RESEARCH ARTICLE

AYURVEDIC MANAGEMENT OF MIGRAINE: A CASE REPORT.

Dr S. D. Pandey¹And Dr. Swapnil Singhai².

¹. Professor & Principal, Mahaveer Ayurvedic Medical College & Hospital, Meerut, Uttar Pradesh, India.
². Professor (Kayachikitsa), Uttarakhand Ayurved University, Main Campus, Haridwar, Uttarakhand, India.

Abstract

Migraine is a benign and recurrent syndrome of headache, nausea, vomiting and other symptoms of neurological dysfunctions in varying admixtures. It is as one of the diseases where cause is exactly not known. Migraine, the second most common reason for cerebral pain, afflicts around 15% of women and 6% of men. With the disease afflicting majority of the people in their prime age i.e. from second decade to fifth decade, it is affecting their professional and social life, hampering their health. The various treatment modules comprises of non-pharmacological treatment such as identification of triggers, meditation, relaxation training, psychotherapy etc. and pharmacotherapy as abortive and preventive therapy. Ardhavabhedaka can be scientifically correlated with Migraine due to its cardinal feature ‘half sided headache’ and also due to its paroxysmal nature. All the three doshas are involved in the pathogenesis of the Ardhavabhedaka with the predominance of Vata or Vatakapha. The disease may not be fatal but if not managed properly then it may damage eyesight or hearing. Ayurveda emphasizes various treatment modalities for Ardhavabhedaka which includes both shamana, shodhana, asthapana and anuvasanabasti to be effective in the management of Ardhavabhedaka. This patient was treated with LaghuSootshekhar Rasa, NarikelLavana, GodantiBhasma and PathyadiKwathare found to be efficacious in the whole symptom of Migraine (Ardhavabhedaka).

Introduction:

Headache in general is one of the commonest complaints of the people seeking professional help. Only few of us are spared the experience of a headache. It is also a major cause of absenteeism from work and of avoidance of social and personal activities. It is a benign symptom, which may be of primary idiopathic type or may be a manifestation of a wide range of organic diseases such as brain tumor, subarachnoid hemorrhage, meningitis or giant cell arteritis. It may be psychosomatic like migraine, tension headache or may be psychogenic in origin e.g. Anxiety, Depression, hypochondrial and delusional headache. Severe headache attacks despite of cause are more likely to be described as throbbing and associated with vomiting and scalp tenderness. Milder headaches tend to be non-descriptive tight band like discomfort often involving the entire head, the profile of tension type headache.

Copy Right, IJAR, 2019. All rights reserved.
Migraine is recognized by the W.H.O., as one of the diseases where cause is not exactly known. Migraine, the second most common reason for cerebral pain, affects around 15% of women and 6% of men. With the disease affecting the majority of the people in their prime age i.e. from second decade to fifth decade, it is affecting their professional and social life, hampering their health. A useful definition of migraine is a benign and recurrent syndrome of headache, nausea, vomiting and other sign and symptoms of neurological dysfunctions in various admixtures. Migraine can often be recognized by its activators like stress (psychological as well as physical), Lack of Sleep, Worries, Red wine, Menses, Estrogen etc. and by its deactivators like sleep, relaxation, meditation, pregnancy, exhilaration, sumatriptan medication.

Coming to the management, other systems of medicines have lots and lots of limitations. The authentic text books of modern medicine clearly state that there is no proper standardized treatment for migraine. The acute condition of migraine is being dealt with ‘over-the-counter’ medicine and minimum percentages of patients of this category are able to consult a physician. But the chronic stage of migraine is more prevalent and difficult to treat. The chronic migrainous headache is the most common problem seen among the patients visiting a hospital with specific complaints of headache. The various treatment modules comprises of non-pharmacological treatment such as identification of triggers, meditation, relaxation training, psychotherapy etc. and pharmacotherapy as abortive and preventive therapy. Aspirin, Paracetamol, Ibuprofen, Diclofenac etc. are non-specific abortive therapy, whereas Ergot, 5-HT receptor agonists are specific abortive therapy.

