

A Retrospective Study on Urinary Tract Infection Treated with Homoeopathic Remedies in Paediatric Age Group-Case Series

**Dr.N. Shalini¹, Dr.Bencitha Horrence Mary²,
Dr. Shimmal chenthik³, Dr. Rohith P.S⁴**

¹PG Scholar, Department of Paediatrics, Sarada Krishna Homoeopathic Medical College, Kulasekaram, Kanyakumari, Tamil Nadu

²Associate Professor, Department of Paediatrics, Sarada Krishna Homoeopathic Medical College, Kulasekaram, Kanyakumari, Tamil Nadu

³Associate Professor, Department of Pharmacy, Sarada Krishna Homoeopathic Medical College, Kulasekaram, Kanyakumari, Tamil Nadu

⁴Assistant Professor, Department of Paediatrics, Sarada Krishna Homoeopathic Medical College, Kulasekaram, Kanyakumari, Tamil Nadu

ABSTRACT

Introduction: Urinary tract infections (UTIs) are one of the most prevalent infectious disorders worldwide, impacting 150 million individuals annually and carrying a high risk of morbidity and expensive medical expenses. These infections can arise in the urethra (urethritis), bladder (cystitis), or kidneys (pyelonephritis). UTIs lower a patient's quality of life by negatively affecting their social and relationship lives. **Summary:** The study reveals that urinary tract infections are more common in children aged 1-10 years, with 5 cases showing marked improvement, 3 moderately improving, and 2 mildly improving. Homoeopathic medicines showed better improvement in over half of the cases, confirming their efficacy in treating urinary tract infections. **Conclusion:** Urinary tract infections are common in paediatrics, particularly in children under lower socio-economic status. Homoeopathy is effective for long-term treatment, but modern medicine can negatively impact children's health. Merc SOL 200 is a specific remedy, but patients should not neglect symptoms, as neglecting them may lead to chronic conditions. Proper hygiene is also crucial alongside proper medication.

