

PRE-OPERATIVE EXCRETORY UROGRAPHY IN PROLAPSE CASES

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It does not appear to be widely known that uterine prolapse can cause ureteric obstruction with changes in the kidney. The symptoms as a result of involvement of urinary tract are late to develop. By that time prolapse itself brings the patient to the hospital.

The descent of the uterus results in elongation of ureters with consequent kinking and sometimes constriction. This in consequence leads to back pressure and may result in hydroureter and hydronephrosis which is liable to get infected later.

The bladder itself is the seat of residual urine in cases of genital prolapse. It would, therefore, be apparent that cystitis, pyelitis and pyelonephritis can have their origin from genital prolapse.

In 1952 Klempler found ureteric dilatation and hydronephrosis in cases of prolapse.

In 1975, Riddle, P. R. found cases of proidentia with acute urinary tract infection and ureamia.

In 1977 Stabler showed cases of proidentia with marked bilateral hydronephrosis, hydroureter and uraemia.

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Material and Methods

Twenty-five cases of varying degree of prolapse ranging from first degree to proidentia, admitted to the Government Hospital for Women, Amritsar were included in the study.

On admission, a detailed history regarding the duration of present complaints, urinary complaints, menstrual and obstetrical history was taken. Relevant past history and family history were taken. Detailed general physical examination and systemic examinations were performed.

Thorough local examination was then performed to know the descent of vaginal walls, cervix, uterine size, position, mobility and descent, any adenexal thickening or masses were noted and tone of pelvic muscles was also noted.

Following laboratory investigations were carried out in each case. Haemoglobin, complete urine examination urine culture and sensitivity, blood urea, serum creatinine. Plain X-ray abdomen and pre-operative excretory urography was done for each patient.

Observations

1. Pyelographic readings

Descent of bladder, amount of residual urine, elongation of ureters, vesico-ureteric reflux, persistent nephrogram,

hydroureter hydronephrosis and any other abnormality like ureterocele were noted and the following changes were observed (Table I). Figs. 1, 2 and 3.

fore the urinary tract changes take place, but the duration of prolapse has got no direct relationship to the severity of urinary tract changes (Table III).

TABLE I
Pre-operative Pyelographic Readings

S. No.	Change observed	No. of cases	%age	Bilateral	Unilateral	
					Right	Left
1.	Descent of bladder	16	64			
2.	Residual urine	11	44			
3.	Vesico-ureteric reflux	5	20			
4.	Hydroureter	3	12	2		1
5.	Hydronephrosis	8	32	4	3	1
6.	Persistent nephrogram	1	4			

2. Relation with parity

Age and parity of a woman had no relationship with changes in the urinary tract in prolapse.

3. Degree of prolapse: Changes are directly proportional to the degree of prolapse (Table II).

Duration of prolapse: It is concluded that though some period must elapse be-

Type of prolapse: Type of prolapse has definite relationship with urinary tract changes as shown in Table IV.

Pre-operative blood urea was raised in 2 cases, though the excretory urography showed early changes only i.e. descent of bladder and residual urine.

Four cases showed raised serum

TABLE II
Degree of Prolapse

Degree of prolapse	No. of cases	No. of cases showing urinary tract changes	Percentage
First degree	5	1	20
2nd degree	14	5	35.61
Procidential	5	4	80
Vault prolapse	1	1	100

TABLE III
Duration of Prolapse

Duration in years	No. of cases	No. of cases showing urinary tract changes	Percentage
Less than 1	4	2	50
1- 5	10	4	40
6-10	8	3	37.5
11-15	1	—	0
16-20	2	Nil	0

TABLE IV
Type of Prolapse

Type of prolapse	No. of cases	No. of cases showing urinary tract changes	Percentage
1st degree U.V. prolapse with cystocele	5	1	20
2nd degree U.V. prolapse with cystocele	14	2	35.6
Procidentia	5	4	80.0
Vault prolapse	1	1	100

creatinine level (Normal level .8-1.2 mgm%). *Summary*

Discussion

Awareness of a condition is the main stay of diagnosis. In prolapse, especially of severe degree and procidentia of any duration, pathological changes had already taken place in the urinary tract with little clinical manifestation. Therefore, it is very important that thorough urinary tract investigations should be done in all cases of prolapse before resorting to surgery. This also concludes that if one is aware of changes in the urinary tract, one should resort to early and adequate surgery in time to avoid permanent damage to the kidney. In the present study we found descent of bladder residual urine, vesico-ureteric reflux, hydroureter, hydronephrosis and persistent nephrogram in 64%, 44%, 20%, 12%, 32% and 4% of cases respectively.

In the present series 25 cases of varying degree of all types of prolapse were studied and it is concluded that no age is immune from urinary tract changes. Parity has no relation with urinary tract changes. Incidence of urinary tract changes are directly proportional to degree and type of prolapse. Duration of prolapse has got no significant relation with urinary tract changes. Complete investigations of urinary system is advocated.

References

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See Figs. on Art Paper V-VI