Original Research Paper



Ayurveda

MODE OF ACTION OF VIRECHANA IN MIGRAINE – A CONCEPTUAL STUDY

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ARSTRACT Ardhavbhedaka is a type of shirashoola which is explained by all acharyas. According to sushrutha headache which is present in the right or left side of the head, which is splitting, pricking or churning in nature and appearing in the intervals of either 15 or 10 days without any known cause. Acharya vagbhata mentioned that when it is greatly aggravated it destroys either the vision or hearing. Migraine is a primary headache involves nerves and blood vessels of the brain, characterised by recurrent headache that are moderate to severe affects one half of the head. Migraine can be triggered by indigestion, hyperchloridria, mental stress, lack of sleep and poor diet etc. virechana is one among the shodhana modality which is performed to eliminate pittadosha from the body through anal route. Though it is agrya for pitta dosha, it also eliminates pitta associate kapha, pittasthanagata kapha and do vatanulomana. charaka mentioned kayavirechana in the chikitsa sutra of ardhavabhedaka.

KEYWORDS: Virechana, Ardhavabhedaka, Migraine.

INTRODUCTION

Migraine is a primary headache results of specific physiologic changes that occur within the brain and leads to the characteristic pain and associated with sensitivity to sound, light and smell, some people will have symptoms of nausea or vomiting. This headache often involves only one side of the head, but in some cases patients may experience bilaterally. The pain of migraine is often described as throbbing or pounding and it may be made worse with physical exertion. Migraine may triggered by hormonal changes during menstrual cycles, various foods like red wine, spicy food, chocolate, stress, exposure to strong stimuli such as bright light, loud noises or strong smell. Worldwide migraine affects nearly 15% or approximately one billion people. It is more common in women and this persists for the rest of lifespan, being two times more common among elderly females than males.In Ayurveda migraine can be correlated to Ardhavabhedaka. Headache which is present in the right or left side of the head, which is splitting, pricking or churning in nature and appearing in the intervals of either 15 or 10 days without any known cause la. virechana is one among the shodhana modality which is performed to eliminate pittadosha from the body through anal route. Though it is agrya for pitta dosha, it also eliminates pitta associate kapha², pittasthanagata kapha and do vatanulomana

ETIOLOGY

- Cerebral ischemia followed by hyperaemia [spasm of blood vessels followed by dilatation]
- Allergy: protiens, tobacco, chocolate, pollen
- · Psycologocal: mental fatigue, anxiety
- Endocrine: serotonin
- Age/gender: middle/female

Nidanas mentioned in classics^{3a}

- Ruksha ahara vihara
- Vishamashana
- Pravata sevanaAtimaithuna
- Vegadharana
- Ucchairbhashana
- Sheeta marutha sevana
- · Atibhaya and krodha

PATHOLOGY

Migraine is believed to be a Neurovascular disorders with evidence supporting its mechanisms starting within the brain and then spreading to the blood vessels. Increased excitability of the cerebral cortex and abnormal control of pain neurons in the trigeminal nucleus of the brainstem. Low levels of neurotransmitters serotonin also known as 5-hydroxytryptamine are believed to be involved.

How pain caused in migraine

There is a migraine "pain centre" or generator in the brain. A migraine

begins when hyperactive nerve cells send out impulses to the blood vessels, causing them to clamp down or constrict, followed by dilatation and the release of prostaglandins, serotonin, and other inflammatory substances that causes the pulsation to be painful.

Avurvedic view

The hyper action of the nerve cells and expansion and dilation of blood vessels are caused because of vata vitiation due to nidana sevana. This further vitiates pitta and kapha which causes the inflammatory process.

TRIGGERING FACTORS FOR MIGRAINE

- Caffeine
- Alcohol
- · Changing weather conditions
- Menstrual period
- Excessive fatigue
- Skipping meals
- Change in sleep pattern.

RISK AND CO-EXISTING DISORDERS

Some medical conditions that are more commonly associated with migraine, including hypertension, raynauld's phenomenon, stroke, chronic fatigue syndrome and sleep disorders. Migraine have a tendency to run in families 4 out of 5 migraine sufferers have a family history of migraine. If one parent has a history of migraine, the child has a 50% chance of developing migraine and if both parents have a history of migraine, the risk jumps to 75%.

