

A Comprehensive Clinical Study with *Ajamodakataila Matrabasti* in the Management of *Katigraha*

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Abstract

Katigraha is a *Vataja Nanatmaja Vyadhi* and it is explained as a condition characterized by *Shula* and restricted movements of *Kati* caused by *Shuddha* or *Sama Vayu*. *Basti* is considered as supreme therapy for *Vatavyadhis*. *Matrabasti* has dual action both *Shodhana* as well as *Brimhana* effect. In classics, no references are available for *Ajamodakataila*. So, it is considered as *Anubhuta yoga* and in the present study two ingredients are considered for the preparation of *Ajamodakataila*. One is *Ajamoda* and the other is *Eranda taila*, which is taken as the base for this *taila*. Both the ingredients of *Ajamodakataila* are having *Vata Kapha hara* property. A total of 15 patients received *Ajamodakataila Matrabasti* and showed 74.81% result with high significance in decreasing pain, stiffness, tenderness, improving range of movements and walking ability. *Ajamodakataila Matrabasti* is more effective clinically and statistically in almost all the parameters.

Keywords: *Katigraha*, *Basti*, *Matrabasti*, *Ajamodakataila*, *Ajamoda*, *Erandataila*

INTRODUCTION

Katigraha is characterized by pain and restricted movements of the *Kati* [1–3]. Low back pain is a ‘human condition’, with 60–80% of the world population experiencing pain at sometimes in their lives. Busy professional and social life, improper sitting posture in offices, factories, continuous and over exertion, jerking movements during travelling and sports etc., have laid an undue pressure over the musculoskeletal system. These contributes to the manifestation of diseases such as low back ache, sciatica etc.

The *Udbhavastana* of *Katigraha* is *Pakvashaya* and generally whenever the *Doshas* are aggravated

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in *Pakvasaya* region, they have to be eliminated through *Guda* and which is possible by *Virechana* and *Basti* [4]. *Basti karma* is a *Panchakarmachikitsa* that is applicable in *Samanya Vata Vyadhis* [5]. *Matrabasti* is a variety of *SnehaBasti*, so specially indicated in diseases of *Kevala vata* [6]. This procedure is easy as well as convenient for patient as well as physician.

Here in this trial, the *taila* processed with single drug *Ajamodaka* as *Matrabasti* [7–9] was selected, which is easily available and also cost effective. An open-label clinical trial was conducted to assess the efficacy of *Ajamodakataila Matrabasti* in *Katigraha* keeping in mind the high prevalence, rate of disability, intensity of symptoms of disease and lack of current effective treatment.

OBJECTIVES OF THE STUDY

- To assess the efficacy of *Ajamodakataila Matrabasti* in *Katigraha*.
- To evolve a comprehensive remedy for *Katigraha*.

MATERIALS AND METHODS

Source of Data

Patient suffering from *Katigraha* were selected from the O.P.D and I.P.D. of K.V.G. Ayurveda Medical College and Hospital Sullia, Karnataka duly following the inclusion and exclusion criteria.

Study Design

A comprehensive clinical study.

Sample Size

A total of 15 patients received *Ajamodakataila Matrabasti*.

Diagnostic Criteria

- *Katishula*.
- Reduced range of movement of *Kati*.
- Tenderness at *Kati pradesha*.

Inclusion Criteria

- Patients having the classical *Lakshanas* of *Katigraha* were selected.
- Patients of both the genders who were *Bastiyogyaa* according to *Ayurveda* classics irrespective of chronicity, occupation, and socioeconomic status.
- Patients between 20 and 60 years of age were selected.

Exclusion Criteria

- Patients who were *Bastiyogyaa* according to *Ayurveda* classics.
- Patients with the association of other serious disorders.

Assessment Criteria

Assessments were made on the basis of improvements in signs and symptoms for which suitable scores were given and the data were analysed statistically.

1. Pain on rest (on lying)
2. Pain on rest (on sitting)
3. Pain on movement (on walking)
4. Tenderness
5. Lumbar flexion
6. Lumbar extension
7. Right lateral movement
8. Left lateral movement
9. Walking time to cover 21 m of distance

Grading (Table 1)

Table 1. Gradings of the Assessment Criteria.

0	No Complaint
1	Mild
2	Moderate
3	Severe

Overall Assessment of Clinical Response (Table 2)

Table 2. Assessment of the Overall Effect of Treatment.

Total effect	Relief (in %)
No relief	0% relief in sign and symptoms
Mild improvement	1–30% relief in sign and symptoms
Moderate improvement	31–60% relief in sign and symptoms
Marked improvement	61–99% relief in sign and symptoms
Complete improvement	100% relief in sign and symptoms

Posology

Internal use 72 ml (one and half *pala*) in the form of *Matrabasti* [10, 11].

