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Research Article

**DURING PREGNANCY THE SEQUENCE OF URINARY TRACT
SIGNS AND SYMPTOMS: A DESCRIPTIVE STUDY
CONDUCTED IN NISHTER HOSPITAL MULTAN**¹Dr. Huma Hafeez, ²Dr. Farjad Naveed Ahmed, ³Dr. Usman Asghar¹Women Medical Officer, BHU Misrial, Rawalpindi. PMDC No. 81549-P²Medical Officer, Basic Health Unit Rurki Kalan, Sialkot³Govt. Eye Cum General Hospital, Gojra, Toba Tek Singh**Abstract:**

There are significant changes in the structure and function of the urinary tract during pregnancy. These changes are often the basis for developing urinary tract disease or cause kidney disease worsening and its consequences.

Objective: Our aim was to evaluate the symptom pattern of the urinary tract during pregnancy.

Study Design: A Descriptive Study.

Place and Duration: In the Obstetrics and Gynecology Department, Nishter Hospital Multan for one-year period from April 2016 to April 2017.

Methodology: Women with symptoms of chronic renal insufficiency, diabetes mellitus, or urinary tract related problems before the pregnancy were not included in the study. Other study variables were symptoms of urinary tract during pregnancy. All women were subjected to a complete urine test with different investigations, including sensitivity and culture.

Findings: 520 total patients were selected for the study. 48 (8.93%) of them were detected with urinary tract problems. In 2 (0.4%) patients' Urinary tract infections were detected, 11 (2.1%) in 2 (0.4%), pelvic kidney stone in 520 (6.5%) and acute urinary retention in 34 acute renal failures. Most of the patients were included in the 21-25 age group. In the third semester mostly patients have symptoms of urinary tract. Our study analysis shows that 317 (61.0%) of the pregnant women had urinary frequency indications. Voiding difficulties and Stress incontinence were reported as 35.2% and 37%, respectively.

Conclusion: In pregnancy, urinary tract issues are common including acute renal failure, UTI, acute urination and nephrolithiasis. Common symptoms include stress incontinence, urination urgency, and difficulty in urination.

Key words: urinary tract, pattern, pregnancy, symptomatology.

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INTRODUCTION:

During pregnancy significant changes in the structure and function of the urinary tract, including high glomerular filtration (GFR), urine output and blood volume occur. Ureters are exposed to tonic relaxation due to the excessive hormones production, mainly progesterone. This tone loss, together with the high volume of the urinary tract, creates urine stasis. Urinary stasis in Some women prepare the ground for upper urinary tract and acute pyelonephritis infections. During pregnancy, lower urinary tract symptoms include increased urinary excretion, decreased bladder capacity, and increased intravenous pressures. Urinary tract infections are the most common medical issue that complicate pregnancy. Various studies have reported the relation between urinary tract infections during pregnancy and outcomes, such as anemia, maternal pyelonephritis, hypertension and renal failure over the last thirty years; premature birth in infants, fetal growth restriction, fetal death and low birth weight. Asymptomatic bacteriuria is seen in 2-11% of pregnancies. Although pregnancy has no association with bacterial infection, it increases the pyelonephritis risk, which in turn constitutes a risk for the fetus and mother. The acute renal failure incidence has reduced complications as the most successful eclampsia, post-abortion sepsis, severe bleeding, hypovolaemia and early intervention as a result of advanced pre-natal care, declining in the last decade in the treatment of complicated pregnancies. In this case, developing maternal-fetal morbidity and mortality rates in excess of 50% in the country and accounts are still common, contrary to acute renal failure incidence obstetric issues take origin.

MATERIALS AND METHODS:

This Descriptive Study was held in the Obstetrics and Gynecology Department, Nishter Hospital Multan for one year period from April 2016 to April 2017. Patients with diabetes mellitus, chronic kidney failure or dizziness and for urinary tract infections who had taken antibiotics within the last 4 weeks complained

of symptoms of the lower urinary tract prior to pregnancy were not selected for the study. Using a pre-designed proforma the data were recorded. After informing the study subjects, predesigned proforma was given and informed consent was taken. A detailed history of symptomatology related to urinary problems. For example, urge for urine, constriction, dizziness, stress frequency, urinary incontinence and difficulties in urination. All pregnant patients were taken to study whether they wanted to collect a urine sample medium flow after vulva cleaning with normal water or catheter specimens were preserved. It was sent for histopathological and physical biochemical analysis including sample sensitivity and culture. Other related investigations included random blood glucose, full blood count, serum creatinine, blood urea, serum electrolytes, serum uric acid, clotting profile, liver function tests, 24 hours urine protein, ultrasonography, lower abdomen CT scan. General clinical, physical and obstetric examinations were performed. All women with APH, PPH and severe preeclampsia were subjected to a standard treatment protocol. Acute renal failure Patients were referred to the urologist room after a therapeutic treatment for further assessment. kidney dialysis unit, tables, kidney disease were transferred to the women were recorded, recorded and monitored to show that the renal function was restored. Data were analyzed by calculating frequency and percentage.

