RETENTION OF URINE IN OBSTETRICS AND GYNAECOLOGY

by

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Among the various disorders of micturition, retention of urine seems to be very common in obstetrical and gynaecological practice. This disorder can happen either as a complication following abdominal or vaginal operation or as a symptom due to some pathology in the pelvis. For the purpose of management of the latter group of cases, proper and adequate appreciation of symptoms and pelvic pathology is essential. In view of this, it was decided to make an analysis of these cases who present themselves with retention of urine as a prominent feature while excluding the cases of post-operative retention.

Review of cases that were treated in the gynaecological unit of Nilratan Sircar Medical College and Hospital, Calcutta reveals that there were 74 cases of retention of urine admitted to hospital during the period from 1974 to June 1978. Its incidence with regard to total gynaecological admissions during these years varied between 0.22 per cent and 0.41 per cent.

Due to inadequacy of information 40 were selected for the purpose of the present study and they were analysed from different angles.

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Mode of Onset

Twenty-eight cases had acute retention of urine and they attended the hospital when retention took place for the first time. The remaining 12 cases had chronic retention which in some cases became acute at times. All cases of acute retention had emergency admissions for relief of retention and they did not complain of the other symptoms for the underlying pelvic pathology for retention of urine. The patients with chronic retention mostly were cold admissions and they not only came for the relief of retention but also requested eradication of the disease which was responsible for the retention.

Age and Marital Status

Analysis of age of these patients shows that most of them belong to the age group between 20 and 30 years. From 31 years onwards there was a sharp decline cases of retention of urine. Seven cases were between 41 to 50 and 7 in women over 50 years.

With regard to marital status, 3 cases were unmarried and 37 cases were married.

Parity

It was noted that primiparae hardly suffer. from this condition. Multiparous women mostly are observed to be the sufferers of this pressing symptom which may result from various causes. Out of 40 cases, 35 women had children ranging between 2 and 5 or more (Table I).

TABLE I
Parity

Parity	No. of cases
0	3
1	2
2 to 5	21
More than 5	14

Etiology

Although many causes are noted to be responsible for retention of urine, retroverted gravid uterus was found to be the etiological factor in 17 cases. Seven had bladder neck-obstruction and 6 were cervical fibroids. In nulliparous women, the cause was imperforate hymen.

TABLE II
Causes of Retention of Urine

Disease	No. of cases
Imperforate hymen	2
Retroverted gravid uterus	17
Cervical fibroid	6
Vulval haematoma	1
T.O. Mass	1
Psychological	1
Genital prolapse	3
Post-Wertheim recurrence	1
Carcinoma of urethra	1
Bladder Neck Obstruction	7

Nature of Treatment

Operation was performed on 21 patients (Table III). Conservative treatment by a continuous bladder drain was carried out in 19 patients and all the cases of retroverted gravid uterus were treated in this manner.

It was noted that following the operative treatment all most all the patients had permanent cure except the 1 where the cause of retention was malignancy. The conservative treatment was associated with satisfactory results in all the cases of retroverted gravid uterus. The psychological patient had initial improvement of her condition by non-operative procedure but returned several times later for the same old complaint.

TABLE III
Nature of Operation

Operation	No. of cases
Myomectomy	5
Hysterectomy	
Abdominal	3
Vaginal	2
Hymenectomy	2
Urethral dilatation	7
Fulguration of urethra	1
Incision and drainage of haematoma	1

Retention of urine can occur as a result of disturbance of the nerve supply to the bladder or due to some organic lesion in the pelvis (Howkins and Bourne, 1971). Depending upon the situation of the organic lesion, it may cause obstruction at the bladder neck or may produce stretching and elongation of the urethra leading to difficulty in outflow of urine (Jeffcoate, 1975). This is amply exemplified in the present study by the high percentage of cases of retroverted gravid uterus. When the uterus became further enlarged to be an abdominal organ, the stretching effect on the urethra disappeared and patient got cured of retention of urine. Angulation of urethra is presumed to be responsible for retention of urine in cases with gross degree of uterine descent. Cervical fibroids may possibly exert pressure directly on the bladder neck to cause retention of urine. Sometimes reflex mechanism may come into play to produce retention. Stimuli may arise from distended vagina of haematocolpos, vulval haematoma or injuries

to vulva and vagina which consequently cause closure of either internal or external sphincter or both of them. Rectal conditions such as faecal impaction and severe colitis attributable for retention of urine have also been described (Doran and Roberts, 1976). From the observation of Fox *et al* (1976) regarding idiopathic chronic retention, it can be presumed that bladder neck-obstruction in women in more common than has generally been reported. Although no case of severe vulvo-vaginitis was observed in the present series, it can well be a cause for retention of urine. Turner (1976) has reported 2 causes of genital herpes causing retention of urine though it is not of common occurrence.

It is apparent from the present study that the majority of patients are parous women and they are over the age of 20 years. Since retroverted gravid uterus which is mostly seen in parous women played a major role in the causation of retention of urine, its high incidence amongst parous women is quite obvious.

As most of the patients presented themselves with acute symptoms, early institution of operative or conservative treatment achieved gratifying results. Delay in the treatment will only intensifies the agony of the patient and may lead to complications which at times may have far-reaching consequences. Urinary tract infection, if it supervenes, may sometimes prove to be very intractable.

Summary

Forty cases of retention of urine were reviewed. The cause of retention in nearly half of the cases was retroverted gravid uterus. Operative or conservative treatment wherever applicable produced satisfactory results. It is recommended to commence the treatment early and remove the cause responsible for retention of urine.

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