Keywords: urinary tract infection, children, Mercurius solubilis

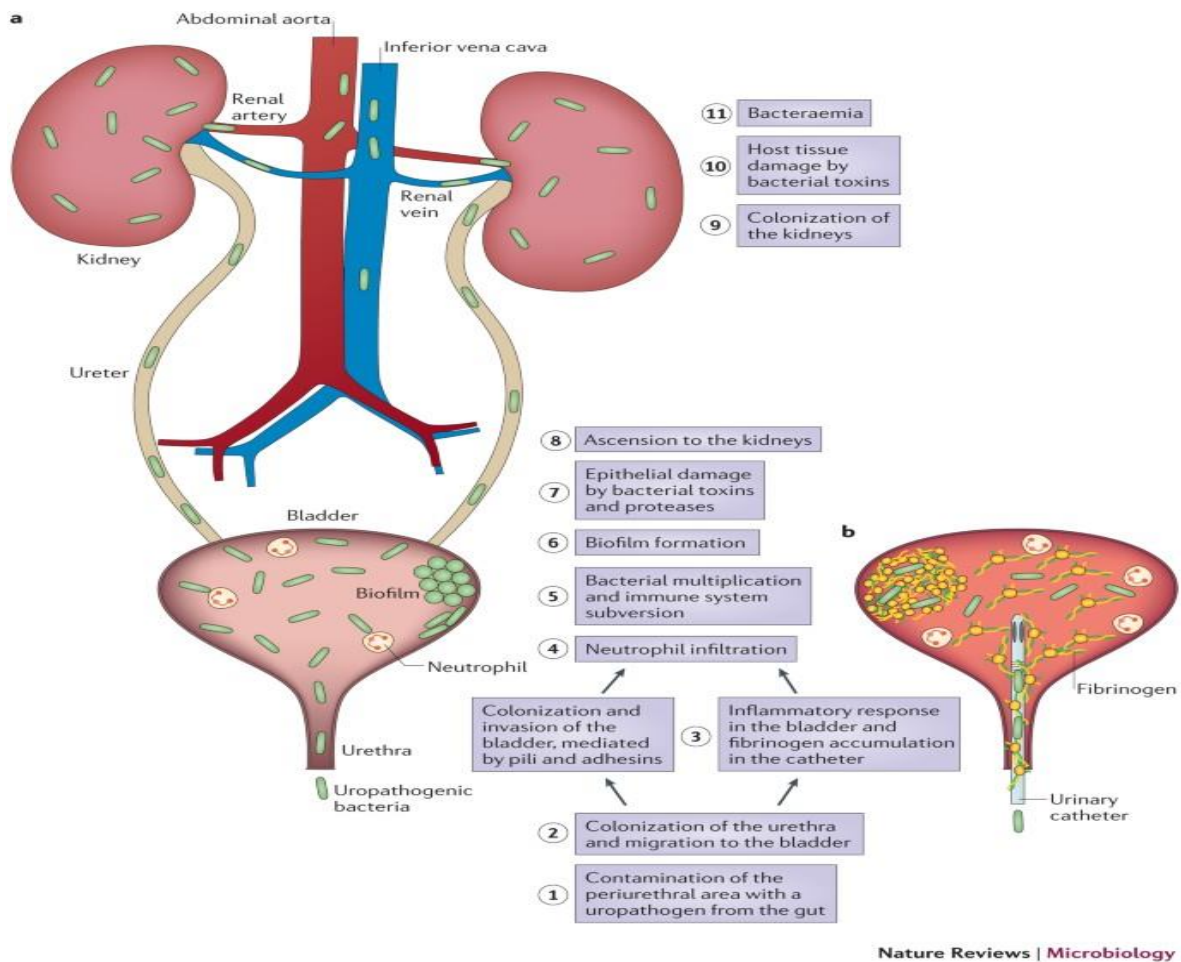
INTRODUCTION

The urinary system, consisting of kidneys, ureters, bladder, and urethra, is responsible for filtering blood by eliminating waste materials and excess water [1]. It also regulates blood pressure, volume, and ion and solute concentrations. Urine is either completely sterile or low in pathogenic germs in healthy individuals. Urinary tract infections (UTIs) are a prevalent infectious disorder [2], impacting 150 million people annually and posing high risks of morbidity and expensive medical expenses. UTIs can occur in the urethra, bladder, or kidneys, negatively impacting a patient's quality of life and social relationships [3].

Children are particularly susceptible to kidney scarring, with the most severe consequence being renal scarring, which affects about 6% [4] of children and is linked to serious future complications and end-stage renal disease [5].

There are two types of UTIs: simple (uUTIs) and complex (cUTIs). In the absence of any structural or neurological disorders pertaining to the urinary system, uUTIs usually affect healthy individuals [6]. When cUTIs are linked to urinary tract abnormalities that raise the risk of infection—like catheterization or functional or anatomical abnormalities—like obstructive uropathy, urinary retention, neurogenic bladder, renal failure, pregnancy, or calculi—they are classified as complicated UTIs. The Enterobacteriaceae family is the most common cause of UTIs in both community and hospital settings, with uropathogenic *Escherichia coli* (UPEC) being the most common isolate.[7]

PATHOGENESIS:



Classification of UTI:

The site of infection—such as urethritis, ureteritis, cystitis, and pyelonephritis—as well as the existence of infection-predisposing factors (complex or uncomplicated) are used to classify UTIs [8]. Uropathogenic bacteria are the main cause of UTIs; they enter the bladder after inadvertently contaminating the urethra. When there are structural or functional abnormalities in the urinary tract [9], the likelihood of developing a complicated UTI increase. Three or more simple UTIs in a 12-month period or two or more infections in a 6-month period are considered recurrent UTIs, and they are typically caused by the same microbe that caused the first infection [10].

MATERIALS AND METHODS:**STUDY SETTING:**

A sample of 10 Urinary tract infection cases has been selected among paediatric age group were selected from the In-Patient Department, OutPatient Department, Sarada Krishna Homoeopathic Medical College, Kulasekharam.

SELECTION OF SAMPLE:

- A sample of 10 cases will be collected.
- Sampling Method–Non-Random Purposive sampling
- Selection would be based on the symptoms which present in the patients with urinary tract infection administered with suitable homoeopathic medicine in paediatric age group.

