

Ayurlog: National Journal of Research in Ayurved Science*A Web based quarterly online published Open Access peer reviewed National E-journal of Ayurved***“To study efficacy of drugs of vedanasthapana gana (ghan vati) in post operative pain management”**

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ABSTRACT

Vedana (Pain) plays important role in our life as there is no birth without Vedana(Pain). From the time of vedic civilization, there have been many attempts to find relief with healing touch and the extracts from plants. “Shushruta Samhita” & “Charak Samhita” mentioned different modalities for Vedanasthapan (pain management). Vedana(Pain) defined as a perception associated with tissue injury or process of disease(samprapti of vyadhi).

Vedanasthapna (Pain relieving) drug mentioned in Ayurveda are having firm scientific background but these drugs has to be re-established on modern lines.

The ideal analgesic:-

- 1) Should obliterate Vedana (pain) and diminish the anxiety associated with it.
- 2) Should be free from unwanted ADR's.

3) Have a rapid onset.

4) Long acting.

5) Relatively inexpensive.

6) Well tolerated when administered orally.

In Ayurveda many drugs in Vedanasthapana, Shoolprashamana and Angmardprashamana ganas which has significant action on vedana

(pain).Vedanasthapana dravyas are same action mentioned above. As there is no collectively work on Vedanasthapna Gana which enforce us to study analgesic property of Vedanasthapana Gana in post operative pain management. So present study was performed clinically with Vedanasthapana Gana Dravya and modern criteria used for assessment of therapy.

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Ayurlog: National Journal of Research in Ayurved Science*A Web based quarterly online published Open Access peer reviewed National E-journal of Ayurved***INTRODUCTION^{1,2,3,4}:-**

There are many problems in our daily life concerning about our health e.g. discomfortness, generalized aches, unhealthiness. But human bear unhealthy/illness conditions of body up to starting of pain. Whenever pain starts with some illness patient will come immediately to doctor i.e. most of patient will come to doctor with pain as main symptom. So that our study include post operative pain management^{4,8}.

As like in Surgeries, Labour there is no healing or normal condition without pain. There is trauma due to Surgeries, Labour and patient may goes in shock or complications^{1,4}.

‘Pain the fifth vital sign’ - this is termed in hospital practice of USA with regular pain measurement with staff to be altered in the event of high scores⁸.

शलकटफलकदम्बपद्मकतुम्बमोचरसशिरीष
वज्जुलैलवालुकाशोका इति दशेमानि
वेदनास्थापनानि भवन्ति॥ च.सू.४/४७¹

OBJECTIVES :-**Need of study^{4,5}**

An effort will be made in this study to find a safe, effective & with no/minimal ADR's drug for post operative pain management (Vedanasthapanaupaya) for those who have undergone procedure. The present study is performed clinically with Vedanasthapana Dravya Ghan vati.

References

1. Charak Samhita 4/18(47)-Chakrapanidatta,
2. Nidana, Samprapti and management of Vedana-Madhava Nidana.
3. Principles of Anatomy & Physiology by-Tortora & Derrickson 11th edition.
4. Bailey's & Love short practice of surgery 25th edition Pg No.200-203.

AIM & OBJECTIVES :-**AIM :-**

“To study efficacy of drugs of Vedanasthapna Gana (Ghan Vati) in post operative pain management.”

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1) To evaluate the therapeutical concept of Shastrakarmottar Vedana with special reference to Post Operative Pain.

2) To study therapeutical concept of Vedana through Ayurveda texts.

3) To study Post Operative Pain from modern texts.

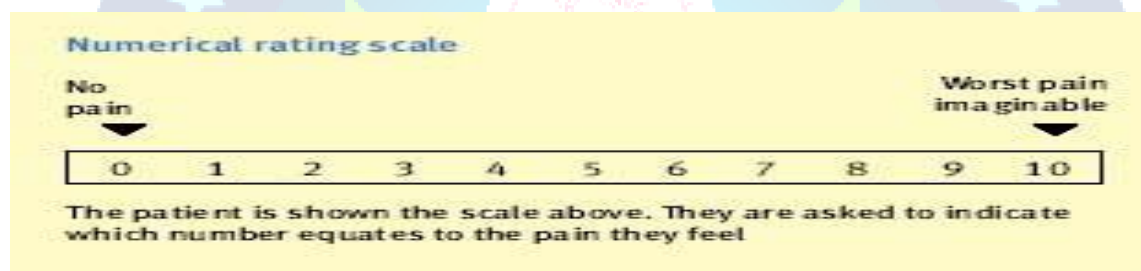
4) To compare the effect of Vedanasthapana Gana Dravya Ghan Vati(250mg).

5) Any new therapeutical & practical concept if found will be noted down.