SYMPTOMS OF ARDHAVABHEDAKA

- **pain** will be severe as though cutting by a sharp weapon or crushing by churner. A pounding or throbbing headache that often begins as a dull ache and develops in to throbbing pain.
- Photophobia and photophobia
- Nausea and vomiting
- Stomach upset and loss of appetite
- Fatigue
- Dizziness
- Blurred vision
- · Diarrhaea/constipation.

Most of the migraine last about 4 hours although severe one can lost up to week. The frequency of migraine varies widely among individuals. It is common for a migraine sufferer to get 2-4 headaches per month. Some people, however may get headaches every few days, while others only get a migraine once or twice a year.

TREATMENT

Treatment approach in Ayurveda is different from other medical systems. Ayurvedic treatment is not for the disease but it is for the particular condition of disease of the individual.

The treatment of Ardhavabhedhaka includes Shirovirechana, Kayavirechana, Chatursneha prayoga, Anuvasana basti, Upanaha, Shirobasthi and Agnikarma^{3b}.

Here kayavirechana refers to shodhananga Virechana which is carried out after poorva karma like Pachana deepana ans Snehapana.

MODE OF ACTION OF VIRECHAAN IN MIGRAINE

In Migraine Stress, Spicy foods, Irregular food habits, Menstrual cycle, Fasting etc. those which leads to pitta prakopa are the precipitating factors for headache. By this it reveals that there is link between BRAIN AND GUT.

GUT-BRAIN AXIS is the biochemical signalling that takes place between the Gastro-intestinal tract and the Central Nervous System. It includes the central nervous system, Neuro-endocrine and Neuro-immune system including the Hypoyhalamic-pitutary-adrenal axis (HPA), Sympathetic and Parasympathetic arms of the autonomic nervous system, including the Enteric nervous System(Second Brain) and the Vagus nerve, and the Gut microbiota.

The probable Virechana in Migraine:-

Snehana → Resolution of toxin material into fat which they bound to membrane protein

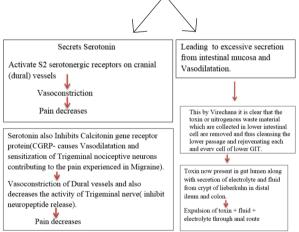
(i.e. toxin which are earlier present in cytoplasm now become membrane Bound)

Swedana → Change in cell permeability leading to expulsion of toxin material to outside the cell, which are membrane bound

Now the toxin present in circulation

Virechana Dravya Cause irritation of intestinal mucosa

Virechana drugs activates cholinergic neurons and Activates PAF(platelet activating factor) - a phospholid pro-inflamatory mediator and it produces significant stimulation of ENS, Colonic secretion and gastrointestinal motility.



DISCUSSION

- 1) Virechana drugs activates cholinergic neurons.
- Activates PAF(platelet activating factor) a phospholid proinflamatory mediator and it produces significant stimulation of colonic secretion and gastrointestinal motility. By these mechanism we can expect the result through gut brain axis⁴.
- Virechana helps to restoration of bacterial flora of intestine and thus synthesis of Vit.B12, thymine, biotine, which are essential for rejuvenating the nerves.
- Virechana helps in synthesis of neuropeptides which plays important role in the regeneration of nerves.
- Virechana by ashraya aashrayi bhava does shodhana of rakta by pitta dosha shodhana
- Sira is Dooshya and upadhatu of rakta dhatu, so that virechana helps in migraine(Neurovascular headache)
- By pittadhara kala shodhana majjadhara kala shodhana occurs i.e, ya eva pittadhara kala sa eva majjadhara kala ^{1b}
- As the variation in Agni causes the migraine headache, virechana helps to normalise Agni⁵.

CONCLUSION

Migraine has become a challenging problem to the present day physician. Ayurveda believes in cleaning the body from witin the and eradicating the disease from its roots. Ayurvedic treatment of migraine therefore is centered on the pacification of piitta dosha, and restoration of digestive function in the body. Ayurveda also considers following as key factors to control migraine. Balancing the nervous system activity, Use of treatment which prevent tridosha imbalance and Stress management. These above can be achieved by Virechana.

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