STUDY DESIGN:

Retrospective Evolutionary Study.

- 10 cases of those administered with suitable homoeopathic medicine have been taken from the college OPD, IPD, of Sarada Krishna Homoeopathic Medical College.

INCLUSIONCRITERIA:

- Patients of age less than 18 years of age who are treated for urinary tract infection complaints.
- Cases with minimum of one follow up and has significant improvement.
- Children of both sexes.

EXCLUSIONCRITERIA:

- Patientsabove18 years of age.
- Cases without proper follow up.

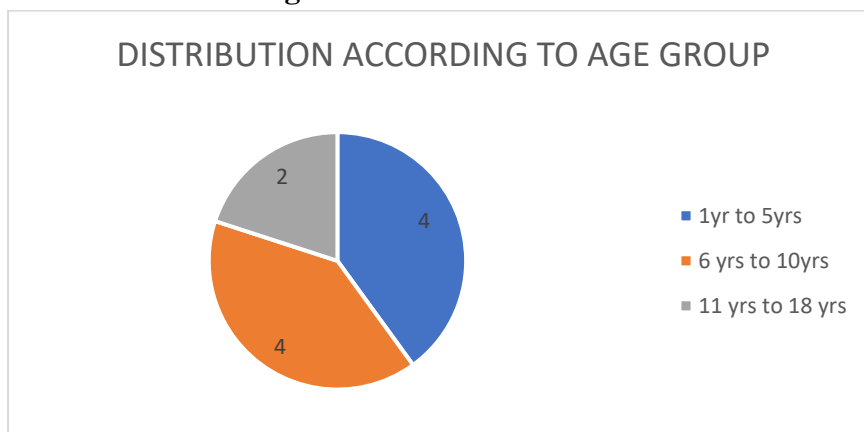
DATA PRESENTATION:**Fig 1–AGE DISTRIBUTION**

