekdays, can do wonders.
- 5) Give up the pill and try another form of contraception. Birth control pills and their effects on hormones can be a major hazard when it comes to migraine pain you may look on other forms of female contraception if you and your partner don't mind.
- 6) Change your lighting . very bright lights can often trigger very migraines. You might consider using the softer, filmy kind of light bulbs.
- 7) Cheese, chocolate and wine may sound like the ideal ingredients for a romantic picnic, but if you are prone to migraines the last thing you may be feeling is romantic following that afternoon getaway. Stay away from all three and find other ways to get in a romantic mood.
- 8) Use body wash to smell good instead of perfume or cologne. Keep yourself clean instead of daubing with the smelly-goods.
- 9) Being an aerobic exercise program. Exercising regularly helps to increase your cardiovascular capacity and improper blood flow is linked to recurrent migraines.
- 10) Driver or take a train when you can instead of flying. One easily avoided when the trip can be made by alternative means of transportation.

## Migrain Headache

Upto 90% of the general population reported experiencing headaches at some point in their lives. At any given point in time, up to 10% of the general population seeks medical treatment for the relief of disabling headaches, and over 40% of north Americans have experienced severe headaches at some point in their lives. Headache is a complex phenomenon, the pathophysiology of which is migrain.

Migraine sometimes has dramatic features of transient neurologic deficits, blinding headaches, nausea, and vomiting. Migraine is much more common in women then men, runs in families, and is usually a disorder of young, primarily healthy women out of the several categories of migraine headaches.

Migraine with aura and migraine without aura is far more "common" than migraine with aura aura are usually visual, but may auras should typically last from 5 to 60 minutes in most patients and represent progressive neurologic deficit with subsequent complete recovery. They usually precede the actual headache attack. Migraine headaches commonly begin early in the morning but may occur at any time of the day or night. Nocturnal headaches, awakening the patient from sleep, characteristically occur in cluster headaches but have also been reported with migraine. however, in a patient with the recent onset of nocturnal headaches, brain tumor and glaucoma should be excluded by thorough neurologic and ophthalmologic evaluation and with appropriate imaging studies.

During severe attacks, headache is lateralized in 60-70% of the patients followed by bi- frontal or global headache in up to 30%; occasionally other locations, including bi-occipital headaches are described. Pain is usually associated with nausea, photophobia, phonophobia, and occasional vomiting. Headache is usually gradual in onset and follows a crescendo pattern which persists typically for 4to 72 hours, with gradual but complete resolution. The headache is usually dull, deep and steady when mild to moderate and becomes throbbing or pulsatile when severe. Migraine headaches are worsened by rapid head motion, sneezing. Straining, constant motion or physical exertion thereby leading many migrain sufferers to lie down in a dark, quiet room. Some migraine sufferers can abort their headaches.

Phenomenon of prodrome should be separated from the aura . prodromes can last hours to days, and are usually associated with changes in mood, appetite, and fluid retention. Although autonomic features characteristically occur in cluster headaches, they can also occur in 10-20% of migraine patients. These symptoms may include nasal stuffness , rhinorrhea, tearing, skin color and temperature change, and changes in pupil.

# A CLINICAL STUDY ON THE ROLE OF NASYAKARMA (BY DEVDALI {LUFFA ECHINATA}) IN THE MANAGEMENT OF ARDDHAVABHEDAKA VIS-À-VIS MIGRANOUS HEADACHES

**Abstract:** A clinical study was conducted on 30 cases presented with classical features of arddhavabhedaka (migraine) to evaluate the effect of nasyakarma with along with internal medications of results were highly encouraging. The present study also includes a causation of the condition and clinical observation on the role of different contributory factors attributed to the causation of the condition and clinical conditions considered for the differential diagnosis of arddhavabhedaka found in classical texts.

#### Introduction

Arddhavabhedaka - a comparable clinical condition of migraine is a commonly occurring vascular headache presenting with pain on one half of the head as cardinal feature. it is described as a separate clinical entity in the classics of charaka and susruta while vagbhata included this condition in the classification of vataja- siroroga. Pain in one half of the head may also appear as a symptom in various conditions viz. anyatyovata

### Need for alternative therapies

Treatment of this condition available at present includes the use of analgesics and vasodilators. They have insignificant role in achieving success but have adverse effects. Owing to the above problems of management, it is imperative to explore newer, efficacious drugs/procedures to tackle such disease entities. The present study was aimed to establish clinically the effect of internal medication and nasyakarma in the management of arddhayabhedaka.

