

OPERATIVE TREATMENT OF HYDRONEPHROSIS

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INTRODUCTION:

Hydronephrotic transformation occurs very often. S.P. Fyedorov divides the causes of obstruction into 5 groups-changes in the wall of the ureter or renal pelvis-obstacles in the ureter out of its lumen. - obstacles in the lumen of ureter.-obstacles caused by deflection in the position of ureter. - obstacles located in lower urinary tract organs (bladder, urethra). All these enumerated causes of hydronephrotic transformation are to be diagnosed and removed. Otherwise, dilatation of the bladder, ureter, pyelocalyceal system with atrophy of the parenchyma develops because of stasis of urine. Latter on the process is complicated very often by nephrogenic hypertension, nephrolithiasis, pyelonephritis, pyonephrosis, urosepsis and in bilateral cases by chronic renal insufficiency. Obstruction occurs more frequently in pelvicalyceal segment: stenosis, valve, stone (additional, accessory) vessel, high insertion of ureter, etc. It is a common knowledge, that plastic reconstructive operations for upper urinary tract obstruction belong to very complicated surgical interventions.

MATERIAL AND METHODS

At the urologic clinic of the Medical Institute situated on the basis of the Republic Clinical Hospital of Bishkek, 100 patient (50 women, 50 men, age range 16-76) were hospitalized for urinary tract obstruction.

Most of the patients with the obstruction of ureteropelvic junction (UPJ) were under 40-69 (69%) out of them 87 (87%) patients developed stenosis of UPJ, including 21 patients with steno-

sis of UPJ of only one kidney, 2 patients with recurrent stenosis of UPJ.

Moreover, causes of hydronephrotic transformation were: 7 with an accessory vessel, 4 with a unilateral high insertion of ureter and 1 patient with a bilateral high insertion of ureter was observed. Ten patients had stenosis of UPJ, an accessory vessel and nephrolithiasis. Hydronephrotic transformation was complicated by chronic pyelonephritis in 50 (51%), pyonephrosis in 3 (3%). The stages of hydronephrotic transformation are given below (Table 1)

Table - 1: Stages of hydronephrotic transformation.

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Hydronephrosis	Stage I	38
	Stage II	49
	Stage III	13

From Table-1 we can see that the majority of patients had the first two stages, 87 (87%)-. 13 (13%) were at the terminal stage, three of them with pyonephrosis. Hydronephrotic transformation on the basis of nephrolithiasis and infravesical obstruction is not included in this table.

RESULTS AND DISCUSSION

Out of the total number of patient 13 cases were not operated on and they are under observation. These patients refused to undergo operation on the first stage of hydronephrotic transformation. The rest 87 (87%) were operated on.

From Table-2 we can see that in most of the cases -56 (56%)- reconstructive operations were performed and kidneys were preserved. Anderson-Kus-Kucher pyeloplasty was performed in

Table - 2: Type and number of operations based on age and sex

Type of operation	Total	Age in years					
		<18	18-29	30-39	40-49	50-59	>60
*Reconstruction of pyeloureteric segment by Anderson-Hynes-Kus-Kucher	41	6	13	12	3	6	1
* Antevesical pyeyo-pyelo anastomosis	5	-	2	1	1	-	1
* Foley-Fenger pyeloplasty	7	-	2	3	1	-	1
* Lithenberg pyeloplasty	1	-	1	-	-	-	-
* Grinchak-Kucher pyeloplasty	1	-	-	1	-	-	-
* Culp-De Vend Gunchac pyeloplasty	1	-	1	-	-	-	-
* Ureteropyelolysis with the intersection of the additional vessel	18	4	2	7	3	-	2
* Nephrectomy	13	1	2	3	1	2	4
TOTAL	87	11	23	27	9	8	9
Men	41	12	11	8	4	2	4
Women	46	4	9	18	7	6	2
Without operation:							
Men	9	2	1	3	-	1	2
Women	4	1	-	2	-	1	-

41 (73.2%) patients. Simultaneously with reconstructive operations secondary stones were removed from the kidneys in 10 patients.

As it is known, results of reconstructive operations, depend on the correctness of drainage of the kidneys. We always put nephrostomy made of a thin polyvinyl tube used for internal infusion and intube the ureter by synthetic microirrigator. They must remain not less than 3-4 weeks. The stent and the nephrostomy are removed after testing and antegrade pyeloureterography.

Nephrectomy was necessary in 13 (13%) patients, in one case hydronephrotic transformation

was at the 2nd stage, complicated by acute purulent pyelonephritis in a patient older then 60. In the others hydronephrosis was at the 3rd stage, out of them 5 had pyonephrosis. In the connection with the absence of organic changes 18 (18%) patients underwent the operation of ureteropelviolysis. Thus ureteropelvic junction obstruction needs accurate timing of plastic-reconstructive surgery to prevent organ loss.