Fig 2 – DIAGNOSIS

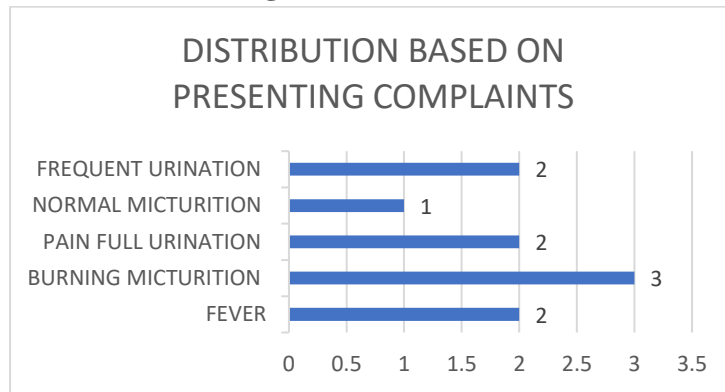


Fig – 3 ASSOCIATED COMPLAINTS

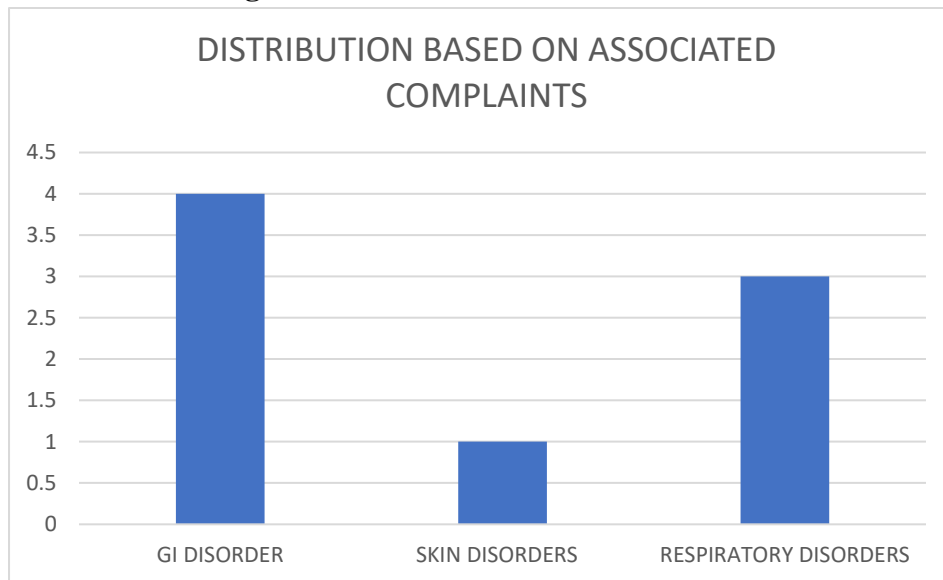
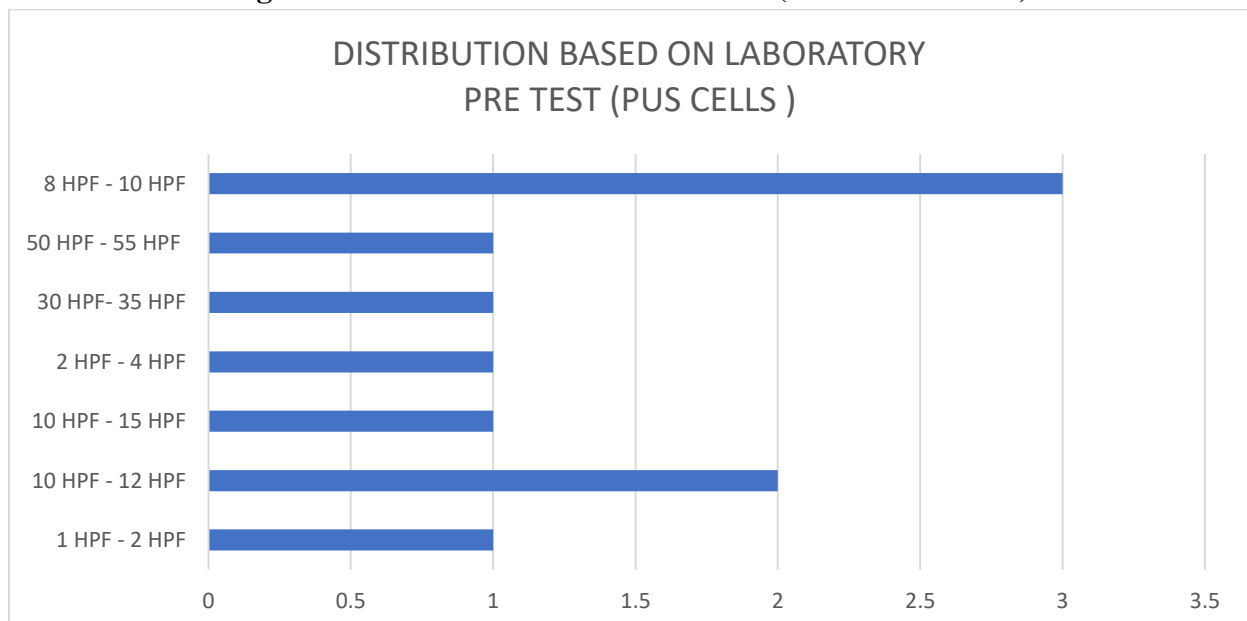


Fig – 4 &5 LABORATORY REPORTS (PRE AND POST)



