A COMPARATIVE CLINICAL STUDY OF TRUNAPANCHAMULA KWATHA AND HARITAKYADI KWATHA IN THE MANAGEMENT OF PITTAJA MUTRAKRICCHRA

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KEYWORDS: Pittaja Mutrakricchra, Trunapanchamula Kwatha, Haritakyadi Kwatha.

ABSTRACT

The quest of man to live happily lies in being healthy. The task of medicine is to preserve and to restore the health by reliving the suffering. The pain is universally understood as a sign of disease. It is a most common symptom that brings a patient to physician’s attention.

Pittaja Mutrakricchra is a common disorder affecting all age groups and both sexes. It is not limited to particular class of the society. It is Shoola (Ruja) Yukta daha pradhanaka pakwasaya samuttha Samanya Vyadhi affecting urinary system and leaving the person disable and disappointed from the daily routine activity. Various Acharyas mentioned the Shodhana and Shaman chikitsa for it. The Trunapanchamula kwatha and Haritakyadi kwatha are mentioned as Mutrakricchrahara in Bahisajya Ratnavali, Chakradatta and Yogaratnakara. Also these Kwatha does Pittahara, Vatanuloman and Basti shodaka. Hence both the combination is worth tested for their efficacy in Pittaja Mutrakricchra.

For present study 40 patients diagnosed as Pittaja Mutrakricchra were randomly selected from Dr. B.N.M.E. Trust’s Shri Mallikarjuna Swamiji Post Graduate and Research Center, Bijapur. Patients thus selected were randomly allocated in 2 groups Group A and Group B. Patients received Trunapanchamula kwatha & Haritakyadi kwatha 40 ml with Sukoshna jala as Anupana before lunch and dinner for 30 days respectively.

The overall effect of therapies showed both Trunapanchamula kwatha and Haritakyadi kwatha having better result in management of Pittaja Mutrakricchra.

INTRODUCTION

Maharishi Sushruta explains the importance to learn other fields of science in Sutra sthana. Vagbhata has also stressed that science should always adapt to the changes of the generation. Mutrakricchra is a disease of Urinary tract in when the person experiences difficulty in micturition.

Urinary Tract infection is undoubtedly one of the common medical as well as surgical, gynecological and obstetrical problems in all under developed, developing and developed countries of world. Burning during micturition along with pain is universally understood as a sign of Urinary disorder.

Pittaj Mutrakricchra is shoola (ruja) yukta daha pradhanaka pakwasaya samuttha samanya vyadhi affecting Urinary system and leaving person disables and disapproved from routine activity. Pittaja Mutrakricchra and UTI (Lower Tract) can be correlated as they have similar clinical features. It has been surveyed by WHO the U.T.I. is the second largest infection in whole world after R.T.I.

AIM

To study ‘A comparative clinical study of the efficacy of Trunapanchamula Kwatha and Haritakyadi Kwatha in the management of Pittaja Mutrakricchra’.

OBJECTIVES

1. To study the Nidana Panchaka of Pittaja Mutrakricchra.
2. To assess the therapeutic efficacy of Trunapanchamula Kwatha and Haritakyadi Kwatha in Pittaja Mutrakricchra.
3. To compare therapeutic efficacy of Trunapanchamula Kwatha and Haritakyadi Kwatha in Pittaja Mutrakricchra.
MATERIALS AND METHODS

AUOSHADHO YOGA: Trunapanchmool kwatha & Haritakyadi kwath.

STUDY DESIGN

It was a comparative clinical study on the incidentally selected patients, which were allocated in Group A and B respectively.

SOURCE OF DATA

The patients of Pittaja Mutrakricchra from the OPD of Dr. B.N.M.E. Trust’s Shri. Mallikarjun Swamiji Post Graduate and Research Center, Bijapur, and patients from camps conducted by Dr. B.N.M.E. Trust’s Shri. Mallikarjun Swamiji Post Graduate and Research Center Bijapur, and at Manguli approximately satisfying the selection criteria were selected.