In Ayurvedic text, almost all the Acharayas have referenced Ardhavabhedaka in Shiro-roga. Acharaya Sushruta has mentioned 11 types of Shiro-roga in Uttar Tantra. Among them, one of them is Ardhavabhedaka in which paroxysmal unilateral headache associated with vertigo and pain related with vertigo and agony of changing power is seen. This can be associated with Migraine. As indicated by Acharaya Sushruta, it is a tridosha-j disease and according to Acharaya Charaka it is Vataja or Vata-Kaphaja.

Ardhavabhedaka can be scientifically correlated with Migraine due to its cardinal feature ‘half sided headache’ which is also explained by commentator Chakrapani as ‘ArdhaMastakaVedana’ (Ch.Su. 7/16) and also due to its paroxysmal nature. All the three doshas are involved in the pathogenesis of the Ardhavabhedaka with the predominance of Vata or Vatakapha. The disease may not be fatal but if not managed properly then it may damage eyesight or hearing.

Ayurveda emphasizes various treatment modalities for Ardhavabhedaka which includes both shamana, shodhana, asthapana and anuvasanabasti to be effective in the management of Ardhavabhedaka.

**Instrumentation:**

**Severity of Headache**
- 0 = No headache.
- 1 = Mild headache, patient is aware only if he/she pays attention to it.
- 2 = Moderate headache, can ignore at times.
- 3 = Severe headache, can’t ignore but he/she can do his/her usual activities.
- 4 = Excruciating headache, can’t do anything.

**Frequency of Headache: Assessed in term of (frequency in days)**
- 0 = Nil
- 1 = ≥ 20 days
- 2 = 15 days
- 3 = 10 days
- 4 = ≤ 5 days

**Duration of Headache: (Assessed in term of hours/day)**
- 0 = Nil
- 1 = 1-3 hours/day
- 2 = 3-6 hours/day
- 3 = 6-12 hours/day
- 4 = More than 12 hours/day
Nausea
0 = Nil
1 = Occasionally
2 = Moderate, however does not disturb the routine work
3 = Severe, disturbing routine work
4 = Severe enough, small amount of fluid regurgitating from mouth

Vomiting
0 = Nil
1 = Only if headache does not subside
2 = Vomiting 1-2 times
3 = Vomiting 2-3 times
4 = Forced to take medicine to stop vomiting

Vertigo
0 = Nil
1 = Feeling of giddiness
2 = Patient feels as if everything is revolving
3 = Revolving signs + black outs
4 = Unconscious

Aura
0 = Nil
1 = Lasts for 5 minutes.
2 = Lasts for 15 minutes
3 = Lasts for 30 minutes
4 = Lasts for 60 minutes

Gradation For Associated Symptoms
0 = No symptoms
1 = Mild (can do his/her work)
2 = Moderate (forced to stop work)
3 = Severe (forced to take rest)
4 = Excruciating (force to take medicine)

Case Report:
A 47 year old male patient presented with complaints of headache, nausea, vomiting and vertigo for the past 1 year. No history of illness or accidents in the past five years and not taking any medication for any illness/disorder. He has continuous, unilateral headache in frontal, parietal lobe in left side sometimes right side. The nature of pain was moderate to severe associated with nausea and sometimes vomiting. Blackouts and vertigo were also present. Family history was not contributory. He has to take allopathic medicine for pain.

Examination –
1. Duration of headache – 1 year
2. Frequency of attacks - 10 days
3. Severity of headache – Severe, can’t ignore but he can do his usual activities
4. Duration of each attack - 6-12 hours/day
5. Site: Unilateral (Frontal & parietal)
6. Location – character – Changing
7. Nature of pain - Severe
8. Associated symptoms-
9. Nausea/vomiting/dizziness/vertigo/blackouts
10. Symptoms of raised ICP – non-significant
11. Autonomic (lacrimation)
12. Quality: Pulsatile & heaviness
13. Rhythm of the disease – Continuous
14. Quantity: Can’t do ADL
15. Daily course of the disease – Morning
16. Seasonal course – Annual
17. Onset of the disease - Acute
18. Aggravation by : Neck movements & sneezing
19. Comorbidity: Panic disorders. Anxiety & Irritability
20. Past history- dental surgery
21. Family history – Noncontributory
22. Stress of life – Occupation
23. Treatment history – Analgesic oral pills
24. Any change in pattern of headache – Family stress, personality
25. Headache alarms – headache after the age of 50, sudden severe onset, increase in frequency and severity, headache with systemic illness.
26. Precipitating factors – Lifestyle factors – fatigue, unrefreshing sleep, stress, physical exertion, environmental – bright lights, noise, strong odours.

