BLADDER NECK OBSTRUCTION IN THE FEMALE

by

KALYANI MUKHERJEE,* M.B.B,S., D.G.O., M.O. (Cal.)

and

SREEMANTA BANERJEA, M.O. (Cal.), M.R.C.O.G., Ph.D. (Lond.)

Introduction

Bladder neck obstruction is very common in the male, the most common cause in adult males being mainly the aftermath of chronic prostatitis. But sometimes it can as well occur in females creating troublesome problems in diagnosis and management—the commonest cause being urethro-vaginitis.

All sorts of urinary symptoms, such as dysuria, retention of urine, overflow incontinence and sometimes haematuria can be complained of by these patients. These diverse symptoms often mislead a gynaecologist as these are the frequent complaints of very common conditions like uterine prolapse and cystocele.

If one is a bit enthusiastic and remembers the condition of vesical neck obstruction and carries out proper investigations one hopes to be able to diagnose a good number of these cases.

Kenneth and Mackinnon, in 1954, reported twelve such cases of vesical neck obstruction in women.

In the absence of voluminous literature on the subject very few could delve into this field of sufficient gynaecological interest. The present case will reveal how it misled the previous gynaecologist.

**Registrar, Eden Hospital, Calcutta.*

***Asstt. Prof. of Obstetrics & Gynaecology, Medical College, Calcutta.*

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CASE REPORT

Mrs. K. G., aged 45 years, nullipara, was admitted on 3.5.66 with complaints of difficulty in micturition and burning sensation during voiding of urine. She also complained of dribbling of urine from an abdominal opening.

History of present illness: The present history started 8 years ago when she had a swelling in the lower abdomen associated with painful micturition. The complaint was relieved by an abdominal operation, though she was not permanently cured. Since then she has been suffering, off and on from swelling of the abdomen and difficulty in micturition. Only 18 days ago she noticed a swelling in the lower abdomen in the midline which burst leading to a vesico-parietal fistula. The fistula healed up spontaneously and the patient went home. She again started the same complaint of difficulty in micturition and was admitted on 3.5.66 for further investigation.

General investigations: Hb. cmm.—80%. W.B.C.—6,000/cmm. poly—69%, lympho—28%, eosino—2%, basoph—1%. Blood sugar 107 mgm. %, urea 70 mgm. %, Na, 140 meg./litre. K. 4.8 meg./litre. Urine—N.A.D. Chest x-ray—N.A.D. Cystoscopy — obstruction bar, evidence of bladder neck obstruction. Micturating cystogram—nothing significant.

Diagnosis: General surgeon was consulted with all these investigations, symptoms and clinical findings of the case, and finally bladder neck obstruction was confirmed.

Management: Pre-operative management—continuous drainage of urine by a self-retaining catheter and daily bladder wash was given.

Operation: 'Y-V' Plasty for bladder neck obstruction (Young-1953) on 22.7.66. Under general anaesthesia Foley's catheter was introduced for continuous drainage. A midline infra-umbilical incision was made and after cutting the rectus sheath the dissection of the suprapubic area was done properly to expose the bladder and the urethra. The junction of the bladder and the urethra was identified and a ridge was felt at that area. The anterior wall of the bladder was then opened by a 'V' shaped incision, the apex of the 'V' being up to the urethro-vesical junction.

After reflection of the 'V' flap upward, the interior of the bladder was exposed and then the obstruction ridge was visible. A wedge-shaped area was cut from the posterior part of the ridge. The incision was made deep enough to cut the fibrous ring but care was taken not to injure the posterior urethral wall which would lead to vesico-vaginal fistula later on.

The mucous membrane was sutured by interrupted catgut sutures. An incision was made from the apex of the V' on to the urethral wall—thus turning the 'V' to 'Y'.

Bleeding points were ligated and the apex of the V was sutured to the apex of 'Y'; the aim being to produce a permanent widening of the urethro-vesical junction. Abdomen was closed in the usual way after a suprapubic cystostomy. A corrugated rubber drain was placed in the retropubic space.

Post-operative management — Continuous drainage of the bladder was kept up by the urethral and the suprapubic catheter, for fourteen days. Bladder wash was started daily after 48 hours. Suprapubic catheter was kept in for 14 days and the catheter per urethram was kept in for 21 days. Other post-operative management was similar to that of repair of vesico-vaginal fistula.

Result: The bladder was rehabilitated after removal of the urethral catheter by asking the patient to pass urine every 2 hours. If these cases showed the residual urine to be more than 2 oz. after each voidding, catheter for continuous drainage is advisable. The present case showed no such complication, and the result was up to our expectation. The patient had no difficulty in passing urine, neither did she develop stress incontinence or any other complication. The patient was discharged a month after operation.

Follow-up: The patient is being followed up in the outpatients department regularly. The last visit was during the 1st week of October. She is perfectly well without any complication. Cystoscopy and micturating cystogram were done again and showed no abnormality.

Discussion

At the very outset of the discussion of the present case, it must be mentioned that the scarcity of literature on vesical neck obstruction in the female is one of the reasons for missing it in gynaecological practice. It does not strike one as a problem because the symptoms of a vesical neck obstruction are commonly elicited and not new to a gynaecologist. Usually these cases will present the symptoms of gradually increasing difficulty in micturition, retention, retention overflow, hesitancy etc. All these can occur in a common gynaecological condition like uterine prolapse and cystocele. So if a gynaecological surgeon can corroborate urinary symptoms with the presence of prolapse and/or cystocele, he feels happy about the diagnosis and just does the operation. However, occasionally a vesical neck obstruction, will be overlooked. The next point to be stressed is the infrequent use of cystoscope by a gynaecologist even if a suspicion of vesical neck obstruction strikes his mind as a probable cause.

For this specific urological problem in the female co-ordination between a gynaecologist and an urologist is desirable to attain a success.

The cause of vesical neck obstruc-

tion in the female is obscure but the detectable pathology is fibrosis around the area.

It is possible that the probable cause may be due to repeated attacks of cystitis with subsequent fibrosis, in a long standing cystocele or uterine prolapse.

It may sometimes occur as a result of bad operative technique of some common operations in the vicinity.

Coming to the case under discussion it can be stressed how much a patient can suffer through bladder neck obstruction without proper management. In the present case the complaint started 8 years ago, occasional retention of urine and overflow incontinence being the main complaints.

No other cause except repeated cystitis could be detected in this case. The vesico-parietal fistula developed most probably due to the giving way of the previous suprapubic cystotomy wound which was done 8 years ago.

Repeated attacks of cystitis most probably led to the formation of fibrosis giving rise to bladder neck obstruction in this particular case.

Regarding the management most of the modern surgeons will not agree with the approach in the case under discussion. The urological surgeons will always approach through urethra and resect the scar with the help of resection cystoscope. But, we the gynaecologist, prefer to approach suprapubically as the specific instrument is not easily available in our territory.

The Y-V operation described is worth giving a trial to but certain dangers need to be kept in mind.

Danger of the operation. Most important point is that if too wide a 'V' is made that can lead to too much widening of the urethro-vesical junction after suturing the apex of the 'V' to the apex of the 'Y'. Too much widening of this area will lead to stress incontinence. The same complication will occur if too big a wedge is removed from the posterior ridge. The next important point regarding the danger is development of vesico-vaginal fistula due to injury to the posterior wall of the urethra during cutting out the wedge.

Our object in publishing this paper will be fulfilled if it appeals to gynaecologists and gives them a thought regarding the presence of vesical neck obstruction in the female while examining a case presenting with urological symptoms.

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