INCLUSIVE CRITERIA

1. The diagnosed patient of Pittaja Mutrakricchra according to classical signs and symptoms.
2. Patients of either sex.
3. The patients were selected between the age group of 16 – 50 years.

EXCLUSIVE CRITERIA

1. The patient having surgical problem of UTI and its complication.
2. The patient age group less than 16 years and more than 50 years.
3. Patient suffering from any other systemic disorders like Cancer, Koch’s, HIV, VDRL, BPH, Diabetes and STD.

DIAGNOSTIC CRITERIA

The parameters for diagnosis are completely based on classical signs and symptoms like Peetam, Saraktam, Sarujam, sadham, Muhur muhur kricchra mutra pravrutti with or without other symptoms. Mainly urine test was considered for fulfilling the diagnostic criteria.

GROUP A

Sample size: 20 patients

Drug: Trunapanchamula kwath

Dose: 48 ml twice a day (one Pala twice a day).

Anupan: Sukoshna jala

Duration: 30 days.

GROUP B

Sample size: 20 patients

Drug: Haritakyadi kwath

Dose: 48 ml twice a day (one Pala twice a day).

Prakshepak dravya: Madhu 1 tsf each time.

Anupan: Sukoshna jala

Duration: 30 days.

FOLLOW UP

The total duration of treatment is 30 days.

During treatment follow up: 15th day

After treatment follow up: 30th day

Post treatment follow up: after 30 day (60th day).

INVESTIGATION

Following investigation was carried out before treatment and after treatment at the end of follow up to assess the general status improvement.

Urine routine (examination) investigation.

ASSESSMENT OF VARIABLES

The severity of each variable ranging from


GRADING FOR SUBJECTIVE VARIABLES

1) Peetam Mutrata (Yellow color urine)

Pale yellow color (Normal urine color): Grade 1

Mild yellow color: Grade 2

Yellow color: Grade 3

Deep Yellow color: Grade 4

2) Burning Micturation

No burning: Grade 1

Mild rare burning in morning or at starting of micturation: Grade 2

Moderate, Tolerable burning at starting and during micturation: Grade 3

Severe, not tolerable at starting, during micturation and prolonged For long time: Grade 4

3) Pain

No pain: Grade 1

Mild rare pain in morning or at starting of micturation: Grade 2

Moderate, Tolerable pain at starting and during micturation: Grade 3

Severe, not tolerable at starting, during micturation and prolonged For long time: Grade 4

4) Frequent Micturation

No frequent micturation (normal 6 – 8 times): Grade 1

Rarely frequent controllable (9 - 10 times): Grade 2

Often frequent not able to control (11 – 12 times): Grade 3

Persistent many times more than 12 times: Grade 4
5) Urine mixed with Blood or graded according to number of RBC’s in Urine

<table>
<thead>
<tr>
<th>Description</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>No urine mixed with Blood (0 – 4)</td>
<td>Grade 1</td>
</tr>
<tr>
<td>Urine stick test positive (Rare urine mixed with blood) (5 – 20)</td>
<td>Grade 2</td>
</tr>
<tr>
<td>Macroscopically invisible but present in microscopy (21 – 40)</td>
<td>Grade 3</td>
</tr>
<tr>
<td>Severe, visible to bare eyes Frank blood mixed micturation (above 40)</td>
<td>Grade 4</td>
</tr>
</tbody>
</table>

**DISCUSSION**

The Nidana, Samprapti of Pittaja Mutrakricchra are not found separately in classics but being one of eight types of Mutrakricchra, the same Nidanas may applicable to Pittaja Mutrakricchra, among them, Ruksha Madhya Prasangana, Anupamamsa sevan, Adhyasan, Ativiyayam etc are striking causes.

The point validated as we find Mutrakricchra occurs as a clinical symptom in Pakwasayasta vata and other diseases.

In modern science micro organisms are considered to be sole cause of UTI. Though Ayurvedic classical text contains references of Krimi (which is accepted term for worms and micro organisms) causation of Mutrakricchra by them has not been mentioned.