Study Duration

Matrabasti: 8 days [12]

Follow up: 16 days

Total study duration: 24 days

Preparation of *Ajamodakataila*

One part of cleaned *Ajamoda* seeds were taken in a vessel. To this, 16 parts of water was added and reduced to 1/8th. One part of *Ajamoda Kalka*, 4 parts of plain *Erandataila* and 16 parts of prepared *Kwatha* were mixed and kept over mild flame till it attained *Madhyama Paka Lakshana* [13].

Treatment Schedule

The patients were subjected to *Sthanika Mridu Abhyanga* and *Swedana* prior to the administration of *Matrabasti*. After this the patients were advised to lie down on left lateral position and *Basti* was administrated. *Basti Pratyagamana Kala* was noted.

OBSERVATIONS

The present study included 33% males and 67% females. About 40% were in the age group of 41–50 years; 53.33% were housewives; 60% belonged to lower middle classes. The habits of maximum patients were mixed (93.33%) that is, *Vishamagni* 60%, *Vatakapaprakruti* 46.67%. About 80% patients fell under below 1 year chronicity; maximum patients were having standing work daily (40%) followed by sitting work (26.67%). Gradual onset was observed in 80% patients and 20% patients showed sudden onset; maximum courses of patients were intermittent course (73.33%). The weights of maximum patients were under 61–70 kg (36.67%) and others were 71–80 kg (20%), 51–60 kg (6.67%), 41–50 kg (20%) and 91–100 kg (6.67%), respectively.

RESULTS

Effect on Criteria

Effect on pain on rest (on lying), before and after the treatment showed reduction in the mean score from 2.33 to 1.00 and after follow up it became 0.27 with 89% improvement. It was found to be statistically significant ($P < 0.001$) (Table 3).

Effect on pain on rest (on sitting), the mean score was 2.53 before treatment that reduced to 1.07 after treatment and after follow up it became 0.47 with 82% improvement which showed highly significant improvement ($P < 0.001$) (Table 3).

Effect on pain on movement (on walking) was observed with a mean reduction of score from 2.40 to 1.27 after treatment. After follow up, again it reduced to 0.93 with 61% improvement showing statistically significant change ($P < 0.001$) (Table 3).

Effect on tenderness showed that the mean score was 2.47 before treatment, which was reduced to 1.07 after treatment. After follow up, it became 0.27 with 89% improvement and it was a statistically significant change ($P < 0.001$) (Table 3).

Table 3. Results of the Assessment Criteria.

Criteria	BT	AT	Fu	%	SD	SE	T-value	P-value
Pain on rest (on lying)	2.33	1.00	0.23	89	0.594	0.153	13.48	<0.001
Pain on rest (on sitting)	2.53	1.07	0.47	82	0.704	0.182	11.37	<0.001
Pain on movement (on walking)	2.40	1.27	0.93	61	0.743	0.192	7.64	<0.001
Tenderness	2.47	1.07	0.27	89	0.775	0.200	11.00	<0.001
Lumbar flexion	2.33	1.40	1.13	51	0.414	0.107	11.22	<0.001
Lumbar extension	1.60	0.73	0.33	79	0.798	0.206	6.14	<0.001
Right lateral movement	2.13	1.13	0.53	75	0.737	0.190	8.41	<0.001
Left lateral movement	2.13	1.13	0.53	75	0.737	0.190	8.41	<0.001
Walking time to cover 21 m of distance	2.33	1.27	0.80	66	0.640	0.165	9.27	<0.001

Effect of lumbar flexion was observed with a mean reduction of score from 2.33 to 1.40 after treatment. After follow up, again it reduced to 1.13 with 51% improvement which shows statistically significant improvement ($P<0.001$) (Table 3).

Lumbar extension was observed with a mean reduction of score from 1.60 to 0.73 after treatment and after follow up it again reduced to 0.33 with 79% improvement. Data showed statistically significant improvement ($P<0.001$) (Table 3).

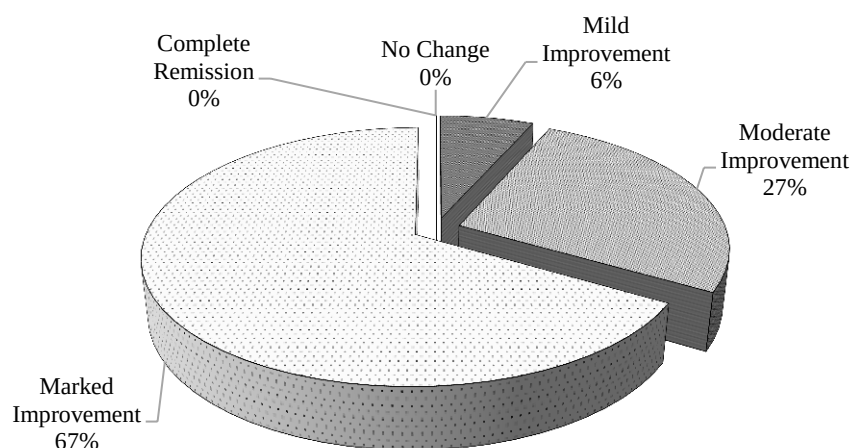
Right lateral movement was observed with a mean reduction of score from 2.13 to 1.13 after treatment and after follow up it again reduced to 0.53 with 75% improvement which showed statistically significant improvement ($P<0.001$) (Table 3).

