

POST-OPERATIVE EXCRETORY UROGRAPHY IN PROLAPSE

by

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The anatomical, physiological and subsequent pathological changes that take place in the urinary tract due to prolapse are reversible to a great degree if requisite surgery is undertaken well in time. A complete return to normal or a marked improvement is achieved as reported by different authors (Kreschmer and Kanter, 1937; Joseph and John, 1950; Parikh and Parikh, 1966).

Danforth (1938) stated that a complete restoration to normal cannot be expected if correction of prolapse was not done in time.

Riddle in 1975 has reported dramatic improvement in the pyelogram appearances in a case of procidentia where he used a pessary to keep it in position.

Jones and Evison (1977) also showed marked improvement on excretory urography two months after corrective surgery in a case of complete prolapse.

Material and Methods

Twenty-five cases of varying degrees and types of prolapse showing different urological changes were submitted to requisite surgery and 3 weeks after the

surgery a repeat excretory urography was done.

Various biochemical investigations i.e. complete urine examination, urine culture and sensitivity, blood urea and serum creatinine were also repeated 4 weeks post-operatively.

Following surgical procedures were undertaken:

Manchester repair	: 16
Vaginal hysterectomy (Mayo-wards)	: 5
Anterior and posterior colporrhaphy	: 2
Le-Forte Colpoclesis	: 1
Pessary	: 1

Observations

The improvement or not of the following pyelographic findings which were there pre-operatively was noted post-operatively.

The marked improvement was noted in the urological changes as shown in Table I and Table II.

Biochemical readings

Blood urea which was raised in 2 cases pre-operatively came to normal level after surgery. Serum creatinine was raised in 4 cases and showed normal levels post-operatively in 3 cases.

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Accepted for publication on 8-9-1981.

TABLE I
Pre-operative and Post-operative Pyelographic Changes

	Pre-operative No. and percentage of cases showing changes		Post-operative No. and percentage of cases showing complete regression	
	No.	Percentage	No.	Percentage
Descent of bladder	16	64	8	50
Residual urine	11	44	6	54.5
Vesico-ureteric reflux	5	20	3	60
Hydroureter	3	12	2	6.6
Hydronephrosis	8	32	6	75
Persistent nephrogram	1	4	1	100

TABLE II
Pre-operative and Post-operative Pyelographic Changes

	Pre-operative No. and percentage of cases showing changes		Pre-operative No. and percentage of cases showing marked improvement	
	No.	Percentage	No.	Percentage
Descent of bladder	16	64	8	50
Residual urine	11	44	4	36.3
Vesico-ureteric reflux	5	20	—	—
Hydroureter	3	12	1	33.3
Hydronephrosis	8	32	2	25

Discussion

Whatever the cause of obstruction it is clear that urinary tract changes do occur in a significantly high percentage of cases and kidney function affected in cases of prolapse without any clinical manifestation. Persistent nephrogram is the earliest change of obstructive uropathy.

In the literature Klempner (1952) and Riddle (1975) showed cases of proclenia admitted in emergency with ureamia. After resuscitative measures and reducing the prolapse with pessary, blood urea levels came to normal and the patients survived.

Urinary tract changes completely disappeared or markedly improved in a significant percentage of our cases (Figs. 1, 2 and 3).

This clearly indicates that surgery should be done at the earliest possible time in such cases to prevent permanent damage to kidney function.

The extent of urinary tract involvement should be assessed so that surgery is done at the suitable time.

Though urinary obstructive changes are present in some cases they are no bar to surgical interference or rather indicate an early attempt at surgery.

It is shown that surgery reverses the changes in majority of cases and avoids a lot of urinary tract catastrophe that might set in if prolapse is otherwise left untreated.

There was complete disappearance of descent of bladder, residual urine, vesico-ureteral reflux, hydroureter, hydro-

nephrosis and persistent nephrogram in 50%, 54%, 60%, 66% 75% and 100% of cases respectively. In the rest of cases there was marked improvement in the above mentioned changes.

Summary

Early surgical treatment of prolapse is very much desirable and rewarding in cases of prolapse which show urinary tract changes leading to complete regression or marked improvement of the changes in the urinary tract.

References

1. Danforth, W. C.: The relationship between prolapse of uterus and changes in

the urinary tract. *S. Clinics of North America*. 18: 213, 1938.

2. Jones, J. B. and Evison, G.: Excretory urography before and after surgical treatment of procidentia. *Br. J. Obstet. Gynec.* 84: 304, 1977.
3. Long, J. P. and Montgomery, J. B.: The incidence of ureteral obstruction in benign and malignant gynaecological lesions. *Am. J. Obstet. Gynec.* 59: 552, 1950.
4. Klempner, E.: Gynaecological lesions and ureterohydronephrosis. *Am. J. Obstet. Gynec.* 64: 1231, 1952.
5. Kreschmer, H. C. and Kanter, A. E.: Urinary tract changes in procidentia. *J.A.M.A.* 109: 1097, 1937.
6. Parikh, S. R. and Parikh, K. S. Urinary changes in cases of genital prolapse. *J. Obstet. Gynec. India*. 16: 567, 1966.
7. Riddle, P. R.: Procidentia and ureteric obstruction. *Br. J. Oology*. 47: 387, 1975.

See Figs. on Art Paper I