The modern theories of pathogenesis suggest that bacterial gain access to bladder via urethra. From an Ayurvedic point of view even in Agantuja karanas Dosh prakopa is the main cause for the Vyadhi though pain occurs first. Khavaigunya in Srotas decides whether there will be Sthana samsraya of Doshas or not.

The drugs in both the Kwath dravyas are Mutravirechaniya and Pittavadashamak and Basti shodaka. So the drugs do both karma i.e. Shodhana and Shaman by their properties.

**DISCUSSION ON NIDANA PANCHAKA**

**DISCUSSION ON NIDANA**

Samanya nidana

The Nidana which affects the Mutravaha srotas can also be considered as Samanya nidana of Pittaj Mutrakricchra.

1. **Mutritodak-bhaksya-strisevan**
2. **Mutra vega nigratna**
3. **Ksniya**
4. **Abhihksata**

**Visishta nidan (specific etiological factor)**

a) **Pitta Prakopaka nidana**

1. **Tikshna aushada sevan:** Tikshna aushadha sevan directly leads to Pitta prakopa as both have same Guna. So in this the Pitta which is influence of Vata may accumulate in Basti and causes Mutrakricchra.

2. **Madhya prasarga:** Excessive Madhyanap causes Vata and Pitta prakopa i.e. Ruksha gunatmak vriddhi of Vata and Teekshna gunatmak vruddhi of Pitta occurs. This Prakupita vata and Pitta causes Mutrakricchra.

The patients observed in this category were showing Ojakshaya lakshanas.

3. **Anupmatsya sevan:** The intake of unhealthy Mamsa causes to Tridosha prakopa increase Klenata and Kleda and causes Mutradusti results to Mutrakricchra.

4. **Adhyasana:** The Adhyasana lead to Agnimandhya which is cause for ‘Ama’. Agni is transforming factor of Ahara into Sara and Kitta portion Mutra is formed from Kitta portion. So Agnimandhya results to Adhyasana will alter the status of formation of Mutra leading to its Dusti.

5. **Ajrna:** In Ajrna saman yavu, Pachak pitta and Kledaka kapha are affected. Since Ahara rasa i.e. formed initially is not of good quality. The ultimate products of digestion i.e. Sara and Kitta bhaga will also be an inferior quality. So normal functions of Mutra i.e. removal of Kleda is not achieved and Kleda accumulates in body. So many patients give history of Adhyasana and Ajrna during the clinical trial.

**b) The Vata prakopa nidanas**

They are Ativiyayam and Nityadrut prsthayanat. These are also striking causes observed during clinical trial in Pittaja mutrakricchra.

**Ativiyayam:** Excessive exercise leads to vitiation of Vata. Ativiyayam causes increase in Sweda pravrutti which causes Alpa mutrata.
DISCUSSION ON SAMPRAPTI

Tridosha prakopa by their own causes they enter Basti and produce Srotorodha, Sankocha and Kshobha at Mutramarg which further causes, Basti Pradesh Shotha and produce pain and difficulty while passing urine and resultant disease as a Mutrakricchra. Also the Apan vayu dusti causes Sanga in Mutravaha srotas which also produce pain and Kricchrata at time of urination leads to Mutrakricchra.

Samprapti Ghatakas

<table>
<thead>
<tr>
<th>Dosa</th>
<th>Pitta Vata (Pachak pitta and Samana, Vyana, Apana vayu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dusya</td>
<td>Rasa, Rakta, Mutra, Kleda, Sweda</td>
</tr>
<tr>
<td>Srotas</td>
<td>Mutravaha srotas</td>
</tr>
<tr>
<td>Sroto dusti prakar</td>
<td>Sanga</td>
</tr>
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<td>Agni</td>
<td>Jataragni</td>
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<td>Mahabhub</td>
<td>Jala and Agni</td>
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<tr>
<td>Udhhbaya Sthana</td>
<td>Kostha (Pakwashaya)</td>
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<tr>
<td>Adhistan</td>
<td>Basti</td>
</tr>
<tr>
<td>Roga marga</td>
<td>Madhyama Roga marga</td>
</tr>
</tbody>
</table>

