

**A COMPARATIVE STUDY OF THE EFFICACY OF
KAṢĀYA KALPANĀ & GHANASĀRA KALPANĀ
WITH SPECIAL REFERENCE TO PATŌLĀDI
KAṢĀYA FOR AMLAPITTA**



**Thesis submitted for the Degree of Master of Philosophy
(Āyurveda)**

Institute of Indigenous Medicine, University of Colombo.

S.L.Munasinghe

Supervisor

**Dr (Mrs.) D.K.Vithanage
D.A.M.S.(Hons.)
M.D. Rasasāstra & Bhaiṣajyakalpanā
G.A.U. Jamnagar, India.
Head of the Department
Institute of Indigenous Medicine,
University of Colombo.**

Co Supervisor

**Dr (Mrs.) S.J.Nawaratna.
M.B.B.S.(Cey.)D.E.M(Col.)**

**Department of Dravyaguna Vignāna
Institute of Indigenous Medicine
University of Colombo
Rajagiriya
Colombo
SRI LANKA**

2000 November

M Phil 96/44

SUMMARY

The aim of this study was to investigate the validity to claim using *kaṣāya* (Decoction) and *ghanasāra* (semi-solid extract) kalpana. Patōlādi *kaṣāya* is recommended for the treatment of Amlapitta in Ayurvedic system of Medicine. Vitiated of pitta dosa is the main causative factor of Amlapitta. This vitiated dosa could be subsides by using drugs having the pitta samana property. Drug having madhura, tikta rasa. Madhura vipāka, laghu guna and sita vīrya is the best which could be selected for this purpose. According to pharmacological action produced by Patoladi *kaṣāya* as shown in chapter two. Patōlādi *kaṣāya* and *ghanasāra* has evaluated the efficacy of these two kalpanās. Water soluble extract of *kasaya* were prepared according to Auṣhadha Sangraha and semi solid water soluble form of *ghanasāra* were prepared according to bhaiṣajya kalpanā vignāna.

For this experimental study Cross bred Albino rats were used and gastric lesions were induced in healthy adult male rats (175-225g) using absolute ethanol. Either 1mL of distilled water (n=18) or 1mL of different concentration of freshly prepared *kaṣāya* or *ghanasāra* (30%, 15%, or 7.5%) was orally administered (n=6/ treatment group) 30min. before ethanol administration, 1h following ethanol treatment the animals were killed by an over dose of ether, the stomachs were removed and numbers and length of lesions were recorded.

Both *kaṣāya* and *ghanasāra* significantly impaired gastric lesions (measured in terms of length and number) in a dose depended manner with equal potency (EC_{50}) for *kaṣāya* length of lesions 12%, number of lesions 11%, (EC_{50}) for *ghanasāra* length of lesions 12%, number of lesions 16%) Patoladi *kasaya* increased carbohydrate content and decreased peptic activity significantly in pylorus ligated rats (n=6). Further the Patōladi *kaṣāya* significantly increased the amount of mucus adhered to gastric lining (using Alcian blue technique). It was concluded that Patōladi *kaṣāya* (both in *kasaya* and *ghanasāra* form) posses potent gastroprotective activity as claimed in Ayurvedic 168

medicine. Thus it may be justifiable to therapeutically use Patōladi *kaṣāya* either in *kaṣāya* or *ghanasāra* form for the treatment of Amlapitta. The present study was done on 40 patients selected from O.P.D. at the Āyurvedic Teaching Hospital at Borella. The test drug Patōladi *kaṣāya* was given to two forms. That were *kaṣāya* form^{and} *ghanasāra* form.

The dose of 120 mL of *kaṣāya* was prescribed for two times a day before meals.

The dose of 5g of *ghanasāra* was prescribed for two times a day before meals.

These two drugs were prescribed for a short period of 7 days. The diet free from excessive spicy and sour items was advised. The patients were followed with treatment for 1 – 2 months. At the onset a general preface out-lining the historical aspect of the subject was given. The animal research had been done as a part of the study, prior to the commencement of clinical study.

.In the clinical study the patients were diagnosed by presence of 'Dāha' (burning sensation of abdomen), 'Śūla' (pain in abdomen and Hṛt), 'Utklēśa' (nausea), 'Chardi' (vomiting), 'Amla', 'tikta' udgāra (Bitter and sour eructation) these symptoms are disturbances in digestion. For this research gastric juice of the human being are not analyzed because according to the animal research this drug did not reduce the acidity of gastric juice.

