Conservative management of urethral prolapse in a five year old girl: A case report

A Sarojini¹, Subha Ranjan Samantaray¹, Ipsita Mohapatra², Achanta Vivekanand¹

¹Associate Professor, Department of Obstetrics and Gynaecology, ²Assistant Professor, Department of Obstetrics and Gynaecology, ³Professor, Department of Obstetrics and Gynaecology, Prathima Institute of Medical Sciences, Karimnagar, Telangana, India.

Address for Correspondence: Dr. Subha Ranjan Samantaray, Assistant Professor, Department of Obstetrics and Gynaecology, Prathima Institute of Medical Sciences, Telangana, India.

Email: drsubha2009@gmail.com

ABSTRACT

Urethral prolapse is a rare presentation. Among all the age groups it is commonly seen in prepubertal age. Most cases are asymptomatic, but if they present, the most common presentation is vaginal bleeding. We present a case of a 5 year old girl who presented with vaginal bleeding and a mass in the vulva. Examination under anaesthesia was done and final diagnosis was made as urethral prolapse. Conservative medical management was planned,

with daily sitz bath along with local application of topical antibiotic and estrogen cream. The mass decreased in size within 3 weeks and the bleeding was completely subsided. Urethral prolapse can be managed conservatively in young and uncomplicated cases. Though surgery is the treatment of choice with minimal chance of recurrence, each case should be individualized and treated.

Keywords: Urethral prolapsed, Girl

Please cite this article as: Sarojini A, Samantaray SR, Mohapatra I, Vivekanand A. Conservative management of urethral prolapse in a five year old girl: A case report. Perspectives in medical research 2014;2: 31-33.

Source of Support: Nil, Conflict of interest: None Declared

INTRODUCTION

Urethral prolapse is a complete circular eversion of the urethral mucosa through the external urethral meatus resulting in congestion and edema of prolapsed part and usually presents as a reddish purple mass through vulva which bleeds intermittently. It may be considered as a sliding hernia of urethra upon its supporting structures. Only females are affected. The first case of urethral prolapse was noted by Solingen et al in 1732 and later Zeigerman et al reported 5 cases in 1945.³ Urethral prolapse has an estimated incidence of about 1/3000.⁴ It is seen commonly in prepubertal native African girls and postmenopausal white women.⁵ Around 80% of the cases are seen in pediatric population, among them the common age of presentation is between 6 months to 8 years.⁶ Second highest incidence is seen between 60 and 65 years.⁷ The youngest reported case of urethral prolapse was 5 day old neonate and oldest was seen in a 92 years old lady.

Most of the cases of premenarcheal urethral prolapse are asymptomatic but if they present the predominant feature is vaginal bleeding. Other symptoms include dysuria, increased frequency and urgency of micturation, difficulty in voiding, nocturia and sometimes tenesmus.⁷ Onset may be acute or chronic. Acute presentation is seen in both children and old aged patients. Chronic prolapse is seen commonly in old age.⁸

Urethral prolapse can be diagnosed by its typical clinical appearance. On examination, it appears as a doughnut shaped reddish purple mass protruding through vulva with a central opening of the external urethral meatus. It can be confirmed by Foley's catheterization. We are reporting a case of urethral prolapse in a 5 year old girl.

CASE REPORT

A 5 year old girl presented to the department of obstetrics and gynaecology, Prathima Institute of Medical Sciences, in the month of July 2014 with the complaints of vaginal bleeding and a mass protruding from vulva since 3 days which was noticed by her mother (figure 1). There was no associated complain like pain abdomen, foul
smelling vaginal discharge, cough, fever. She also
did not have any complain of frequency, urgency,
octuria or any other lower uterine symptoms. There
was no history of sexual abuse or trauma. Her vitals
were stable. On physical examination a small
reddish, edematous mass protruding from the
vestibule was observed (figure 2). Examination
under anaesthesia was planned on the next day,
which revealed a reddish mass in the region of
urethra protruding with a central opening. Foley's
catheterization (size 10 Fr) was done through the
opening and 80 ml of urine was collected. This
confirmed that the opening visible through the mass
was external urethral meatus (figure 3). Final
diagnosis was made as urethral prolapse. All routine
investigations were done and found to be normal,
urine culture and sensitivity was showing no growth.