Chart 1: The probable stages of manifestation of Pittaja mutrakricchra according to Satkriyakala

DISCUSSION ON PURVA RUPA

There are no textual references for Purvarupa. But Chakrapani comment of Ca.Sa.Ci.11/12 says that Laksanas of the Vyadhi which are expressed in milder or incomplete form are to be considered as Purvarupa of Pittaja Mutrakricchra.

DISCUSSION ON RUPA

Daha: It is purely Paitika lakshana. Due to increase in Ushna, Tikshna, Ruksha guna of Pitta patients feels burning sensation at the time of urination.

Ruja: Pain at time of urination is due to Vata. In present study patients giving history feeling pain at genital region, lower abdomen, pelvic region and sometimes due to infections pain can spreads up to kidneys and both lumbar regions.

Peeta mutrata: It is due to the vitiated Pitta which causes Vivarnata of Peeta.
Muhur muhur mutra pravrttiti: Is due to vitiation of Apan vayu, which becomes Pratiloma in Mutrakricchra and causes on and off micturition.

Sarakta mutrata: Is due to vitiation of Rakta by Vidagdha Pitta.

While clinical trial it was noticed in many of patients having burning Micturition, pain, change of color of urine, hesitancy and urgency were also noticed in some patients. The Sarakta mutrapravrttiti was also observed microscopically in some patients. Also on and off micturition is noticed in number of patients. These signs and symptoms of Pittaja Mutrakricchra are observed in patients in various grades. Kala, Rogi bala, Rog bala, Desha also plays an important role.

DISCUSSION ON SADHYASADHYATA
As it is a Marmagata vyadhi it is Kastasadhya.

DISCUSSION ON CHIKITSA
1) Shodhan therapy Virechan and Basti.
2) Shaman therapy in the form of internal medicine like Choornas, Ksheerpaka, Kwath, Ghrita, Taila, Vati, Guggulu etc and external application of Pradeha with Seeta dravya, Parisheka and Avagaha etc. As so many forms of internal medicine are available, the Kwath preparations are taken for Shaman therapy due to their easier and faster way of absorption from gut and reach fast at site of action. Hence the present study was carried with Trunapanchamula Kwatha and Haritakyadi Kwatha preparation for the need of the hour.

Criteria for selection of trial drugs
- Easily available drugs.
- Acts as a Mutrakricchhraara.
- Does not contain any known side effects.
- Economical.

1) Trunapanchamula kwath: The main reason to select this Kwath churna was that all the drugs Kusha, Kasha, Shara, Darbha and Ikshu have been said to have Mutrakricchharaara properties and Pitta vatahara and Basti shodhak. Due to these activities the aggregate properties of Kwath are useful in Samprapti Vighatana of Pittaja Mutrakricchra.

2) Haritakyadi Kwath: The Haritakyadi kwath has been selected because, the drugs Haritak and Pashanbhed are Mutranulomaka and Ashmarighna and Gokshura, Aragvada and Dhanwyas are Mutra Virechaniya. All these drugs act as Tridosha shamak except Pashanbhed which is Kapha Pittahara. All these properties play role in Samprapti Vighatana of Pittaja Mutrakricchra.

Chart 2: Pittaja Mutrakricchra Vis-à-vis Urinary tract infection
MODE OF ACTION OF KWATHA

Kwatha is prepared by using the coarse powder form of drug with water by using the theory of decoction. In this water soluble and thermostatic active principles of the drugs are extracted out. Hence water is used as the base for the formulation. Water absorbed in the body faster than any other solvent. As the therapeutics active principles of the drugs are absorb in the water in Kwatha form and hence when it is administered to the patient its action is very fast. Faster is the absorption of the drugs faster the drug action. Radial absorption of the Kwatha in GIT facilitates the drug to reach its site of action. The drug theory suggests that every drug has the affinity towards their host organ to exhibit its action. The both Kwatha taken for clinical study are mainly formulated for Mutravahak srotas and aimed for Mutravirechana and Pittavatashamana, the base used as water increases the urine output and cleans up the channels. Thus the mode of action of Kwatha makes easier for the therapeutic management of the undertaken clinical trial on the Pittaja Mutrakricchra.

