



CLINICAL STUDY ON POST OPERATIVE PAIN MANAGEMENT WITH VEDANA STHAPAKA KASHAYA IN ARSHAS

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ABSTRACT

Background: Post-operative pain is the common outcome of the Surgery and the ability to alleviate this pain is one of the most important goals for surgery. In case of *ksharasutra* ligation the patient experiences agonizing pain in the wound which may persist for long time. To manage this we have to rely on the modern analgesics which are having lots of side effects. **Objective:** To evaluate the efficacy of Vedana Sthapaka Kashaya in post operative pain management of patients undergone *ksharasutra* ligation for Arshas. **Methodology:** In this study minimum 40 patients were selected and placed in two groups by simple random sampling method i.e. 20 in trial and 20 in standard groups. In trial group “Vedana sthapaka kashaya 35 ml TID” was given where as in the standard group “Tab. Diclofenac sodium 50 mg BD” was given. The therapeutic effects were analyzed by using the subjective parameter. The duration of treatment was 5 days and clinical assessment was done every day. **Result:** At the end of clinical study all 20 patients in group A and 20 patients in group B showed maximum improvement. **Conclusion:** The study showed both Diclofenac sodium and *Vedana sthapaka kashaya* were proved to be effective in the management of post operative pain in the patients who undergone *ksharasutra* ligation in *arshas* but comparatively, Tab. Diclofenac sodium was found superior than *Vedana sthapaka kashaya*.

KEYWORDS: *Vedana*, *Postoperative pain*, *Ksharasutra ligation*, *Vedana sthapaka kashaya*, *Diclofenac sodium*.

INTRODUCTION

Surgery gives fastest relief from various diseases but the common outcome is the post operative pain which comes under acute pain. Pain is said to be an important indicator of abnormal process going inside the body which urges the person to take required treatment.^[1] Early treatment of acute post operative pain may prevent the development of chronic post operative pain.

In *Ayurveda* pain can be co-related with *Vedana*. *Acharya Sushruta* mentioned that *Vedana* can not arise in body without involvement of the *Vata Dosha*.^[2] So, the drug or procedure which alleviates *Vata Dosha* acts as a potent *Vedana Sthapaka*.

Now days *Arsha*^[3] is a very common disease. It mainly occurs in ano-rectal region which is a very sensitive area. *Acharya Sushruta* mentioned *Shashtra Karma* or surgical procedure for the management of *Arshas*.^[4] When any surgical or para-surgical procedure is done in ano-rectal region it creates so much pain which can be considered as post operative pain and it needs an urgent medication. But the post operative pain management in *Ayurvedic* point of view is still a setback. So, in *Ayurvedic* field

there is a need to establish an effective treatment for pain management.

In the present study the patients who had undergone *ksharasutra* ligation for *Arshas* were subjected to *Vedana Sthapaka Kashaya* for Post Operative Pain Management. An assessment of the analgesic effects was done and the results were compared with modern Non Steroidal Anti Inflammatory Drug Diclofenac Sodium.^[5]

So, in this study an effort was made to evaluate the analgesic effect of *Vedana Sthapaka Kashaya*^[6,7] in post operative pain management of *Arshas*.

MATERIALS AND METHODS

Sample source: Patients attending OPD and IPD of Alva's Ayurveda Medical college Hospital, Moodubidire, medical camps and other referrals were selected. Each patient was selected for the trial after voluntary consent.

Sample size: Minimum 40 patients who were fit for the study as per inclusion criteria were selected randomly and placed into 2 equal groups, Group A (Standard Group) and Group B (Trial Group).

Study design: Open clinical study.

Selection Criteria: The cases were selected strictly as per the pre-set inclusion and exclusion criteria.

Diagnostic criteria

Patients who have undergone *Ksharasutra* ligation for *Arshas*.

Inclusion criteria

1. Patients of both sexes in age group of 21-70 years were included.
2. Patients fulfilling the diagnostic criteria.

Exclusion criteria

1. Patients having unexplained severe pain before operation.
2. Patients who develop other complications apart from pain in post operative period.
3. Pregnant women were excluded.

INTERVENTIONS

A total number of 40 patients were randomly selected for the study. They were divided into 2 groups of each 20 patients.

Group A - (Standard Group)

Sample size: 20 patients

Tab. Diclofenac sodium administered orally

Dose: 50 mg B.D. after food

Duration: 5 days

Group B - (Trial Group)

Sample size: 20 patients

Vedana sthapaka kashaya administered orally

Dose: 35 ml T.I.D. before food

Duration: 5 days

Criteria for assessment were based on Mc Gills Pain Score Index. Review of intensity of post operative pain was done everyday up to 5 days. Findings were subjected for statistical analysis.

Materials

- *Vedana sthapana gana dravya*
- Tab. Diclofenac sodium 50mg

Preparation Of The Kashaya

- ✓ The drugs of *vedana sthapana gana* i.e. *shala, katphala, kadamba, padmaka, tumba, mocharasa, shirisha, vanjula, elavaluka, ashoka* were made into coarse powder form separately.
- ✓ Then the coarse powders of all the drugs were taken in equal quantity.
- ✓ One part of coarse powder was mixed with 16 parts of water and boiled.
- ✓ When one eighth of initial content was remained, it was filtered and thus the kashaya was prepared.