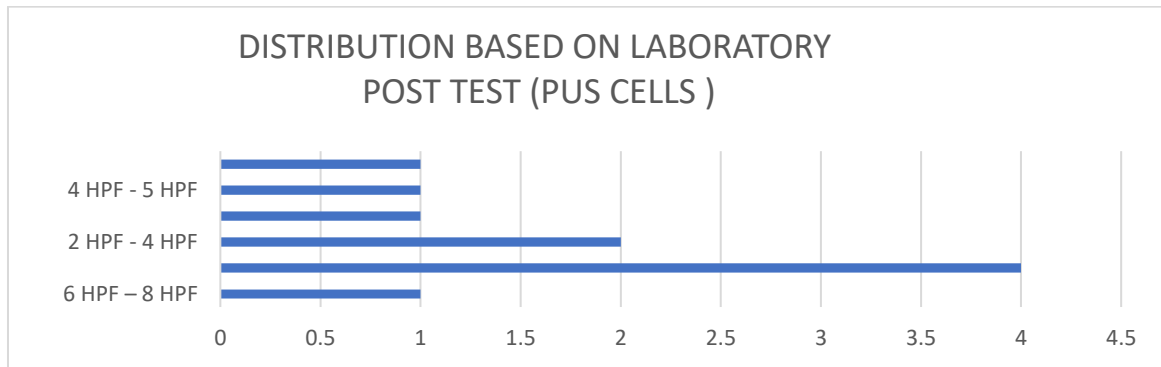


Table 1- PRESCRIPTION (REMEDY AND POTENCY)

S.NO	REMEDY	POTENCY
1	CANTHARIS 30	2
2	CANTHARIS 200	1
3	URTICA URENS 30	1
4	ARS ALB 0/6	1
5	ARNICA 200	1
6	NUX VOM 200	1
7	MERC SOL 200	3

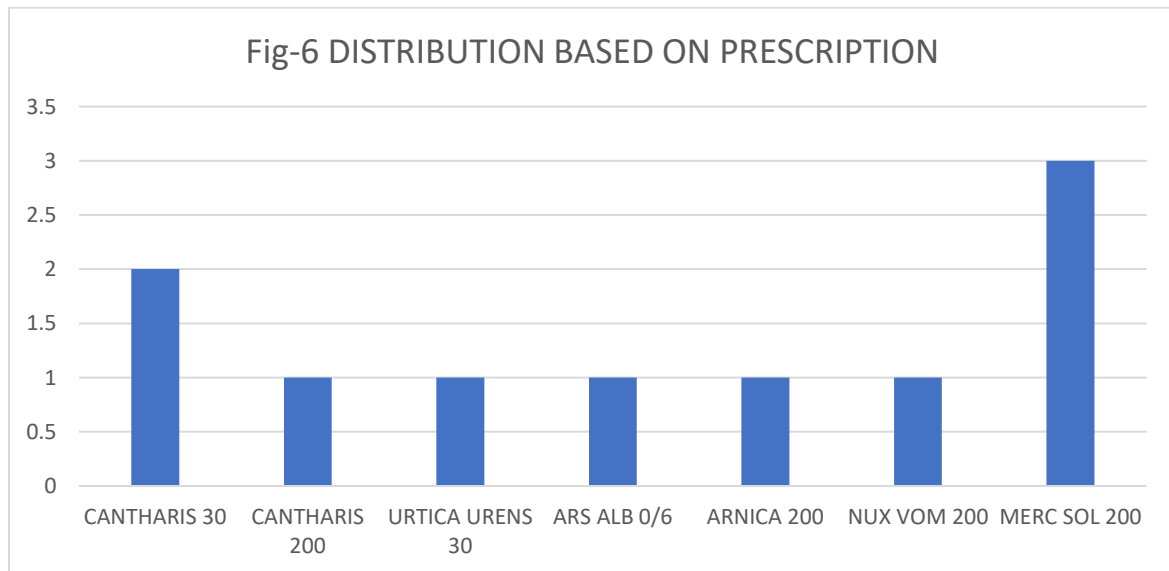


TABLE- 2 DURATION OF TREATMENT

S.NO	DURATION OF TREATMENT	NO OF PATIENT
1	8 Days	3
2	5 Days	1
3	17 Days	1
4	16 Days	2
5	15 Days	1