RESULTS:

During the study, 520 patients were analyzed. 49 (9.4%) of them were diagnosed with urinary tract. The average age of the patients was 27, the youngest was 17 and the oldest was 41 years old. 306 of the 520 patients (59%) were replicated with 3-5 children. The urinary complaints frequency increased by 75.5% in the last three months of the pregnant patient with increasing gestational age and was 18.1% in the first quarter. Acute urinary retention was diagnosed in patients with urinary tract infection 2 (0.4%) (Table 1, 11 (2.1%), Pelvic kidney stone 520 (6.5%) , acute renal failure 34 in 2 (0.4%)).

Table No1: Frequency of Different Urinary Problems in Pregnancy

Condition	No of patients	Percentage
Urinary tract infection	34	6.5%
Cystitis and Urethritis	25	4.8%
Acute pyelonephritis	06	1.2%
Asymptomatic bacteriuria	03	0.5%
Acute renal failure	11	2.1%
Renal calculus disease	02	0.4%
Acute urinary retention	02	0.4%

Symptoms Analysis showed that more than one symptoms are noted in many patients. The most common symptoms were the following: micturition frequency was 316 (60.8%), stress incontinence and urinary difficulties were 192 (38%) and 183 (36%) respectively. The acute renal failure most common causes include preeclampsia, eclampsia and prolonged intrauterine death (Table II).

Table No2: Urinary tract symptoms

Symptoms	N0 of Patient	Percentage
Irritative Symptoms		
Frequency of micturition	316	60.8%
Urgency	150	28.8%
Pain in lower abdomen	53	10.2%
Burning micturition	88	16.9%
Dysuria	53	10.2%
Incontinence		
Stress incontinence	191	36.7%
Urge incontinence	152	29.2%
Voiding Difficulties		
Difficulty in passing urine	45	8.7%
Incomplete emptying	138	26.5%
Other		
Oliguria	06	1.15%
Hematuria	05	0.9%
Affected	436	83%
Not affected	84	16.5%

Initially all acute renal failure patients were conservatively managed, transient dialysis was required in 3 patients and 3 patients died. (Table III)

Table No3: Data concerning 11 patients who had acute renal failure

S.No	Age in years	Parity	Gestational	Primary cause age in weeks	Management and outcome	Mode of delivery	Fetal outcome
1.	22	2 nd	11	Septic abortion	Expired	Induced abortion	
2.	35	9 th	34	Post-partum bleeding	Dialysis	SVD	Alive
3.	28	4 th	38	Hepatorenal failure	Conservative	SVD	IUFD
4.	20	4 th	40	Eclampsia	Conservative		Still born
5.	25	PG	32	Pre-eclampsia	Conservative		Alive
6.	24	7 th	33	Pre-eclampsia	Conservative	SVD	NND
7.	28	5 th	34	Eclampsia	Expired	SVD	IUFD
8.	30	5 th	41	Abruption placenta	Dialysis	SVD	IUFD
9.	35	5 th	20	Eclampsia	Expired	Induced abortion	
10.	25	PG	24	Prolonged intra uterine death	Conservative	Induced labor	IUFD
11.	25	PG	30	Prolonged intra uterine death	Conservative	Induced labor	IUFD

DISCUSSION:

Urinary tract problems during pregnancy in our country are quite common. The most common urinary tract infection was urinary tract infection during the pregnancy of 520 selected patients. Pregnancy is a predisposing factor for urinary tract

infection and pregnant women suffering from this are exposed to dangerous risks. 520 of these sera (6.5%) had **THOUGH** at 34. This is 18% lower than that reported by Net JT and colleagues. about 20-40% of these women are diagnosed and treated with asymptomatic bacteriuria (ASB) because they are not