PROBABLE MODE OF ACTION OF TRUNAPANCHAMULA KWATHA

It contains the drugs Kusha, Kasa, Sara, Darbha and Ikshu. All the drugs are having Madhur and Kashaya rasa except Ikshu which having only Madhur rasa, all are having Seeta veerya, Madhur vipaka, Laghu and Snigdha guna and all are having Prabhav Mutrakricchrahara.

Considering above properties all the drugs having Madhur rasa, Madhur vipak, Seeta veerya and Laghu snigdha guna, and having the Prabhav Mutrakricchrahara given in the form of Kwatha gets absorbs easily and does Pitta and Vata shama and acts as Mutral or Diuretic. Also does Mutravirechan and Bastishodhan by their properties, so these preparations have shown effective result in patient of Pittaja Mutrakricchra by breaking the pathogenesis of disease. Hence based on these properties of drugs and their specific drug action Mutrakricchrahara acts on urinary system, it has been selected for present study and previous works also reveals the same.

PROBABLE MODE OF ACTION OF HARITAKYADI KWATHA

It contains the drugs Haritaki, Gokshura, Pashenbheda, Aragvada, Dhanwys and Madhu as a Prakshepak dravya. Although drugs in Haritakyadi kwatha are of different properties i.e. Rasa, Veerya, Vipaka and Gunas, we found the common qualities – as the four Dravyas of them except Haritaki having Sheeta veerya and except Pashanbheda all having Madhur vipaka and Madhur rasa as a Pradhan rasa or Anurasa. Haritaki due to its Madhur and Tikta rasa acts as Pittaghna and due to Madhur rasa and Ushna veerya it does Vata shama and Prabhava is Tridoshahara, Vedanasthapaka, Shothahara etc. It is having Anuloma property. By these properties vitiated Dosha and Malas are excreted out of body. Aragwadha due to its Madhur rasa and Seeta veerya increase urine output acts Mutral and Pittashamak. Dhanwysas with Snigdha and Laghu guna acts Mutral and Pittashamak. Gokshur with Madhur rasa and Snigdha guna increases kapha and ultimately Kleda increases “Mutrasya Kledavahanama”, therefore due to increased Kleda the Mutra is increased. Pashanbhed due to its Laghu and Teekshna guna is helpful for action of Ashmaribhedan and Kapha pittashaman. Thus Haritakyadi kwath works in Pittaja Mutrakricchra. Overall, the drugs are Tridosha hara and Mutral.

With this Kwath madhu is added as a Prakshepak dravya which is Sookshma and Srotovishodaka it removes Stanika sanga and does Lekhana and hence pacifies the vitiated Doshas. As Madhu is Yagavahi it increases the properties of Kwatha and carries it to Sookshma srotas and does Srotoshodhana. So these preparations have shown effective result in patient of Pittaja Mutrakricchra by breaking pathogenesis. Hence based on these properties of the drugs and their specific drug actions that it is Mutrakricchrahara and acts on urinary system it has been selected for the present study previous works also reveals the same.

OBSERVATION

Age: In present study age limit for selection criteria was between 16-50 years. Among them maximum number of patients were belongs to age groups 26 – 35 years (21 patients, 52.5%). The UTI is most common in reproductive age group. The 26 – 35 age period is a peak period of reproductive life. The large number of patients may be required to reveal the actual statistics.