INTRODUCTION:

The number of injuries of the urinary tract during gynecology-obstetrical operations has increased. Kn, D.V. (1) reported that "obstetricians-gynecologists do not use all the necessary precautions in their daily operations to avoid possible complications with the urinary system. They do not catheterize ureters before the deliberately difficult operations and also do not evacuate urinary bladder. They do not examine urinary sytem before the operation and never render an adequate help if it is injured". As a result of this genital fistulas appear, such as vesicovaginal, vesicouterine, urethrovaginal and ureterovaginal fistulas. It is necessary to do complicated, reconstructive, plastic operations to abolish these fistulas. But sometimes in case of recurrences they have to be repeated. Spasokukorsky reports: Plastic operations of the urinary genital fistulas is one of the most difficult operations. Especially the depth of the operation field hinder all movements and make the work with the scalpel and needle more triesome. Another side of this problem is that it brings often failures, that forces us to repeat the operation again and again.

MATERIAL-METHOD

For the last 4 1/2 years 93 women (age range: 19-57 years) entered the Clinic of Urology with different traumas of the urinary system after gynecology-obstetrical operations.

From the total number of the entered persons. 4 patients were from the other republics: two from Jambul region (Kazakistan). 1 from Tasli-

kent, 1 from Moscow, Last 2 patients had recurrent urinary genital fistulas. One patient was transferred from the general surgery (R.C.). the other 89 patients were from the different sectors of the gynecology-obstetrical clinics in the Kirghizstan (Table 1).

According to Table-2, most of the patients were under 40 years (64.5%). All of them had injured urinary tract during the cesarean section and extirpation of uterus (atonic bleeding). After the age of 40. 33 patient (35.5%) had hystrectomy because of myomas and other pathologies.

Table-1: Nuber of traumas of the urinary system in the Kirghizstan.

N	Regions	Number
1	Chu region	19
2	Bishkek	18
	Maternity Hospital n1	6
	Maternity Hospital n2	8
	Maternity Hospital n3	6
	Institute of Science and Research of Oncology and Radiology	1
	General Surgery of The Republic Clinics	1
3	Osh region	8
4	Jalal-Abad region	5
5	Talas region	5
6	Issik-Kul region	6
7	Hanşh negioh	7
8	From other Republics	4

Table-2: Ages of the patient.

Age	<20	21-24	25-29	30-34	35-39	40-44	45-49	50-54	>55	Total
No	7	7	5	27	14	14	8	9	2	93

Table-3 shows that gynecology-obstetrical operations more often bring injury to urinary bladder, causing vesicovaginal fistulas (in about 57-61.31% of all cases). Recurrent vesico-vaginal fistulas were seen in 15 (26.3%) of them. Combined traumas of the urinary bladder occurred in two cases. That explains the higher number of injuries than the number of patients (107 vs. 93). Out of 12 women with stitched and tied up ureters. Two suffered bilateral problems. Two women were brought by air to the reanimation unit of the republic Clinics, with diagnosis of anuric stage of acute renal insufficiency. They died within the first day of their hospitalization.

Table-3: Nuber of traumas

Types	Number
Vesicovaginal fistulas	42
Reurent vesicovaginal fistulas	15
Vesicouterine fistulas	3
Ureterovaginal fistulas	19
Stitched ureters	12
Bilateral	3
Urethrovaginal fistulas	2
Combined traumas of urinary tract	11
Total	107

Table-4: List of salvage procedures

Name	Number
Vesicovaginal fistula repair	57
Plastic operation of ureters and urethro-vaginal fistulas	18
Urethrovaginal fistula repair	2
Operation for the combined urinary genital traumas	15
Nephrectomies	12
Total	104

Dissection showed stitched ureters in both cases. All women entered the Urology Clinic with urinary system traumas after complete examining and previous conservational treatment aga-

inst inflammatory processes had various plastic recovering operations.

RESULTS AND DISCUSSION

Plastic operations for the vesicovaginal fistulas were performed in 57 patients. Sixteen patients were operated with the relapses of the vesicovaginal fistulas, 12 of them were operated twice. Seven patients had their first operataion in other clinics. One had operations in Moscow, another in Tashkent, the last one in Kirghizytan. Four patients had stitched of tied up ureters and that-way why ureteroneocystostomy with antireflux operation was performed. Five patient underwent end to end ureteral anastomosis with the prevention of renal function. Twelve patients had non-functional kidney after injury and that was why nephrectomy was done. Fifteen patients with combined traumas of the urinay system had serious operations. Two patients had ureteroneocystostomy combined with reparation of vesico-vaginal fistulas. Polietomia of the urinay bladder, nephrectomy and plastic operation of vesico-vaginal fistulas were performed in another 2 women. On patient, after the end of pergnancy had atonic bleeding, so amputation of uterus was done, but both of ureters were stitched. Urgent both side nephrostomy with an antireflux operaion was performed. So, only well-time plastic reconstructive operation of the urinay system can save women from long suffering and make them feel themselves strong and healthy.

REFERENCES

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