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“The effect of *sunthyadi phant* in post-spinal headache a priliminary clinical study.”

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Abstract-

The spinal anesthesia is frequently performed procedure in surgical field, Headache after spinal anesthesia is common which accounts for 32% prevalence and carries considerable morbidity with the symptoms lasting for several days.

As working in surgical field there is more incidence of post spinal headache after spinal anesthesia, post spinal headache is well known complication. It occurs after Induction of spinal anesthesia due to leakage of CSF after the Dural and arachnoid puncture and has significant effect on the patient's post-operative well-being.

The present study aimed to evaluate the “Effect of *Sunthyadi Phant* on preventing post spinal Headache” in surgical patients.

Keywords- Post spinal Headache, Spinal Anesthesia, *Sunthyadi Phant*

Introduction-

Headache is most troublesome complication of spinal anesthesia which occurs in 30% of patient receiving spinal anesthesia, Spinal anesthesia or block is considered a form of regional anesthesia and type of neuroaxial block which involves the injection of local anesthetic, opioids in to subarachnoid spaces^{1,2}.

The regional anesthesia techniques are extensively used for all surgical procedures since they provide

good analgesia and anesthesia in operative field, however after surgery some patient leads to develop post spinal headache which is most common complication of spinal anesthesia with the associated symptoms like giddiness, nausea.

This is event actually related to age, gender, needle size, previous history of surgery and post spinal headache. Till the date there is no any treatment available which demonstrate to after complete relief in the symptoms and prevention of post spinal headache? Further, the most common form of post-spinal headache occurs in the occipital and frontal region and related to the pain diffusion into the neck & shoulder joint. The temporal, vertex and nuchal area are reposted less commonly as the site of discomfort, these symptoms are due to leakage of CSF and its diminished pressure causing stretching and pressure on intracranial regions and consequent vasodilatation³.

The headache is predominant complaint characterized by severe searing and spreading pain like hot metal, the pain is exacerbated by head movement, and adoption of the upright posture and relieved by lying down. An increase in severity of the headache is essential condition of post spinal headache.

The post spinal headache prophylactic measures includes oral analgesic, bed rest, oral or intravenous hydration and caffeine, epidural crystalloid administration and prophylactic epidural blood patch⁴.

In contrast to that Ayurveda has a variety of herba medication in the treatment of various types of *Shir-shool*, thus here an attempt has been made to evaluate the effect of *Sunthyadi phant* in the post spinal headache.

Aim and Objective:

1. To evaluate the effect of *Sunthyadi phant* in Post spinal headache.
2. To study the management of post spinal headache with ayurvedic remedies.

Material and Methods:

For the clinical study, patient undergoing surgery under spinal anesthesia and fulfilling criteria for diagnosis were selected

Inclusion criteria:

1. The patient being admitted for surgical procedure under spinal anesthesia.
2. Having onset on post spinal headache was considered to enter the study protocol.
3. Patients willing to participate in study.

Exclusion criteria:

1. It includes patient having a fever or unstable vital sign as well as a history of taking psychedelic or narcotic drug,
2. History of cervical spondylitis, hypertension, migraine, past history of chronic headache,
3. Severe post spinal hemodynamic changes (e.g. severe hypotension, bradycardia).

Criteria for assessment:-

The present study was implemented in the surgery department of Arogyashala Hospital, Nashik, Maharashtra.

The improvement in patient was assessed on the basis of relief in the sign and symptoms of the headache, the detail score adopted for the main sign and symptoms in this study are as follow.

Severity of Headache: by VISUAL ANALOGUE SCALE

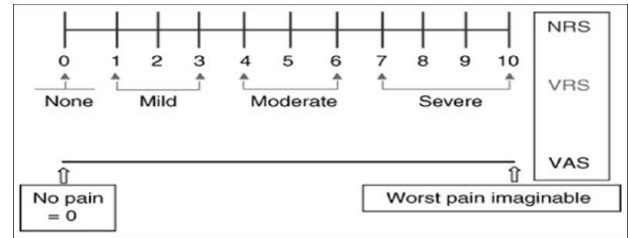
VAS is a simple, objective and reproducible method of quantifying pain for VAS. A 10mm line is drawn with verbal anchors at both ends Zero (0) on it denotes no pain while 10 on it denotes most excruciating pain Further grading of pain is done as

1mm-3mm: Mild Pain

4mm-6mm: Moderate Pain

7mm- 10mm: Severe Pain

The patients were asked to mark the line to show how intense degree of pain is.



Sr no	V A Score	Grade
1	0	0
2	1-3	1
3	4-6	2
4	7-10	3

Grades:

0 – No Headache

1 – Patient suffering from mild headache while sitting or walking

2 – Patient suffering from severe Headache while sitting or walking

3- Patient suffering from moderate to severe headache even in the supine position which impedes his/her daily activities.

2)Duration of Headache: Assessed in term of Hours

0- Nil

1- 1-3 hrs/ day

2- 3-6 hrs /day

3- ≥ 12 hrs/ day.

All the 5 patients underwent spinal anesthesia in sitting position by an anesthesiologist the all patient were preloaded by 500 cc ringer lactate in 1 hour before surgery; the spinal anesthesia

was given by injecting 3 to 4 cc of hyperbaric 0.5% bupivacaine into intervertebral space of L₃ & L₄ with 25 gauge Needle with all aseptic precautions.

Selection of Drug:

Ayurveda has a variety of herbal medicines which are act as *Shoolahara* and can be used in *Shir- shool* however; these medicines can also be useful in reducing the post spinal headache.