**Physical Examination**
Body weight : 64 kg
Heart Rate : 98/min
Respiration Rate : 24/min
Blood pressure : 142/88 mmHg

**Investigations**
HB – 13.6 gm%
TLC – 7800 cumm.
DLC – Neutrophils-58 Lymphocytes-36 Monocytes-3 Basophil-0 Eosinophil-3
ESR – 11 mm/hr
RBS – 108 mg/dl

**C.T. scan of head**
Normal study.

**Treatment Schedule**
Tab. LaghuSootshekhar Rasa – 250 mg
(Swarnagairika – 240 gm, Shunthi – 120 gm &NagavelliSwarasa for grinding for three days)
NarikelLavan – 1 gm
GodantiBhasma – 250 mg
BD with Ghrita
PathyadiKwath 20 ml BD with equal quantity of water (B.P)

**Results**:
Before and after completion of 45 days treatment clinical assessments were made from the interrogation and gradation of scoring pattern. There was a drastic change in the parameters as:

| Sign & Symptom          | B.T. | 1st Week | 2nd Week | 3rd Week | 4th Week | 5th Week | 6th Week |
|-------------------------|------|----------|----------|----------|----------|----------|----------|
| Severity of headache    | 3    | 3        | 2        | 2        | 1        | 1        | 1        |
| Frequency of headache   | 3    | 3        | 2        | 2        | 1        | 0        | 0        |
| Duration of headache    | 3    | 3        | 2        | 2        | 1        | 1        | 0        |
| Vomiting                | 2    | 2        | 2        | 1        | 1        | 0        | 0        |
| Nausea                  | 3    | 3        | 3        | 2        | 2        | 1        | 1        |
| Vertigo                 | 3    | 3        | 2        | 2        | 1        | 1        | 1        |
| Aura                    | 3    | 3        | 2        | 2        | 1        | 0        | 0        |
| Associated symptoms     | 2    | 1        | 1        | 1        | 1        | 0        | 0        |
Discussion:-
Maximum Nidanas shows the predominance of Vatadosha. Vata gets provoked by addiction to dry articles or excess of diet or eating on a loaded stomach. The quantity of food to be taken depends upon the power of digestion (Ch.Su.5/3), even light food article, if taken in excessive quantity can produce agnimandhya (Ch.Su.5/7) resulting in amarasra formation which obstructs the channels and aggravates all the three doshas. Suppression of natural urges obstructs the movements of Vata. Excessive sexual indulgence produces degeneration of Dhatus in reverse order (Ch.Si.8/24-25). Also the various types of pain like Toda, Bheda, etc are suggestive of Vishama nature of Vatadosha.

The various nidanas leads to doshadushti i.e., Tridoshaja (Su.), Vata-Kaphaja (Ch.) and Vataja (Va). The dushti of Rasa and Rakta is also seen, as mentioned by Acharya Charaka – Shiroruk in ShonitajaRoga (Ch.Su.24/13). Simultaneously, Srotodushhti in Rasa – Raktavahasrotos also takes place, which can be taken as blood vessels of the head, as migraine involves vascular phenomenon. The phenomenon Urduhagamana by Vata due to its ChalaGuna or Kapha along with Vata causing Urduhaagpravriti explains the predominance of Vatadosha in establishing the pathogenesis.

