

## **Cystone in Urinary Tract Complaints during Pregnancy**

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### **ABSTRACT**

*In the present study Cystone proved very promising in 100 cases of urinary tract infection seen during 14 weeks to full term of pregnancy. Certain drugs are contraindicated in pregnancy. In such cases instead of giving antibiotics or other drugs, we recommend the use of Cystone tablets without hesitation. Cystone is safe, has no toxic or side-effects and is well tolerated by all the patients. As judged from the time taken for the patients to be complaint-free and also organism-free, Cystone tablets proved very helpful and beneficial.*

### **INTRODUCTION**

Urinary tract complaints are quite common during pregnancy. The common complaints are burning micturition, frequency of micturition, pyrexia of varying degrees, pain or uneasiness in the lower abdomen, nausea and/or vomiting and headache.

Ever since Dodds showed in 1931 that bacteria were present in the urine of about 11% of her pregnant patients and that *E. coli* occurred twice as frequently as other organisms, there has been a debate on the implications of these findings. Kase (1960) claimed that there was a positive correlation between the finding of symptomatic bacteriuria in early pregnancy and the later development of acute pyelonephritis of pregnancy, and also with foetal loss especially due to prematurity. Hence the management and treatment of urinary tract infections during pregnancy is important, as well as difficult, in the sense that most of the conventional antibiotics which are used for urinary tract infections are either contraindicated or need to be used with caution.

Cystone (Himalaya) has been extensively reported in the management and treatment of many urinary complaints, urinary tract infections and in urolithiasis, with excellent results (Chatterjee, B.N. *et al.*, 1982, Dandia, S.D. *et al.*, 1975, Garg, S.K. *et al.*, 1985, Gupta, P.D., *et al.*, 1976, Pendse, A.K. *et al.*, 1984, Prasad, R.R. *et al.*, 1970, Singh, P.P. *et al.*, 1983, Tripathi, K. *et al.*, 1984, Trivedi, B.T. *et al.*, 1974, Ghosal, K.K. *et al.*, 1980 and Saronwala, K.C. *et al.*, 1973).

Cystone has a marked and effective diuretic activity because of its high content of natural mineral salts. It also exhibits urinary antiseptic and antispasmodic properties. In general, it causes relaxation of the smooth muscles. It also corrects the cystalloid-colloid imbalance and possesses a remarkable property of disintegrating the gravel or the calculi. Thus it relieves the pain and spasm caused by the passage of the particles of calculi or the highly acidic urine. Cystone is known to relax the detrusor muscles and act on the mucin in the calculi that binds the particles together. It thereby allows the disintegrating particles to escape with the flow of urine. Prolonged use of Cystone does not alter the electrolyte balance. It is thus very useful in urinary infections, crystalluria and other urinary complaints.

## COMPOSITION

Each Cystone tablet contains:

Exts. Didymocarpus pedicellata	65 mg
Saxifraga ligulata	49 mg
Rubia cordifolia	16 mg
Cyperus scariosus	16 mg
Achyranthes aspera	16 mg
Onosma bracteatum	16 mg
Vernonia cinerea	16 mg
Shilajeet (purified)	13 mg
Hajrul yahood bhasma	16 mg
Processed in <i>Ocimum basilicum</i> , <i>Tribulus terrestris</i> , <i>Mimosa pudica</i> , <i>Dolichos biflorus</i> , <i>Pavonia odorata</i> , <i>Equisetum arvense</i> , <i>Tectona grandis</i> seeds.	

Impressed and encouraged by the favourable results of Cystone in urinary tract infections, we undertook a trial at our hospital to study its efficacy in urinary tract infections during pregnancy. The findings were carefully studied and analysed.

## MATERIAL AND METHODS

One hundred cases of urinary tract infections during pregnancy attending the OPD of the Kiriburu Hospital, or admitted indoors, were put on Cystone therapy, 2 tablets t.i.d. till they became complaint-free, and thereafter one tablet t.i.d. till the urine became free of pus cells. Their pregnancies were confirmed by clinical examination by the author, while the urinary tract infection was confirmed by urine analysis and culture.

There were 79 patients with gestation periods of 14 to 28 weeks, 11 patients from 29 to 32 weeks and 10 patients from 33 weeks to term. Patients in the first trimester with urinary tract infection were not included in this study (See Table 1).

Period of gestation	No. of patients	Percentage
14 to 28 weeks	79%	79%
29 to 32 weeks	11	11%
33 weeks to term	10	10%
Total	100	100%

Out of 100 patients, 78 had pyrexia, 68 burning micturition, 68 frequency of micturition, 54 pain in the abdomen, 18 backache and 12 nausea and/or vomiting (See Table 2).

Complaints	No. of cases	Percentage
Pyrexia	78	78%
Burning micturition	68	68%
Frequency of micturition	68	68%
Pain in lower abdomen	54	54%
Backache	18	18%
Nausea and/or vomiting	12	12%
Total no. of patients	100	298

On urine analysis, 11 patients showed numerous pus cells on high power (++++), 59 many pus cells (+++), 20 quite a few (++) , 6 showed a few (+) and 4 patients showed only few pus cells. Red blood cells were seen from a few to many in 73 patients and no red blood cells in 27 patients. Twenty three patients showed calcium oxalate crystals, while eleven had uric acid crystals. Phosphate crystals were not found in any patients.

Urinary culture revealed that 89 patients harboured *E. coli* and the remaining 11 *Staphylococcus albus*.

### DOSAGES

The 100 cases were divided into three Groups A, B and C.

- Group A: 40 patients were given Cystone, 2 tablets t.i.d. till the infection was cleared.
- Group B: 30 patients were given Cystone, 2 tablets t.i.d. along with Ampicillin, 250 mg 6 hourly for 7 days.
- Group C: 30 patients were given Cystone, 2 tablets t.i.d. along with alkaline mixture and Tincture Hyoscyamus, 2 teaspoonfuls t.i.d.

### RESULTS

From Table 3 it is apparent that Cystone alone, given to Group A patients, produced fairly good results compared to those in Group B (Cystone + Ampicillin). Only in 3 cases, where the response was poor, we had to add Ampicillin for better results.

Groups	No. of cases	Good response	Moderate response	Poor response
Group A(Cystone alone)	40	30	7	3
Group B(Cystone + Ampicillin)	30	24	6	0
Group C(Cystone + alkaline mixture)	30	26	3	1
Total	100	80	16	4

Even in Group C, where Cystone was used along with an alkaline mixture and Tincture Hyoscyamus, the results were excellent in 26 cases and moderate in 3 (See Table 3).

The results were classified as Good, Moderate or Poor according to certain criteria:

- Good:** When the patient became complaint-free within two weeks of starting treatment and there was appreciable reduction in the number of pus cells per high power focus, within two weeks of treatment.
- Moderate:** When the patients became complaint-free within a month of starting treatment, but took more than two weeks to be complaint-free and there was appreciable reduction in the number of pus cells after only two weeks, but before one month.
- Poor:** When there was no improvement either in the urine analysis or the patient did not become complaint-free even after one month of treatment.

Forty patients could be followed up till delivery. There were no abnormalities in any of the babies born. No patients reported any side-effects or toxicity.

Table 4: Showing the number of complaint-free and organism-free patients						
	Group	Within 1 week	1-2 weeks	2-3 weeks	3-4weeks	Within 4 weeks
Complaint- free patients	A	29	1	5	2	3
	B	18	6	4	2	Nil
	C	12	14	1	2	1
Organism-free patients	A	21	10	5	2	2
	B	15	6	8	1	Nil
	C	15	6	5	3	1

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