Subjective Parameters:

1) Pain

2) Tenderness

SUBJECTIVE CRITERIA FOR ASSESSMENT :-**1) Pain :-**

	Category	Symptom	VRS Rating	Score
1)	No pain	No complaints of pain	0	0
2)	Mild pain	Bearable pain requires no treatment	1-3	1
3)	Moderate pain	Pain bearable upto some extent requires treatment	4-7	2
4)	Severe pain	Unbearable pain (Disturbs Sleep)	8-10	3

2) VRS (Verbal Rating Scale) For Tenderness :-

	Category	Signs	Score
1)	No tenderness	No complaints	0

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2)	Mild tenderness	On firm pressure	1
3)	Moderate tenderness	On gentle pressure	2
4)	Severe tenderness	Denies touching	3

Observation :-

Title	1 st day	2 nd day	3 rd day	4 th day	5 th day
Pain					
Tenderness					

Efficacy Table:-

Grade	Efficacy	% of relief
1	Excellent	100% Relief
2	Marked	>75% Relief but not complete Relief
3	Moderate	50% to 75% Relief
4	Mild	25% to 50% Relief
5	Ineffective	No Relief or marginal Relief

DrugReview:- शालकट्फलकदम्बपद्मकतुम्बमोचरसशिरीषवज्जुलैलवालुकाशोका इति दशेमानि वेदनास्थापनानि भवन्ति॥¹⁴ च.सू.४/४७

Dravya-Guna-Karma^{1 to 14} _

द्रव्य/	रस	विपा	वीर्य	गुण	प्रभाव	दोषघ्न	Physical & Chemical
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	L.Name/ Family		क				ता	Constituents
1	शाल/ <u>Shoerea</u> <u>robusta</u> / Dipterocar- paceae	कषाय	कटु	शी त	रुक्ष	वेदना - स्थाप न	रक्त- कफहर	Flavanoids, Tannins,Amin o Acids,FattyA cids, Essential oils
2	कट्फल/ <u>Myrica</u> <u>esculanta</u> / Myricaceae	कषायतिक्त कटु	कटु	उ ष्ण	लघु, तीक्ष्ण	-	कफ- वातहर	Steriods,Suga rs, Diaryl Heptanoid, Metacyclopha ne, Myricetin
3	कदम्ब/ <u>Anthoceph</u> <u>alus</u> <u>indicus</u> / Rubiceae	तिक्तकषाय	कटु	शी त	रुक्ष	वेदना - स्थाप न	त्रिदोष शामक	Ash=10%, Cinchotannic acid
4	पद्मक/ <u>Prunus</u> <u>cyrasoidus</u> / Rosaceae	तिक्त,कषाय	कटु	शी त	लघु, स्निग्ध	वेदना - स्थाप न	कफ- पित्त शामक	Amygdalin, Hydrocyanic acid
5	मौचरस/ <u>Salmaia</u> <u>malbarica</u> / Bombacace	कषाय	मधुर	शी त	लघु, स्निग्ध,पि च्छिल	-	कफ- पित्त शामक,	Gallic Acid, Tannic Acid, Catechutannic Acid, D-Galactose,

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	ae						व्रणशोथ हर	
6	शिरिष/ <u>Albizia</u> <u>lebbbeck</u> / Leguminos eae	कषायतिक्त, मधुर	कटु	अ ल्प उ ष्ण	लघु, रुक्षती क्षण	विष घ्न	त्रिदोष शामक	Tannin(7- 10%), Saponin, Cestesterol
7	अशोक/ <u>Saraca</u> <u>asoca</u> (<u>indica</u>)/ Leguminos ae	कषायतिक्त	कटु	शी त	लघु, रुक्ष	वेदना - स्थाप न विष घ्न	कफ- पित्त शामक	Ash=10%, Tannin Alliphatic Alcohol, Ester, Oelic, Linoelic, Palmitic, Steric Acids, Glycosides

Here we exclude (Lagenaria siceraria),
(Bambusa arundinaceae Willd.), &
Elvalukam (Prunus avium Linn.f.),
because of confusion about selection of
drug.

supervision of Ras-shatra Department as
per Sharangdhar samhita MK 2/1-kwatha
kalpana.

PLAN OF WORK :-**Materials & Methods**

Method of Preparation of Ghan vati^{1,2,3} :-

Preparation of Ghanvati prepared under

Study- Open Randomized.

Sampling- Random Sample Selection.

Informed valid consent was taken.

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Ayurlog: National Journal of Research in Ayurved Science*A Web based quarterly online published Open Access peer reviewed National E-journal of Ayurved***STUDY DESIGN :-**

Name of drug	Vedanasthapana Gana (Each Ghan Vati-250 mg)
Form	Ghan Vati
Dose^{1(b)}	2 Ghan Vati BD
Administration of drug	After Meal Two Times (Internal)
Study Duration	5 Days
No of Patients	35

Follow up was daily for 5 days i.e. 1st, 2nd, 3rd, 4th, 5th days of Treatment.

INCLUSION CRITERIA :-

1. Post operative patient.
2. Patients of age between 14 years -70 years.
3. Pain, tenderness at operated site.

STUDY END POINT :-

After 5 days of study.