#### Historical Account

Migraine is as old as civilisation. It was mentioned in an Egyptian papyrus of 1200 BC, and was described by Hippocrates. The best early account was given by Aretaeus of Cappadocia in about AD 130. He has described

the headache (usuallyonly on one side of the head), nausea, sickness, dislike of daylight and feeling of giddiness which may accompany the attach. half a century later Galen used the Greek word 'hemicrania' (half skull) to describe the one sided headache in this disorder. This word was later corrupted to 'megrim' and then to 'migraine'.

## **Definition of Migraine**

Vagbhata's statement regarding arddhavabhedka runs as follows: Arddhe tumoordhanah sosarddhavabhedaka. Vedana in half of the portion of the head is called arddhavabhedaka. A paroxysmal disorder characterised by visual and / or sensory phenomena in an aura associated with or followed by unilateral headache and vomiting. While this definition is satisfactory for 'classical' migraine, there are man patients who never experience an aura and in whom the headache is always bilateral. The single most characterisitic and constant feature is that headaches occur paroxysmal disorder, i.e. the headaches occur in attacks, separated by intervals of freedom.

## **Synonyms**

Hemicrania; bilious attack; headache.

### Aetiology

Cerebral: Cerebral is chaemia followed by hyperaemia (spasm of blood vessels followed by dilation)

Ocular : Refractive errors

Allergy: Proteins, tobacco,

chocolate, pollen

Psychological: Mental fatigue, anxiety

Endocrine : Serotonin

Age & Sex : Middle age / females

### **Complications**

Excerebration of this siroroga may cause vinasa of srotra (loss of autitory function) as well as vinasa of akshi (loss of visual function).

## Signs and Symptoms

Visual aura: Scintillating scotoma up to ½ hr. duration may be followed by visual field loss contralateral to headache. May have aura without headache.

**Prodrome:** hours to days prior to headache. Psychic symptoms: Irritability, confusion, anxiety, depressioni, euphoria, altertness, clarity.

**Headache:** Pulse synchronous, may be like pressure behind eye-radiating to face, jaw, neck and back. Peak pain 1 to 2 hr., nausea and vomiting, rarely diarrhoea, sensitivity to external stimuli- light and sound changes character of headache over time.

**Skin Pallor:** Temporal arteries tender and dilated. Pain may decrease by occluding temporal artery anterior to ear. Most common age of onset 10 to 30 years. 30 to 50% prior to age 15. headaches usually decrease after age 40; rarely increases.

Severe pain on both sides of manya. Pain will be felt inlalata, akshi, bhru, sankha, karna, and regions on any one of the sides.

Nature of pain; Pain inarddhavabhedaka will be severe as though cutting by a sharp weaon or churning by a churner. Pain (toda, bheda, bhrama) is felt in half of siras.

Recurrence of the disease: According to Susruta this set of clinical features recurs once in 10 or 15 days.

## **Differential Diagnosis**

Clinical features resembling arddhava bhedaka are also found in various other disorders of eye (netra rogas, vata rogas and also appears as vegadharanajanya vyadhis (due to suppression of physiological urges may be considered for differential diagnosis).

## Other syndromes causing arddavabhedaka like symptoms which are described in ayurvedic classics:

- 1. Anyatovata (netraroga): Pain in manya akshi and sankha regions. According to Susruta severe pain is felt at karna, manya, hanu, greeva,netra and bhru regions.
- Vataparyayam (netraroga): (a) severe pain is left in pakshma, akshi and bhru regions.(b) Drishtinasa is seenas complication.
- 3. Adhimantha (netraroga): Headache is a predominant symptom especiallyis vataja type adhimantha. (a) Siroantarvedana, (b) netravedana, c) karnanada, bhrama and lalta bhru vedana, (d) Sankha/danta, kapola, kapalasthi ruja are seen in raktaja adhimantha.
- 4. Vataja ahishyanda (netraroga): (a) Nistoda, stambhana, romaharsha, sirobhitapa.

- (b) Pain is felt at sankha, lalta bhru and akshi.
- 5. Ardhitavata (vataroga): Painis felt inhalf of the portion of face and head with other associated symptoms.
- 6. Miscellaneous causes: (1) Arddhava bhedaka asdivasvapnajanya dosha

- (2) Arddhavabhedaka inkshavathu vegadharana.
- 7. Retinal migraine,
- 8. Symptomatic migraine and
- 9. Facial migraine.

## Model score sheet for assessment in Migraine

Clinical Parameters		Scores	
1.	Headache	50	
	Mildrelief	30	
	Moderate relief	10	
	Marked relief	5	
	Complete relief	0	
2.	Visual aura (Transitory diplopia / scotoma, etc)	20	
	Absent	0	
3.	Vomiting/nausea	12	
	Absent	0	
4.	Paresthesiae (of limb, part of the body, lips, face, etc.)	6	
	Absent	0	
5.	Weakness (of limb, part of the body, etc.)	2	
	Absent	0	

#### **Materials and Methods**

Type of study: Single blind.