treated during pregnancy, if they develop symptomatic urinary tract infections. ASB is also associated with early delivery. Prevalence is very high in pregnancy compared with other studies in acute renal failure (ARF). A more effective treatment of preeclampsia in the early stages of complicated pregnancies and the onset of the septic abortus in the early stages of complicated pregnancies. In our study, IRA was found to be very sick in 1060, and in 194 obstetric patients was Drakely in comparison to others. This study was supported by Drakely et al. All patients with ARI were healthy before. Acute renal failure due to preeclampsia, eclampsia and prolonged intrauterine fetal death. Two patients with acute acute renal failure required acute renal failure. However, renal failure improved due to normal kidney function. After conservative treatment, eight patients had normal renal function and 2 patients died after transient dialysis treatment. Naqvi et al. They reported that the most common cause of acute renal failure was antepartum hemorrhage. However, in our study, as seen in the Drakely study, the prevalence of preeclampsia as the cause of acute renal failure and the complicated preeclampsia has been the major cause of severe renal failure. et al. However, in patients with renal disease who already have hypertension and proteinuria, preeclampsia is difficult to diagnose. Preeclampsia often occurs early and more serious. The concentration of uric acid in maternal serum may be the first sign of preeclampsia. The uric acid and creatinine levels in the initial maternal serum were 14-20. It should be taken during pregnancy week. Deteriorated maternal renal function or uncontrolled hypertension is an indication of termination of pregnancy. Urinary retention during pregnancy is rarely found in the literature. This study showed that 2 (2.5%) obstetric patients had acute urinary retention. A retrograde ultrasound grade uterus was detected at the entrance. Ultrasound showed no fibroma or retrograde grade uterus with other pelvic tumors. Severe UTI and other urological causes were not detected in the study. There was no history of pelvic inflammatory disease (PID) or abdominal pelvic surgery. There is no universal protocol for the treatment of imprisonment, but various techniques have been described. However, urgent treatment is to keep the patient supine and to delay the release of the bladder if the patient is supine. Both patients were treated conservatively with transient catheterization. No manual repositioning of uterine or necessary care is required in any patient. Analysis of the symptoms showed that 431 (83%) pregnant women gave at least one symptom. However, most women gave more than one symptom. Cutner et al. Only 100% of pregnant women reported complaints of urinary symptoms, but

only 47% of women complained of one or more problems related to the lower urinary system in the study of Najmi et al. The most common symptom was the frequency of 83.59% of women, Najmi et al., Day and day, 316 (60.8%) less discovery of the frequency of patients. Urinary frequency, increased fluid and urine intake, and pressure on the bladder of the pregnant uterus may be due to a variety of causes, including mechanical factors. At the third trimester, a reduction in bladder capacity can further complicate the situation. However, a higher fluid consumption is the most important factor. The second most common symptom was stress incontinence. 197 (38%) were available. In general, as the pregnancy progresses, women recognize increasing numbers of complaints of urinary incontinence and 32-85% of people with gravitational effects.

CONCLUSION:

This study results shows that in acute renal failure, urinary problems, acute renal failure, such as renal calculi and acute urinary retention, which are common in our mother's pregnancy. Qualitative tests of urine, urine culture and determination of blood pressure on the surface are sufficient to detect urinary problems during pregnancy. Obstetric complications continue to be common causes of acute renal failure in developing countries. Later, the most effective measures remain as prevention and management of obstetric complications. To improve outcomes, the benefits of pre-natal care for the disease should be trained and access to such care should be provided.

REFERENCES:

1. Afshar, Kambiz, Nina Fleischmann, Guido Schmiemann, Jutta Bleidorn, Eva Hummers-Pradier, Tim Friede, Karl Wegscheider, Michael Moore, and Ildikó Gágyor. "Reducing antibiotic use for uncomplicated urinary tract infection in general practice by treatment with uva-ursi (REGATTA)—a double-blind, randomized, controlled comparative effectiveness trial." *BMC complementary and alternative medicine* 18, no. 1 (2018): 203.
2. Harlow, Bernard L., Tamara G. Bavendam, Mary H. Palmer, Linda Brubaker, Kathryn L. Burgio, Emily S. Lukacz, Janis M. Miller et al. "The prevention of lower urinary tract symptoms (PLUS) research consortium: A transdisciplinary approach toward promoting bladder health and preventing lower urinary tract symptoms in women across the life course." *Journal of Women's Health* 27, no. 3 (2018): 283-289.
3. Breyer, Benjamin N., Jennifer M. Creasman, Holly E. Richter, Deborah Myers, Kathryn L. Burgio, Rena R. Wing, Delia Smith West, John