Sex: Unequal incidence was observed in sex ratio. Maximum number of patients in present study were males (27 patients, 67.5%) followed by females (13 patients, 32.5%). Higher incidence in male because in many cases the history of Vegadharana, habits of tobacco chewing, smoking, habit of alcohol was common. Also Malabhadhata was observed. The female patients were less in this study, still as it is known that female patients are more prone to lower UTI, because of many unhygienic conditions. But in present study as the sample is not large so it does not give any clear picture.

Agni: It is evident from present study that most of patients suffer from the abnormality of Agni. No patients were observed with Samagni, Mandagni (27 patients, 67.5%), Vishamagni (12 patients, 30%) and Teekshnagni (1 patient, 2.5%) were observed. So it can be said that Agni plays an important role in producing Roga.

Marital status: Majority of patients registered for the present study were married (21 patients, 52.5%) and unmarried were (18 patients, 45%) widow (1 patient, 2.5%). The age limit for present study for selection
criteria was between 16 to 50 years. There is increased risk of spread of infection through cohabitation and marriage is also solemnized at a young age in Indian social setup and this could be reason for higher proportion of married patients.

RESULTS

Burning Micturition (Sadaha Mutra Pravrutti)

Both groups had shown highly significant result in reduction of Burning Micturition at the end of treatment and at the end of follow up.

Comparing ‘t’ values of both Groups, Group A patients showed better result than Group B. The drugs in both Groups have Madhura and Tikta rasa, Madhur vipaka and the Seeta veerya which are Pitta hara. So the improvement can be understood based on Rasa, Veerya and Vipaka of both Groups.

Pain (Saruja Mutra Pravrutti)

Group A: Patients showed highly significant result in reduction of pain at the end of treatment and at the end of follow up.

Group B: Patients shown highly significant result at the end of treatment and significant result at the end of follow up.

The pain is due to Vata. The ingredients of Trunapanchamula kwatha control the Vata and Pitta by their properties as Vatashamana and Pittahara. Thus seen results are highly significant at the end of treatment and at the end of follow up in Group A.

Also the drug in Haritakyadi kwatha by their properties acts Pittahara and Vatashamana and Haritaki is vedanasashamaka shown highly significant result at the end of treatment. The significance result at the end of follow up in Group B is may be due to not following Pathya apathyaa and indulge in Nidan sevan again like riding etc.

Frequent Micturition (Muhur mucrhr kricchra mutra pravritti)

Both groups showed highly significant result in reduction of Frequent Micturition at the end of treatment and at the end of follow up. Comparing ‘t’ values of both Groups, Group A patients showed better result than Group B. Apana vayu is responsible for Mutra niskasana. Hesitancy and urgency are due to the derangement of Apana vayu. All the five Dravyas of Trunapanchamula Kwath have Madhur rasa and Madhur vipak causes easily evacuation of urine and stool. This means that they have effect on Apana vayu. The ingredients of Haritakyadi kwatha are having properties of Vatanulomak i.e it relieves Vata hence facilitates easy excretion of Mutra. Hence highly significant result was observed in both the groups.

Urine mixed with blood

Group A: Patients shown significant result in reduction of urine mixed with blood at the end of the treatment and at the end of follow up. As all the drugs of Trunapanchamula Kwath are having Seeta veerya which acts as a Stamban i.e Haemostatic therefore useful for arresting internal and external bleeding. Hence it is useful in Haematuria.

Group B: Patients shown no significant result in reduction of urine mixed with blood at the end of the treatment but shown highly significant result in reduction of urine mixed with blood at the end of follow up. As the Dravyas of Haritkyadi Kwath have Seeta veerya it acts as Haemostatic and acts in arresting internal and external bleeding. So this can be concluded that follow up period have good result in case of Haritakyadi Kwath or may needs some more period of time duration.

Peeta Mutra (yellow color urine)

Both groups had shown highly significant result in reduction of Peeta mutra at the end of treatment and at the end of follow up.

But while comparing the ‘t’ value of both Groups after treatment and after follow up, the result is seen as highly significant after treatment than after follow up.

As the both Kwath having drugs which are Pitta shamaka and Pitta hara due to their Madhur rasa and Madhur vipaka and Seeta veerya they does Pitta shamana and Pitta hara by Mutravirechana property. So the patients of both Groups showed highly significant result.