Probable mode of action of drug –
LaghuSootshekhar Rasa is a herbo-mineral formulation which contains Swarnagairika (Purified Red ochre- Iron oxide), Shunthi (Zingiber officinalis), Nagvelli juice extract (Piper betel) which balances Vata and Pitta. It has Kashaya, Madhura Rasa, Snigdha, Visadaguna and SheetaVeerya and MadhurVipaka. It improves blood circulation and provides strength to the brain.

NarikelLavana contains Narikela (Coconut nucifera) and SaindhavaLavana (Rock salt). It is non-crystalline material having alkaline pH and hygroscopic nature. Its activity on hyperacidity is because of the presence of activated charcoal and alkaline nature. It calmsVata and Pitta dosha.

Godantibhasma
(Gypsum) balances all three doshas, especially Pitta dosha. It is Sheeta in potency, alleviates Pitta dosha, arrest bleeding, ameliorates hyperacidity and has been used as best drug for headache.

PathyadiKwath
is a decoction of Haritaki, Amalaki, Vibhitaki, Haridra, Neem and Guduchi has been described for the treatment of various types of headache. Triphala corrects our digestion and assimilation process, it normalizes the gut. Haridra and Neem both acts as an antibiotic and prevent unwanted production of inflammatory chemical mediators. Guduchi acts as an antioxidant and free radical scavengers.

Conclusion:-
The present case study signifies the role of Ayurvedic medicine in the treatment of Migraine. The patient can make significant gains in symptoms in relatively short periods of time. Despite the limitations of this case study, conclude that the herbo-mineral formulations are simple and effective treatment modality for Migraine without any adverse effects.

References:-
1. Narikelalavana - Shastri KN: Rasa Tarangini of Sadanand Sharma, Ksharavisheshadivigyaninya: Chapter-14, Verse 123-129. New Delhi: MotilalBanarasidas, 1979; 348.
2. Yadav S, Sharma K and Kaur N: Characterisation of Narikelalavana. Int J Pharm Sci Res 2017; 8(5): 2200-04. doi: 10.13040/IJPSR.0975-8232.8(5).2200-04.
3. Sootshekharas Rasa - Rasa Tantra Sara – Siddha Yoga Sangraha – KharaliyaRasayana 330
4. NarikelaLavana - Bhaishajyaratnavali ShoolarogaChikitsa 30/69-70
5. Godantibhasma - Rasa Tarangini 11/241 Rasamrata- Jha CB. Textbook of AyurvediyaRasashastra Publication-ChaukhambhaSurbharti.
6. TrikamjiYadavji Acharya, Rasamritam, translated by Joshi Damodar, 1st edition, Chaukhamba Sanskrit Bhavana, Varanasi:, page no.-122, (1998).
7. Mishra Siddhinandan - Ayurvediye Rasasastra, Chaukhamba Orientalia, Varanasi, chapter - Sudha Varga, p.no. - 571, 2007.
8. Pathyadikwatha – Dr. Shrivastava S., Sharangadhar Samhita, 3rd edition 2003, Chaukhambha Orientalia, Varanasi, Madhya Khand, Kwath Kalpana.
9. Bhavmishra, Bhavaprakash Nighantu, Chaukhambha Bharti Academy, Varanasi, 1999.
10. Kashinath Sastri & Gorakhnath Chaturvedi, Agnivesha, Charak Samhita, Part 2nd, Chaukhambha Bharti Academy, Varanasi, 1981.
11. Kaviraja Ambikadutta Shastri, Sushruta Samhita, 14th edition, Chaukhambha Sanskrit Sansthan, Varanasi, 2003.
12. Vagabhatta, Astangasamgraha with Sashilekha Teeka, Rudra Parasava, 1st edition, Chaukhambha Krishnadas Academy, Varanasi, 2006.
13. Chakrapanidatta Chakradatta, Vaidyaprabha Hindi commentary by Acharya Ramanath Dwivedi, Chaukhambha Publication, Varanasi, 1998.
14. Harrison’s Principles of Internal Medicine, Vol. 2, McGraw Hill book company, 11th edition, 1987.
15. Kumar & Clark, Clinical Medicine, 6th edition, Elsevier Limited, 2005.