- W. Kusek, and Leslee L. Subak. "A Behavioral Weight Loss Program and Nonurinary Incontinence Lower Urinary Tract Symptoms in Overweight and Obese Women with Urinary Incontinence: A Secondary Data Analysis of PRIDE." *The Journal of urology* 199, no. 1 (2018): 215-222.
4. Ganzeboom, Karlijn MJ, Annemarie A. Uijen, Doreth TAM Teunissen, Willem JJ Assendelft, Hans JG Peters, Jeannine LA Hautvast, and Cornelia HM Van Jaarsveld. "Urine cultures and antibiotics for urinary tract infections in Dutch general practice." *Primary health care research & development* (2018): 1-8.
 5. Cameron, Anne P., Christina Lewicky-Gaupp, Abigail R. Smith, Brian T. Helfand, John L. Gore, J. Quentin Clemens, Claire C. Yang et al. "Baseline lower urinary tract symptoms in patients enrolled in the Symptoms of Lower Urinary Tract Dysfunction Research Network (LURN): a prospective, observational cohort study." *The Journal of urology* 199, no. 4 (2018): 1023.
 6. Schneeberger, Caroline, Jan Jaap HM Erwich, Edwin R. van den Heuvel, Ben WJ Mol, Alewijn Ott, and Suzanne E. Geerlings. "Asymptomatic bacteriuria and urinary tract infection in pregnant women with and without diabetes: Cohort study." *European Journal of Obstetrics & Gynecology and Reproductive Biology* 222 (2018): 176-181.
 7. Helmuth, Margaret E., Abigail R. Smith, Victor P. Andreev, Gang Liu, H. Henry Lai, Anne P. Cameron, and Nazema Y. Siddiqui. "Use of Euclidean length to measure urinary incontinence severity based on the lower urinary tract symptoms tool." *American Journal of Obstetrics & Gynecology* 218, no. 3 (2018): 357-359.
 8. Oriá, Mônica Oliveira Batista, Emma McKim Mitchell, Camila Teixeira Moreira Vasconcelos, Tamires Dayanne Araújo de Oliveira, Lia Gomes Lopes, Purdenciana Ribeiro de Menezes, and Marli Terezinha Gimenez Galvão. "Prevalence of lower urinary tract symptoms and social determinants in primary care users in Brazil." *International urogynecology journal*(2018): 1-8.
 9. Liu, J.M., Chiu, F.H., Liu, Y.P., Chen, S.P., Chan, H.H., Yang, J.J., Chang, F.W. and Hsu, R.J., 2018. Antepartum urinary tract infection and postpartum depression in Taiwan—a nationwide population-based study. *BMC pregnancy and childbirth*, 18(1), p.79.
 10. O'Boyle, Amy L., Bethany M. Mulla, Shannon V. Lamb, Joy A. Greer, Stuart H. Shippey, and Nanette L. Rollene. "Urinary symptoms after bladder flap at the time of primary cesarean delivery: a randomized controlled trial (RTC)." *International urogynecology journal* 29, no. 2 (2018): 223-228.
 11. Lin, Yi-Hao, Shuenn-Dhy Chang, Wu-Chiao Hsieh, Yao-Lung Chang, Ho-Yen Chueh, An-Shine Chao, and Ching-Chung Liang. "Persistent stress urinary incontinence during pregnancy and one year after delivery; its prevalence, risk factors and impact on quality of life in Taiwanese women: An observational cohort study." *Taiwanese Journal of Obstetrics and Gynecology* 57, no. 3 (2018): 340-345.
 12. Schiavi, Michele Carlo, Maria Grazia Porpora, Flaminia Vena, Giovanni Prata, Valentina Sciuga, Ottavia D'Oria, Chiara Di Tucci et al. "Orally Administered Combination of Hyaluronic Acid, Chondroitin Sulfate, Curcumin, and Quercetin in the Prevention of Postcoital Recurrent Urinary Tract Infections: Analysis of 98 Women in Reproductive Age After 6 Months of Treatment." *Female pelvic medicine & reconstructive surgery*(2018).
 13. Nevés, Tryggve. "Lower Urinary Tract Dysfunction in Children and Young Adults: An Introduction." In *Clinical Urodynamics in Childhood and Adolescence*, pp. 117-126. Springer, Cham, 2018.
 14. Friedman, Lucas, Natalie Jo Horwitz, Lindsey Retterath, Dale Woolridge, and Srikar Adhikari. "Point-of-Care Ultrasound Screening and Diagnosis of Imperforate Hymen in Pediatric Abdominal Pain." (2018): 479-479.
 15. Ghouri, Flavia, Amelia Hollywood, and Kath Ryan. "A systematic review of non-antibiotic measures for the prevention of urinary tract infections in pregnancy." *BMC pregnancy and childbirth* 18, no. 1 (2018): 99.