Figure 1: An erythematous mass was noted
protruding from the vulva
Figure 2: Per speculum examination revealed a
central opening
Fig 3: Catheterization confirms the mass as urethral
prolapse

Rectal examination was done and no abnormalities
were detected. The catheter was kept in place for 3
days. Conservative medical management was
planned, with daily sitz bath along with local
application of topical antibiotic and estrogen cream.
The catheter was removed after 3 days and the patient
was discharged. She was advised to continue the
estrogen cream for 3 weeks. Follow up was done after
3 weeks. The mass decreased in size and the bleeding
completely subsided. We are regularly following the
case for any recurrence.

DISCUSSION

Etiology of urethral prolapse is not clear, but the
possible causative factors include mucosal
redundancy, estrogen deficiency, inadequate
perineal muscular attachment and increased intra-
abdominal pressure. Other contributing factors are
trauma, malnutrition, urinary and vaginal infection,
chronic cough and constipation, neuromuscular
weakness. Valerie hypothesized that the high resting
intra-abdominal pressure in children that are large
for their age is one of the causes. Popularly this
condition is thought to be aetiologically analogue of
hernia at any other site and it may be caused due to
congenital weakness of the supporting tissues.

Onset is usually acute and the common presenting
symptoms are vulval mass, spotting or bleeding or
serosanguinous discharge from the vulva. As the
disease progresses the edema and congestion
become more severe, finally thrombosis and
sloughing may occur. The diagnosis is based on
clinical features of circumferential edematous,
reddish purple tissue prolapsing through the urethral
meatus. Laboratory and radiological evaluation are
not necessary in most of the cases.

The condition may mimic like some other pathology
like urethral caruncle, rhabdomyosarcoma, ectopic
urethrocele, condyloma, sarcoma botryoides,
endodermal sinus tumor, urethral malignancy,
urethral leiomyoma, malakoplakia and foreign body.
The optimal treatment for urethral prolapse is still a
controversy; options are medical or surgical
methods. Medical methods include sitz bath, local
hygiene, topical steroid, topical estrogen, and topical
antibiotics. Surgical treatment is required in more
severe and complicated cases or after failure of
medical therapy. Different surgical methods are
ligation of mucosa over a catheter, cauteterization of
the mucosa and excision of the mucosa with a
catheter in situ. Other methods are cryosurgery and
reduction of prolapse through a vaginal incision
followed by suturing of circular muscle around distal
urethra, four quadrant excision technique. Some
complications may be seen after surgical treatment
like urethral stenosis, urinary incontinence, urinary
retention, vaginal bleeding, bleeding from suture
line and recurrent prolapsed. Medical management
may not be always be effective and is having a high
rate of recurrence. Surgery is the treatment of choice
with high cure rate.
Our case was a five year child with an acute presentation of vulval mass with vaginal bleeding without any associated complaints. Clinical examination and examination under anesthesia confirmed that it is a case of urethral prolapse. The exact cause could not be identified, however after excluding the common causes we came to a conclusion that, the prolapse may possibly caused by intrinsic weakness of supporting structure. As our case is a young premenarcheal child without any other complication like ulceration, thrombosis or infection, rather than planning for surgery, we had planned to manage the case conservatively with sitz baths, topical antibiotic and estrogen with regular follow up. After 3 weeks the symptoms as well as the mass decreased in size. After 4 months she was completely asymptomatic and the vulval mass significantly decreased in size. We are doing a regular follow up to detect any recurrence.

CONCLUSION

Urethral prolapse is a rare condition which is usually diagnosed by clinical examination. Conservative/medical management may be tried in young and uncomplicated cases. Though surgery is the treatment of choice with minimal chance of recurrence, each case should be individualized and treated.

REFERENCES