Albumin

Both groups had shown highly significant result in reduction of Albumin at the end of treatment and at the end of follow up.

Comparing ‘t’ values of both Groups, Group A patients showed better result than Group B. The excess of Albumin released from muscles during the excessive work and excess exercise. The result of both Trunapanchamula and Haritakyadi Kwatha in Group A and Group B with proper Pathya palan may shown the highly significant result.

Epithelial cells

Both groups had shown highly significant result in reduction of epithelial cells at the end of treatment and at the end of follow up.

Comparing ‘t’ values of both Groups, Group A patients showed better result than Group B. This may be the diuretic properties of drugs of both Kwath.

Pus cells

Group A: Patients shown highly significance result in reducing Pus cells at the end of treatment and at the end of follow up.

Group B: Patients shown significant result in reducing pus cells at the end of treatment and at the end of the follow up.
This may be the drugs of Trunapanchamula Kwath having better antimicrobial activity than the drugs of Haritakyadi Kwath.

Overall both Kwath drugs have shown definite antimicrobial activity. So complications of urinary tract are ruled out. So both Kwath acts as antibacterial, anti inflammatory and diuretic.

**Overall effect of the therapy**

The overall effect of the therapies showed both the Trunapanchamula Kwath and Haritakyadi Kwath having better result in management of Pittaja Mutrakricchra.

The result of study showed that almost all the results are better at the end of follow up in both Groups. So in present study follow up of patients show the importance of follow up period.

Even though highly significant results are observed in both Groups, but variation in t' values, shows Group A is more effective than Group B which is justified by statistical analysis.

On the basis of literature observations and results with statistical data the discussion and conclusion were done.

**CONCLUSION**

1. Pittaja Mutrakricchra is Pakwashaya samutha shoola yuksa daha pradhan madhyama rogamargaja samanyaja vyadhi.
2. Ativyayam, Teekshna Aushadha, Atimadhayapan, Adhyashana and Ajirna are main striking causes of Pittaja Mutrakricchra.
3. For Pittaja Mutrakricchra vishesha nidana are elicited from Mutrakricchra vyadhi nidhana, and on basis of Kriyakala vishesh samprapti can be drawn.
4. Pittaja Mutrakricchra can be compared to lower urinary tract infection.
5. The role of Krimi as a causative factor of Pittaja Mutrakricchra was not mentioned in classics.
6. In overall study the patients observed with Peeta mutrata, Saruja, Sadaha, Kricchra muhur muhur mutra pravrutti but compared to Haritkyadhi Kwath the Trunapanchamula Kwath gave better results in Pittaja Mutrakricchra.
7. Both Kwath are having highly significant results in lakshanas like Peeta mutrata, Saruja, Muhr mutra pravrutti but compared to Haritkyadhi Kwath the Trunapanchamula Kwath gave better results in Pittaja Mutrakricchra.
8. The Trunapanchamula kwatha and Haritakyadi kwatha contain Pittavatashamaka and Mutravirechaniya drugs, so they act as Shodhana and Shamana simultaneously.
9. Both the Kwath are simple formulations, economical for patients and does not shown any adverse effects.

### Table1: The Response of Individual Group after Treatment

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>CD</th>
<th>CS</th>
<th>CI-I</th>
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REFERENCES

1. Charak samhita of Agnivesha elaborated by Charak and Drdhabala (Vol II) edited with Charak chandraka Hindi commentary by Dr. Brahmanand Tripathi, forwarded by Dr. Prabhakar J. Deshpande; Chaukhambha Surbharti Prakashan 2002. PP 869.
2. Charak samhita of Agnivesha elaborated by Charak and Drdhabala (Vol II) edited with Charak chandraka Hindi commentary by Dr. Brahmanand Tripathi, forwarded by Dr. Prabhakar J. Deshpande; Chaukhambha Surbharti Prakashan 2002. PP 869-870.
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