Level of study: OPD.

20 patients presenting with classical features of migraine were randomly selected for the study. Patients with notable visual problems and associated with systeme disorders viz, diabetes, hypertension, etc. were excluded from the study.

#### Treatment and dose schedule

Nasya karma with from Devdali Churna (Luffa Echinata) to inhale in each nostril for seven days A formulation of उसतखदूस (Lavandula stocohas), धनिया (coriandrum sativim) & काली मिर्च Pipernigrm in powder form was given before sunrise at an interval of 30 days.

#### Classification of result

- 1. Complete relief: 100% relief has been noted
- 2. Partial relief
- (a) Marked relief: Relief up to 75% and above
- (b) Moderate relief : Relief above 50% and below 75%
- (c) Mild relief: Relief more than 25% but below 50%
- (d) No relief: No relief or only marginal improvement.

#### **Observations**

Among 20 treated cases 55% are females, (Table 1), 35% belongs to age group of 30-34 years (Table 2). 70% are officers (Table 3), 60% belongs to vataprakriti group (Table 4) Vegadharana was observed as aetiological factor in 90% patients (Table 5).

Table 1. Sex- wise distribution of patients

Sex	No. of patients	Percentage
Male	8	45
Female	12	55

Table 2. Age- wise distribution of patients

Age in Years	No. of Patients	Percentage
20-24	3	15
25-29	4	20
30-34	7	35
35-39	5	25
40-44	1	5

Table 3. Occupation wise distribution of patients

Occupation	No. of Patients	Percentage
Officers	14	70
Housewives	4	20
Workers	2	10

Table 4. Distribution of prakriti

Prakriti	No. of Patients	Percentage
Vata	12	60
kapha	6	30
Pitta	2	10

Headache was found in all the patients (Table 6). Refractive errors were observed in 60% (12) cases (Table 7 & 8).

#### Results

Complete relief was found in 25% cases, marked relief in 15% cases, moderate relief in 10% cases, mild relief in 30% cases and no relief was observed in 20% cases (Table 9).

#### **Discussion and Conclusion**

Migraine has become a challenging problem to the present day physician. In the present study an attempt has been made to explore some alternative solutions hidden in the classical texts to manage such conditions. Results obtained after the study were highly encouraging and free from adverse effects.

Table 5. Distribution of aetiological factors

Aetiological factors	<b>No. of Patients</b>	Percentage
Rooksha ahara sevana (over indulgence of dry foods)	21	45
Atiahara sevana (excessive intake of food)	17	15
Vishamasanam (frequent & irregular intake of food)	17	85
Pravata sevana (exposure to direct breeze)	6	30
Avasya sevana (exposure to snow fall)	3	15
Atimaithuna (excessive sexual indulgence)	5	25
Vegadharana (superssion of physiological urges)	18	90
Ativyayama (over exercising)	4	20
Uchiarbhashana (loud speech)	8	40
Seetamaruta sevana (exporure to cold air)	4	20
Unwanted repetition of vamana and virechana karmas	0	0
Atibhaya and krodha	10	50

**Table 6. Incidence of clinical features** 

Clinical feature	No. of Patients	Percentage
Headache	22	100
Visual aura	18	90
Nausea/vomiting	19	95
Parasthesia	3	15
Weakness	1	5

**Table 7. Incidence of refractive errors** 

Sl. No.	No. of Patients	Percentage
1. Refractive errors	12	60
2. No. refractive errors	8	40

Table 8. Role of different contributory factors at a glance

Sl. No.	Factors	No. of Patients	Percentage
1.	Females	11	55
2.	Age 30 - 34 yrs	7	35
3.	Officers	14	70
4.	Vataprakriti	12	60
5.	Vegadharana	18	90
6.	Headache & nausea	20	100
7.	Refractive errors	12	60

Table 9. Results

Sl. N	o. Mode of response	No. of Patients	Percentage
1.	Complete relief	5	25
2.	Marked relief	3	15
3.	Moderate relief	2	10
4.	Mildrelief	6	30
5.	Norelief	4	20

In the present scenario Nasya karma from Devdali Churna to inhale in each nostril for seven days A formulation of उसतखदूस (Lavandula stocohas), धनिया (coriandrum sativum) & काली मिर्च Pipernigrum in powder form was given before sunrise for 30 days.

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#### Clinical Management of Migraine

A formulation of उपतखदूस (Lavandula stocohas), धनिया (coriandrum sativim) & काली मिर्च Pipernigrm was given welfore sunrise.

Nasy Karam by DEVDALI (Gagagarbel) given immediate relief in pain.