References :-

- 1) Sharangadhar Madhyam Khanda 2/1.
- 2) Sharangadhar Madhyam Khanda 7/5.
- 3) Sharangadhar Madhyam Khanda 8/5.

EXCLUSION CRITERIA :-

1. Patients with post operative complication.
2. Any major complication arise during treatment.
3. Other diseases like carcinoma etc.

Statistical Analysis**Comparisons of Drug for pain (Before and after treatment)****Descriptive Statistics:-**

	N	Mean	Std.	Minimum	Maximum	Percentiles
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			Deviation			25th	50th (Median)	75 th
Pain_ BT	35	2.2571	.44344	2.00	3.00	2.000	2.0000	3.00 00
Pain_ AT	35	.2286	.42604	.00	1.00	.0000	.0000	.000 0

Wilcoxon Signed Ranks Test for pain:-**Ranks**

		N	Mean Rank	Sum of Ranks
Pain_AT -	Negative Ranks	35 ^a	18.00	630.00
Pain_BT	Positive Ranks	0 ^b	.00	.00
	Ties	0 ^c		
	Total	35		

a. pain_AT < pain_BT

b. pain_AT > pain_BT , pain_AT =
pain_BT**Test Statistics^b**

	Pain_AT Pain_BT
Z	-5.436 ^a
Asymp. Sig. (2-tailed)	.000

a. Based on positive ranks. b. Wilcoxon
Signed Ranks Test

From the above table, the statistic is based on the positive ranks, that the z-score is – 5.436 and this value is significant as $p < 0.001$. Since this value is based on the positive ranks,

It is concluded that after treatment there was a significant decrease in Pain.

Ayurlog: National Journal of Research in Ayurved Science*A Web based quarterly online published Open Access peer reviewed National E-journal of Ayurved***Descriptive Statistics for Tenderness**

	N	Mean	Std. Deviation	Minimum	Maximum	Percentiles		
						25 th	50 th (Median)	75 th
Tenderness AT	3 5	2.3429	.48159	2.00	3.00	2.00	2.0000	3.00
Tenderness BT	3 5	.0857	.28403	.00	1.00	.000	.0000	.000

Ranks

		N	Mean Rank	Sum of Ranks
Tenderness_AT -	Negative Ranks	35 ^a	18.00	630.00
Tenderness_BT	Positive Ranks	0 ^b	.00	.00
	Ties	0 ^c		
	Total	35		

a. Tenderness_AT < Tenderness_BT

b. Tenderness_AT > Tenderness_BT

c. Tenderness_AT = Tenderness_BT

Test Statistics for Tenderness^b

	Tenderness_AT - Tenderness_BT
Z	-5.387 ^a
Asymp. Sig. (2-tailed)	.000

a. Based on positive ranks. B. Wilcoxon Signed Ranks Test

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It is concluded that after treatment there was a significant decrease in Tenderness.

Discussion:-

There is 77% completely relief in Post Operative Pain & 91% relief in Tenderness by Vedanasthapna Ghan Vati Drug.

Conclusion:-

This study concludes that the Vedanasthapna Ghan Vati drug of efficient in Post operative Pain and Tenderness management.

There is further requirement of treatment after 5 days of study in Vedanasthapna Ghan Vati to get more result.

Here 90% patients had moderate improvement, 6.66% patients had mild improvement, 3.33% patients had Markedly improvement in all sign and symptoms.

The study found that Vedanasthapna Ghan Vati has effect on mild to moderate post operative pain & Tenderness with no side effects.

Finally it has been concluded that, this treatment is moderately effective in

relieving the symptoms Pain & Tenderness.

Scope for further study:-

- 1) To study drugs of Vedanasthapna Gana to cellular level which helps to improve the potency of drug.
- 2) Further Clinical study of Ayurveda drug and it's properties at cellular could be compare by keeping views of side effects of modern drug to help our elderly people in our Society.
- 3) Detail pharmacokinetic and pharmacodynamic drug study to find of specific action of drug on post operative pain in major surgeries.
- 4) It could be research topic whether Vedanasthapna Gana Dravya can be used in major surgeries as analgesic, Peri-operative anaesthetic drug.
- 5) It could be the study topic for the excluded drugs of our study.

References –

1. Database of Medicinal Plants Used in Ayurveda (Central Council for Research in Ayurveda & Siddha).
2. The Ayurveda Pharmacopiea of India Part 1st.

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3. Bhavaprakasha Nighantu, Dr. Krushnachandra Chuneekar, Dr. Gangasahaya Pandey.

4. Chakrapani Tika & Charak Samhita By Ravidutta Tripathi Charak Sutrasthana 4 / 47.

5. Dhanwantari Nighantu, Acharya Priyawat Sharma, Dr. Guruprasad Sharma.

6. Pub Med Internate Website.

7. Kaiyadev Nighantu Acharya Priyawat Sharma, Dr. Guruprasad Sharma.

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SWAPNIL MORE

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