6	3 months	1
7	4 months	1

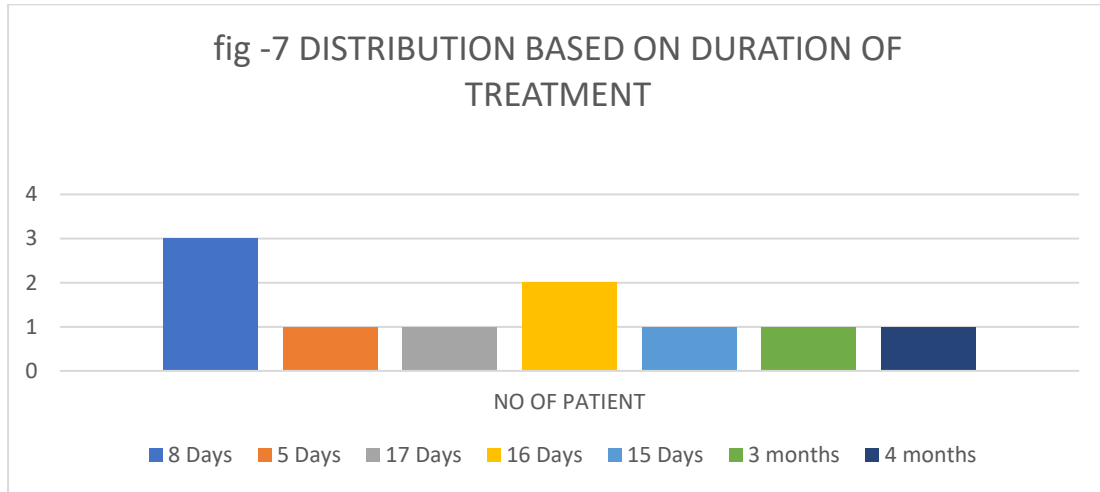
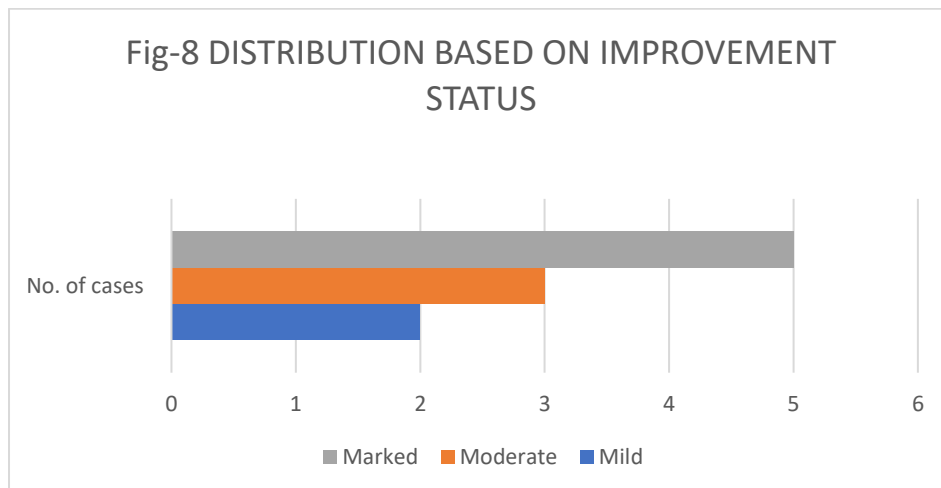


TABLE-7 IMPROVEMENT STATUS



DISCUSSION:

This Study has shown the prevalence of urinary tract infection is more between the age group of 1-10 years, 5 cases has got marked Improvement, 3 cases Moderately Improved and 2 cases got Mild Improvement. Females are more commonly affected. Homoeopathic medicines could show a better improvement in urinary tract infection has been shown from the Study. More than half of them could feel better with proper administrations of the Medicine, that is 5 patients. For 2 patients the condition has slightly better but persist. This result correlates with the Clinical study on the efficacy of homoeopathic medicines in the treatment of urinary tract infection in children of that out of 10 cases.

RESULT:

The most commonly affected age group is between 1-10 years (8) cases, followed by 11-15 years (2) cases. Females are more commonly affected. This study has proven that the Homoeopathic medicine is Effective in Managing the urinary tract infection in paediatric age groups.

CONCLUSION

Urinary tract infection are the common conditions where the Pediatric age group has got mostly affected. Both sexes are commonly affected more seen in children under lower socio- Economic status. Homoeopathy has a better scope in treating such cases as long term use. Modern medicine has shown an adverse effect in the health of Children. From this study MERC SOL 200 is termed as one of the specific Remedy. Patient should not neglect the symptoms at the Initial stages, which might later lead to a chronic condition. Along with the proper medications one should maintain the proper hygiene.

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