Urinary Tract Infection and its Management by Renalka

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ABSTRACT

Urinary Tract Infection (UTI) is a common disorder in all age groups and in both sexes. It a

global problem. Many drugs have been introduced for UTI but the problem of drug resistance

and during dependence and toxic manifestations of long term use of drugs are common.

Keeping in view these features and the fact that Ayurveda has guidelines to preserve positive

health and to provide relief from disease, Renalka syrup was evaluated to treat UTI.

In the present clinical trial, 30 female patients suffering from symptoms of UTI were given

Renalka syrup 2 tsf. B.I.D. Detailed investigations were done on a prescribed proforma and

recorded before and after treatment at weekly intervals for four weeks. A significant reduction

in the clinical symptoms of UTI and common pathogens specially E. coli, B. proteus,

Klebsiella and Pseudomonas prove the efficacy of Renalka in the management of UTI.

Keywords: Urinary Tract Infection, Renalka, E. coli, B. proteus, Klebsiella, Pseudomonas.

INTRODUCTION

Urinary Tract Infection is a very common disorder among all age groups and found both in

men and women. Many efforts have been made for the treatment of UTI but the problem of
drug resistance and dependence along with the untoward effects of long term therapy are very

common while managing the UTI. In Ayurveda a large number of drugs have been used for

the management of UTI to afford relief from the symptoms and prevent its recurrence.\cite{1,2}

The present clinical trial of Renalka in the management of UTI is aimed to evaluate in terms

of its efficacy, safety and cost effective ratio, so that renal functions are maintained within its

normal limits.

MATERIAL AND METHODS

The present clinical trial was carried out in 30 female patients in the age group of 22-46 years,

attending Prasuti Tantra O.P.D. of S.S. Hospital, Institute of Medical Sciences, B.H.U.,
Varanasi. A complete history of the patients was recorded in a specially prepared research
proforma and patients were registered in the trial with an informed consent for the given
treatment. Urine analysis and culture was done in all the cases before starting the clinical trial.
Renalka syrup was given twice daily as 2 tsf. for four weeks. Weekly urine analysis was done
and clinical findings were recorded. Urine culture was treated at the end of 4 weeks treatment. The final assessment of results was done at the end of four weeks.

**Subjective and objective parameters:** Renalka contains extracts of *Tribulus terrestris, Cretaeva magna, Hemidesmus indicus, Cyperus rotundus, Vetiveria zizanioides, Asparagus racemosus, Elettaria cardamomum* and Trikatu.

Twenty six patients complained of burning micturition, 21 had frequency of urination, 12 patients had severe dysuria with mild to moderate fever and 12 patients complained of only dysuria as a presenting symptoms (Table I).³

<table>
<thead>
<tr>
<th>Table I: Clinical Response after 4 weeks</th>
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<tr>
<td>Symptoms</td>
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<td>----------------------------------------</td>
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<tr>
<td>Burning micturition</td>
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<tr>
<td>Frequency of micturition</td>
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<tr>
<td>Dysuria with mild fever</td>
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<tr>
<td>Dysuria alone</td>
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Urine culture was done in all the 30 patients before starting the treatment. The culture was positive in 90% of patients.

Out of these 27 patients 21 patients (70%) had *E. coli*, 10% had *B. proteus*; 7.4% had *Klebsiella* and 3.7% had *Pseudomonas*.

**Urine analysis:** Urine analysis revealed the presence of albumin in 20 patients, pus cells in 23 patients, epithelial cells in 19 patients and R.B.C. in 5 patients.

During the course of treatment no untoward effects of the drug were seen. On completion of treatment no drug dependency and side effects were observed. Hence, the trial drug Renalka was found to be safe with no side effects or drug dependency.

**RESULTS**

The response to the trial drug Renalka syrup was recorded after every seven days. There was marked relief in burning micturition (96.15%) and frequency of micturition (95.23%). Eleven out of 12 patients showed relief in dysuria with mild fever (91.66%), whereas all the patients had complete relief of dysuria. Thus, Renalka syrup was clinically effective in relieving symptoms and controlling infection.

<table>
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<th>Table II: Effect of Renalka on the pathogens</th>
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<tr>
<td>Organism</td>
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<td></td>
</tr>
<tr>
<td><em>E. coli</em></td>
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<tr>
<td><em>B. proteus</em></td>
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<tr>
<td><em>Klebsiella</em></td>
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<td><em>Pseudomonas</em></td>
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It is obvious from the table that with the treatment of Renalka for four weeks at a dose of 2 tsf. twice daily, the causative pathogens *B. proteus, Klebsiella* and *Pseudomonas* were completely eliminated, whereas 19 of 21 cases of *E. coli* showed negative culture (Table II).
DISCUSSION
The clinical trial of Renalka, an Ayurvedic preparation has proved its efficacy and safety in chronic UTI.
The trial drug Renalka syrup has been quite effective in controlling and relieving clinical symptoms significantly. The present study also demonstrated antimicrobial efficacy of the drug against the common pathogens *E. coli, B. proteus, Klebsiella* and *Pseudomonas*.

- Bactericidal effect was observed against *E. coli, B. proteus* and *Klebsiella*
- Associated symptoms relieved significantly
- Beneficial response of drug was observed within one week of treatment
- No untoward effects were observed during the course of treatment.

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