Drug presentation- It was presented in the form of kashaya and was administered orally 35ml TID before food.

ASSESSMENT CRITERIA

Subjective Criteria

- Post operative Pain.

DISCUSSION

Table 1: Showing Effectiveness on Pain of Both Groups.

Post op. Pain	EFFECTIVENESS %				
	1st day	2nd day	3rd day	4th day	5 th day
Group A	11.76	25.88	35.29	52.94	74.11
Group B	6.024	15.662	31.325	49.327	65.06

Table No. 2: Effect Of The Treatment In Group A.

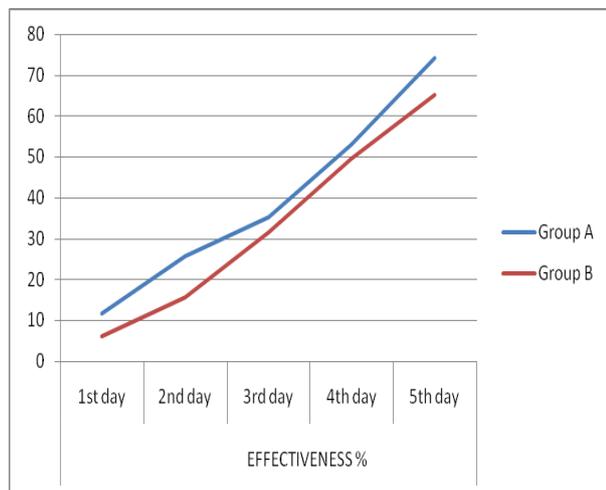
Symptoms	MEAN SCORE				%	SD	SE	t value	P value
	BT		Mean AT	BT-AT					
Pain on McGill pain score	4.25	AT1	3.75	0.50	11.76%	0.550	0.123	4.359	<0.001
		AT2	3.15	1.10	25.88%	0.587	0.131	6.850	<0.001
		AT3	2.75	1.50	35.29%	0.550	0.123	13.077	<0.001
		AT4	2.00	2.25	52.94%	0.562	0.126	18.291	<0.001
		AT5	1.10	3.15	74.11%	0.852	0.191	18.905	<0.001

Table No. 3 EFFECT OF THE TREATMENT IN GROUP B.

Symptoms	MEAN SCORE				%	SD	SE	t value	P value
	BT		Mean AT	BT-AT					
Pain on McGill pain score	4.15	AT1	3.90	0.25	6.024	0.553	0.124	2.517	<0.01
		AT2	3.50	0.65	15.662	0.513	0.115	5.940	<0.001
		AT3	2.85	1.30	31.325	0.489	0.109	12.365	<0.001
		AT4	2.10	2.05	49.397	0.447	0.100	23.267	<0.001
		AT5	1.45	2.70	65.060	0.759	0.170	16.480	<0.001

Table No 4: Effectiveness Comparison Between The Groups.

Post op. Pain	EFFECTIVENESS %				
	1st day	2nd day	3rd day	4th day	5 th day
Group A	11.76	25.88	35.29	52.94	74.11
Group B	6.024	15.662	31.325	49.327	65.06



Graph No.1: Effectiveness Comparison Between The Groups.

Discussion on comparative effect of both the Group

Pain was reduced by 74.11% in Group A & 65.06% in Group B. Both the groups showed improvements with significant p-value of < 0.001. Severity of pain in both the groups is mainly due to aggravation of vata dosha and irritation of *sangyavaha srothas* caused by *ksharasutra* ligation. According to modern science Post operative pain initiates by injury to the tissue, ultimately the nerve ending and pain receptors present in the skin and other tissue. But the quantum of pain depends upon Psychological factor, Neurological factor and Constitutional status of the individual.

CONCLUSIONS

The review of literature and clinical study provides certain useful conclusions.

- 1) *Ksharasutra* ligation in *Arsha* will cause lot of pain in post operative period and this pain has to be managed for better acceptance of the procedure.
- 2) The pain was well tolerated by the patients of both the groups from 3rd post operative day.
- 3) There were no adverse effects observed due to drug in both the groups during the study.
- 4) In *ksharasutra* ligation, post operative pain management using Diclofenac sodium tablets has been effective so far.
- 5) *Vedanasthapaka kashaya* was also found effective in relieving pain.
- 6) Although there were complain of mild pain by the patients of Group B (*vedanasthapaka kashaya*) even before completion of 8th hour which was speculated time for re-administration of *kashaya* in post operative period. But pain was well tolerated by the

patients. There were no such complains observed in Group A (Tab. Diclofenac sodium) patients.

- 7) There is no evidence of any secondary infection seen, in both the groups.
- 8) *Vedanasthapaka kashaya* also found to be useful in healing of the wound far earlier when compared to Diclofenac sodium tablets.
- 9) From first assessment day onwards got statistically significant changes in both the groups.
- 10) Group A got 74.11% result in relieving the post operative pain.
- 11) Group B got 65.06% result in relieving the post operative pain.
- 12) Though the Trial group is showing less result than the standard group but statistically showing significant result i.e. P value <0.001.

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