Left lateral movement was observed with a mean reduction of score from 2.13 to 1.13 after treatment and after follow up it again reduced to 0.53 with 75% improvement showing statistically significant improvement ($P<0.001$) (Table 3).

Time taken to cover 21 m distance was observed with a mean reduction of score from 2.53 to 1.27 after treatment and after follow up it again reduced to 0.80 with 66% improvement. Analysis of this data showed statistically significant improvement ($P<0.001$) (Table 3).

Overall Effect of the Therapy

None of the patients were completely cured or unchanged. One patient (6%) got mild improvement and four patients (27%) got moderate improvement. A total of ten patients (67%) got marked improvement. Overall effect of *Ajamodakataila Matrabasti* was 74.81% (Figure 1).

**Figure 1.** Overall Effect of the Therapy.

DISCUSSION

Katigraha is a condition in which the *Gatatva* of *Vata* can be considered. Due to consumption of *Vata Vardhaka Ahara* and *Vihara*, the aggravated *Vata* while moving throughout the body, lodges in *Katipradesha* which produces stiffness and pain. *Katigraha* is a *Vata Vikara*, related to *Asthisandhis* and *Dhatukshaya* is the resultant. So *Snehana* in the form of *Matrabasti* would be an ideal line of treatment given with *Ajamodakataila*. The ingredients of the *taila* were *Ajamoda*, which comes under *Shoolaharadashamani* and another was *Erandataila*, which was taken as the base for this *taila yoga*. *Katighara* is having the involvement of *Kapha Dosha* along with *Vata* and both the ingredients of *Ajamodakataila* were having *Vata Kaphahara* property. *Katigraha* involved in *Asthidhathu*, so eight days of *Basti* were needed for getting the nourishment of *Asthidhathu*. Here the baseline data were compared with the data taken after 16 days of therapy because the *Pariharakala* of *Basti* as double the period of administration of *Basti karma*.

Probable Mode of Action

The drugs administered through the anal route that is, *Pakwashayagatabasti* directly act over the *Udbhavasthan* of *Vatavyadhi* including *Katigraha* as *Pakvashaya*. Action of *Matrabasti* is possible by *Anupravarana* of *Bastidravya*, which contains *Sneha* easily moves up to *Grahani*. *Matrabasti* acts mainly on *Asthi* and *Majjavahasrotas*. *Asthi* is the *Ashrayasthan* of *Vatadosha*. *Dalhana* says that *Pureeshadharakala* and *Asthidharakala* are one and the same. So if *Pureeshadharakala* gets purified and nourished; the *Asthivahasrotas* will also be purified and nourished. *Pittadharakala*, *Majjadharakala* and *Grahani* part takes in the action of *Matrabasti*. *Bastidravya* enters till *Grahani* (*Pittadhara Kala*) which is the seat of *Agni*. The nutrients may get absorbed and thereby nourishes the *Majjadharakala*, which is having a strong bond with *Pittadharakala* and *Vata*. *Matrabastidravya* is absorbed from the upper rectal mucosa, and is carried by the superior mesenteric vein into the portal circulation and enters into the liver. Secondly, the portion absorbed from the lower rectum enters directly into systemic circulation via middle and inferior hemorrhoidal veins. This indicates that due to more vascularity in this area absorption rate is high.

Advantages

- The major advantage of this route is, the total gastric irritation is avoided and also metabolism as some portion of absorption from lower rectum directly enters into systemic circulation.
- The absorption of *Sneha* is also enhanced by its hypo-osmotic nature.
- Some studies have shown that *Matrabasti* have got a property to regulate sympathetic activity, decreases adrenalin and noradrenalin secretion.
- It helps in the balance of autonomic nervous system.
- Also plays major role in maintaining normal bacterial flora of the colon.

CONCLUSION

Katigraha is commonly seen as a prominent problem in the society. The disease *Katigraha* is a *Sthanavishesha Vatavyadhi*. It was concluded that *Ajamodakataila Matrabasti* showed high significance in decreasing pain, tenderness and improving range of movements and walking ability ($P < 0.001$).

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