

## Case Report

# Bilateral Hydronephrosis Due to Uterine Prolapse

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## Abstract

A case report of 50 years old lady who had a neglected complete procidentia resulting in severe obstructive uropathy.

## Introduction

Untreated Complete uterovaginal prolapse though not very common, may lead to obstructive uropathy with bilateral hydronephrosis resulting in renal failure.<sup>1,2</sup>

## Case Report

A 50yrs old obese lady reported in outpatient department of Al-Ihsan hospital with complaint of lower abdominal pain, dysuria, urgency of urine for the last two weeks and history of something coming out of vagina for the last five years. Her menstrual cycle was regular 6/28. LMP was a week ago.

She was married for the last 27 years and had four normal deliveries with no miscarriage and her last child birth was 11 years back. There was no coital activity for the last five years.

She was a known hypertensive and was under the care of a psychiatrist for depression for the last 5 years and was on anti-depressants.

On physical examination she was obese, pale looking not so well oriented in time, place and person with a little drowsiness. Her pulse was 102/min, B.P 135/95 and temperature was 100 F. Systemic examination revealed no abnormality. Gynaecological examination showed complete uterine descent with marked cystocele, rectocele and enterocele.

Laboratory tests showed anaemia Hb 9.5 g/dl (normal 12-16 g/dl), WBC 12.1/cmm (normal 4-10), raised blood urea 100 mg/dl (normal 10-50), creatinine 2.7 mg/dl (normal 0.6-1.1). Numerous pus cells were seen on urine examination, but urine culture report revealed no growth of any organism. Random blood glucose level 94 mg/dl (<160 mg/dl). Abdominal ultrasound showed bilateral hydronephrosis which was confirmed by abdominopelvic CT scan report showing grade III hydronephrosis and downward descent of lower ends of both ureters due to grade III uterovaginal prolapse (UV) as shown in Figure 1



**Figure 1. CT scan showing grade III hydronephrosis**

Patient was admitted and had her consultation by the physician, psychiatrist and anaesthetist. After obtaining fitness for surgery, she had vaginal hysterectomy with anterior vaginal repair, posterior culdoplasty and colpoperineorrhaphy (Figure 2 & 3)



**Figure 2. Complete uterine descent (Pre-operative)**

Her post-operative recovery was uneventful and there was marked improvement in hydronephrosis to stage I confirmed by 6 weeks post-surgery abdominal CT Scan. She was quite happy and satisfied and there was marked reduction in her anti-depressant drug doses.



**Figure 3. Post-operative result.**

## Discussion

Obstructive uropathy with bilateral hydronephrosis may be seen in uterine procidentia cases.<sup>3,4</sup> Though it is rare. It is estimated that about 5-7 % patients with uterine prolapse have obstructive uropathy.<sup>5</sup> The mechanism is most likely direct compression of ureters.<sup>6</sup> In complete procidentia herniation of bladder, uterus and ureters through the pelvic floor occurs, whereby the and ureters are compressed between fundus of uterus and bladder against the levator ani muscle.<sup>7,8</sup> The same happened in this case.

A similar case was reported by Durukan T in Department of Obstetrics and Gynaecology Ankara, Turkey where a 64 years old woman presented with renal dysfunction due to procidentia. After surgical correction of procidentia renal function tests returned to normal.<sup>9</sup>

Another case reported by Chuang FR in Chiayi, Taiwan where a 54 years old lady was admitted due to fever and pyuria. Uterine prolapse was noted as an incidental finding. She had vaginal hysterectomy which corrected obstruction and bladder dysfunction also.<sup>10</sup>

Similarly in our case the neglected stage III UV prolapse resulted in obstructive uropathy and reversal of kidney function after surgical correction of procidentia.

## Conclusion

Hence we suggest that in woman presenting with dilatation of upper urinary tract one must always rule out, among other causes, uterine or vesical prolapse as early diagnosis and management are necessary in order to prevent urinary tract infection and renal failure.

## References

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### Quote

“Discover, rediscover, find and cling to and confess the values—values of the intellect and heart”.

Dr. Ruta, A German nun