So we decided to take *Shoolahara dravya* explained by *Acharaya Charaka* in *Shoolaprashaman kashaya* as content in *Sunthyadi Phant*.

METHODOLOGY:

1.The *Sunthyadi phant* contain 5 herbal drugs namely *Sunthi* (*Zingiber officinalis*), *Pipalimool*

(*Piper longum*), *Marich*(*Piper Nigrum*), *Chitrak* (*Plumbago zeylinica*), *Ajamoda* (*Apium graveolens*).

2. *Sunthyadi Phant* was prepared according to *Sharangdhara*, All medicines 6gm each were taken and 120 ml of boiled water in proportion 1:4 were added and soaked⁵.

3. After cooling the water the content were rubbed with hand and filtered and given to patient.

4. The 90 ml of *Sunthyadi Phant* were given to patient in TDS does after 24 hrs. of surgery, having onset of the post spinal Headache.

Observation and result :The study done on 5 patients of Shalyatantra Department, observation is as below

Table: % relief in all parameters and total effect of therapy of 5 patients in %:

Sr. No.	Headache	Mean Score		Mean Difference	% Relief
		B.T.	A.T.		
1	Severity	2	0.6	1.4	70%
2	Duration	1.6	0.6	1	62.5%
Total Effect		= 66.25%			

In 5 patients a significant improvement was observed in all parameters like severity of headache, duration of headache. The percentage relief on symptoms has been observed. Total effect of therapy shows 66.25% relief in all

patients; this shows the “*Sunthyadi phant*” gives significant relief in Post-spinal headache.

Discussion-

Post spinal Headache has been considered as one of the research priority

in surgery, *Sunthyadi phant* orally was employed aiming at reducing the post spinal headache, and the result indicated that post spinal headache was significantly reduced.

Sunthyadi phant was effective in reducing post spinal headache and diminished the intensity of post spinal headache at duration and frequency points.

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जमोदाजगन्धाजाजीगण्डीराणीति दशेमानी
शूलप्रशमनानि भवन्ति इति पञ्चकः
कषायवर्गः॥१७॥

According to *Acharya Charaka*, above drugs act as *shulahara* as described in *Shulaprashamana Kashaya*, the *Sunthyadi phant* contain *Sunthi*, *Maricha*, *Pipali*, *Chitraka* and *Ajamoda*. These drugs are having Tikshna guna and Ushna Virya, *Shula* is mainly due to *vata dosha* and *vata dosha* is *Akash mahabhuta pradhana* these drugs causes Vatanulomana and Agnidipan which helps to reduce *vatprakopa* and helps to decrease the Headache. Active chemical constituent in *Sunthi* gingerol inhibits the biosynthesis of prostaglandin that have role in pain perception, *zingiber officinalie* and *Ajmoda* has potent cox 1 and cox 2 inhibitory activity^{7,8,11} and potent nociceptive and anti-analgesic activity⁹. In modern science post-

operative hydration is one of the prophylactic treatment in post spinal headache, Total amount of *Phant* given to patient is about 270 ml which may also help to hydrate the patient. Due to this *Sunthyadi phant* reduces post spinal headache significantly.

Conclusion-

Sunthyadi phant reduces post spinal headache in all criteria of assessment, thus it act as good analgesic medicine.

In this case series 5 patients are enrolled.

All patient of post spinal headache showed significant improvement in 3 day and reduces severity, duration and frequency of headache.

Thought the number of patients is small, it can be stated that in this study *Sunthyadi phant* was found to be very effective in treatment of post spinal headache.

To validate the study another study with large no of patients is much needed.

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References:

1. Synopsis of Anesthesia, J. Alfred D Lee, and R.S. Atkinson, 6th Addition, The Stonebridge press, Page no. 400-408

2. 2. Apfel CC, Saxena A, Cakmakkaya OS, Gaisre R, George E, Radke O. Prevention of postdural puncture headache after accidental dural puncture a quantitative systemic review, Br J Anesth. 2010;105 (3);255-263, doi 10.1009/bja/aeq191.
3. Usta B, Gozdemir M, Dermircioglu RI, Muslu B, Sert H, Yaldiz A. Dexmedetomidine for prevention of Shivering during spinal anesthesia. Clinics (Sao Paulo) 2011;66; 1187;1191.
4. 4. Post dural puncture headache; pathogenesis, prevention and treatment; D.K. Turnbull and D.B. Shepherd; academic anesthetic unit, university of Sheffield, Royal Hallamshire hospital.
5. 5. Practical handbook of rasashastra and Bheshajyakalpana, Dr. Bharat J. Rathi, Chaukhamba Prakashana, Page no. 162.
6. 6. Charak Santhita, Charaka Sutra sthana 4/17, Acharya Vidyadhar Shukla and Ravidata Tripathi, Chaukhamba Prakashana, page no. 77
7. 7. The effect of Ginger on preventing post spinal headache in patients undergoing Cesarean section, Banafshesh Mashak, Maryam Hashemjad, Kourosh Kabir:// dx.doi.org// pubmed/
8. Shrivastava KC, Mustafa T. Ginger (Zingiber Officinale) in rheumatism and musculoskeletal disorder. Med hypothesis 1992;(4) 342-348 doi: 10.1016/0306-9877(9) 90059-L
9. Reddy and Seetharam Pharmacologyonline 3: 489-495
10. Foster HB, Niklas H, Lutz S. Antispasmodic effects of some medicinal plants, planta Med. 1980; 40: 309-319:// dx.doi.org// pubmed/7220648
11. Johri K. Cumium cynium, and carum carvi: an update of pharmacognacy review. 2011 jan-jun; 5(9) : 63-72 http:// doi.org/ PMC 3210012

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