Symptoms relived by Patōladi *kaṣāya* and *ghanasāra* were analyzed into major symptoms like 'dāhā', 'śūla', 'chardi', 'amlōdgara' and 'utklēśa'. General symptoms such as 'aruci', 'gurukōstha', 'agnimāndaya', 'avipāka' and 'gourava' etc. Associated symptoms such as 'śiṛṣaśūla', 'angamarda', 'angasāda', 'bhrama' and 'klama' etc. had being discussed separately.

Results of Patōlādi *kaṣāya* on Amlapitta. The relief of 'dāha' 60.7% which was highly significant. Relief of 'śūla' was 59.4% and in 'chardi' 61.1% both were highly significant at the level of $P < 0.001$ and on 'amlōdgāra' 57% relief which was also highly significant. According above facts Patoladi *kasaya* had significant relief in all cardinal symptoms of this disease (Table No. 4-23). 'Amlodgar' was little lower in comparison to 'dāha', 'śūla', 'chardi', and 'utklēsa' but all symptoms were statistically significant at the level of $P < 0.001$. Result of Patōladi *ghanasāra* on cardinal symptoms of Amlapitta. The relief of 'dāha' 65%. In 'śūla' was 74.4%, In 'chardi' was 75% and in 'amlōdgāra' was 67.5% all the above symptoms statistically significant at the level of 0.001 but 'utklesa' of *ghanasāra* treated group had 41.7% relief, and it was significant at the level of $P < 0.01$ with comparison of *kaṣāya* and *ghanasāra* of the symptoms of utklēsa. In *kaṣāya* it was more significant than *ghanasāra*. (Table No. 4-23,24).

These symptoms were produced due to 'Annavaḥa srotodusti', hence the Patōlādi *kaṣāya* had good curing effect on 'Annavaḥa Srotas'. General symptom Aruci was relieved by 68.8%. Guru kostha was relieved by 70%. 'Agni mandaya' was relieved by 53.3%. Avipāka was relieved by 65.67% and 'Admana' were relieved by 65.6%. All general symptoms of 'Aruci', 'Gurukōṣṭha', 'Agnimandaya', 'Avipāka' and 'Ādmana' of general symptoms statistically significant at the level of $P < 0.001$. But only relief of 'Gourava' was 60% that was statistically significant at the level of 0.01. Results of Patoladi *Ghanasāra* on Amlapitta patients. The relief of Aruchi was 58.6% and in 'Gurukostha' was 65.4% in 'Agnimāndaya' was 60% in 'Avipaka' was 61.3%, in 'Ādmāna' was 60.9% and all 'Aruci', 'Gurukōṣṭha', 'Agnimāndaya', 'Avipāka' and 'Ādmāna' of General symptoms statistically significant at the level of $P < 0.001$. But only relief of 'Gourava' was 55%, that was statistically significant at the level of 0.01. But comparison of both *kaṣāya* and 'statistically significant at the level of $P < 0.01$ (Table No. 4-25,26).

Result of Patōlādi *kaṣāya* of associated symptoms of Amlapitta the relief of 'śirṣāsūla' 55.9%, in relief of 'angamarda' was 56% and 'angasāda' was 62.4% and 'bhrama' was 68.4% and 'klama' was 53.3%.

RESULTS

EXPERIMENTAL STUDY:

All above four symptoms statistically significant at the level of $P < 0.001$ only relief of 'mutradāha' was 75% but it had statistically significant at the level of $P < 0.01$.

Consideration of relief in associated symptoms of Patōlādi *Ghanasāra* treated group showed that relief of 'sirsasul'a was 59.5% in 'angamarda' was 57.1% in 'angasada' was 68.4%. These three symptoms statistically significant at the level of $P < 0.001$ relief of 'bhrama' was 53.3% and 'klama' was 61.5 Both symptoms were statistically significant at the level of $P < 0.01$ only symptom relief of 'mutradāha' was 50%. That was statistically significant at the level of $P < 0.05$ (Table No. 4 – 27,28)

When used the one sample sign test for all cardinal, general and associated symptoms of Amlapitta Were statistically significant at the level of $P < 0.05$.

CLINICAL STUDY:

- (a) Amlapitta is found in all age groups except in children
- (b) Faulty dietary habits are found to be the main etiological factors of Amlapitta
- (c) Mental etiological factors are reported by maximum number of patients
- (d) The efficacies of both drugs have shown similar results in relation of cardinal general and associated symptoms of Amlapitta
- (e) A small dose of scrap solid form of Patōlādi *kaṣāya* i.e. *gūṣṭhasūta* can be used for the treatment of Amlapitta instead of large dose of *kaṣāya*.

