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Case Report Open Access

Premenarcheal Urethral Mucosa Prolapse in Enugu, Southeast, Nigeria: Five Case Series

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Abstract

Background: Urethral Prolapse is a rare benign condition that is often misdiagnosed by clinicians.

Objectives: To report the clinical presentations and outcomes of urethral prolapse in Nigerian pre-menarcheal girls and to review the literature.

Methods: This retrospective study was undertaken from February 21, 2015 back to January 1st, 2010. The clinical presentations and outcomes of cases of urethral prolapse managed in Enugu with complete surgical excisions were reviewed.

Results: There were five cases of pre-menarcheal urethral prolapses. Their ages ranged from 2 to 10 years with a mean age of 6.6 years. The case presentations were mass in the vagina (4/5, 80%), asymptomatic (3/5, 60%), bleeding per vagina (1/5, 20%), and dysuria (1/5, 20%). Four cases (4/5, 80%) were misdiagnosed with the parents suspecting sexual assault in 3 (3/5, 60%) children. The outcomes of the surgical excisions were uneventful in four (4/5, 80%) cases. One child (1/5, 20%) had postoperative acute retention of urine. There was no urinary incontinence or recurrence of urethral prolapse after the excisions.

Conclusions: Urethral prolapse is rare and often misdiagnosed by clinicians. The outcomes of complete surgical excisions were uneventful in most cases.

Keywords: Urethral prolapse; Rare; Misdiagnosed; Surgical excision; Outcomes

Introduction

Urethral prolapse is a circular complete eversion of the distal urethral mucosa through the external meatus. It is a rare, often misdiagnosed, benign condition with an incidence of 1:3000 among pre- pubertal black girls [1]. The exact etiology is unknown, but increased urethra mobility, mucosal redundancy, increased abdominal pressure, poor attachment between the inner longitudinal and outer circular smooth muscle layers of the urethra, estrogen deficiency, and poor nutrition have been implicated [2-4]. The muscle layers may separate after a sudden increase in intra-abdominal pressure leading to urethral mucosa prolapse. Vascular congestion, strangulation and necrosis can complicate urethral prolapse. It is mostly asymptomatic but can present with vaginal bleeding, dysuria, hematuria, frequency, and urgency especially in adolescent, and post-menopausal cases [3-5]. Vaginal examination reveals a reddish circular urethral mucosa at the external meatus with a dimple (opening) on it. Catheterization of the bladder confirms the diagnosis when urine is drained [5]. There is still controversy on the treatment options. Medical treatment with topical antibiotics, estrogen creams, and sitz baths is advocated as the treatment of choice by some authors while complete surgical excision is preferred by others [5-8]. Complete surgical excision has a higher cure rate, and relieves symptoms faster than medical treatment which may have a recurrence rate of up to 67% [5,8,9]. Ligation of the urethral prolapse over a urethral catheter is another reported surgical option [10]. When medical management fails, surgical excision is usually resorted to with success [11]. We report the clinical presentations and outcomes of five cases of urethral prolapse managed by complete surgical excisions in Enugu to reappraise the subject with a view to making early clinical diagnosis by clinicians easier.

Case Reports

Case 1

Miss UK was a 6-year-old black girl who presented to Enugu State University Teaching Hospital, Enugu on January 20, 2010 with a mass in the vagina and painful micturition of five days duration. She denied any history of trauma, sexual assault or insertion of foreign body into her vagina. The mother took her to a private clinic where a childhood genital tumor was suspected before she was referred. Vaginal examination revealed uncircumcised vulva and intact hymen. A reddish mass of 1.0 cm in diameter was found with a dimple at the centre below the clitoris. A diagnosis of urethral prolapse was made. The mother's anxiety was allied during counseling. She had a successful surgical excision without complications or recurrence after three years of follow–up.

Case 2

Miss F O was a 7-year-old black girl who presented to Enugu State University Teaching Hospital, Enugu on 12/3/2011 with one day history of a mass in the vagina. It was not associated with any symptoms. Vaginal examination revealed a urethral prolapse. She had successful surgical excision.

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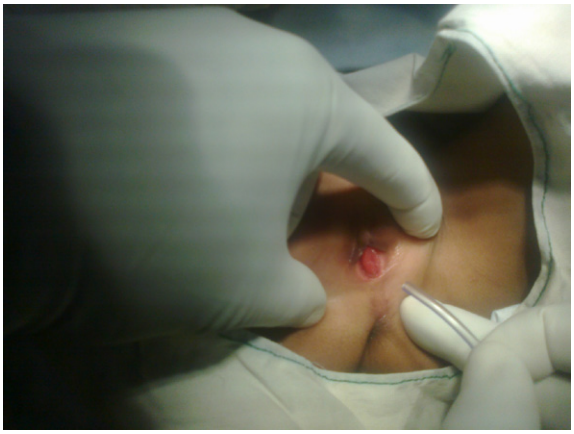

Figure 1: Clinical appearance of a urethral mucosa prolapse.

Case 3

CA was a 10-year-old girl who presented to Semino Hospital and Maternity, Enugu on July15, 2012 with a mass in the vagina of three days duration. She denied any history sexual assault. Vaginal examination revealed uncircumcised vulva, intact hymen and a urethral prolapse. Surgical excision of the prolapse was successful.

Case 4

Miss CM was an 8-year-old primary four pupil who presented to Semino Hospital and Maternity, Enugu on September 10, 2014 with spotting blood per vagina of ten days duration. There was no associated vaginal discharge or dysuria. The mother suspected sexual abuse in spite of the girl denial and took her to a private clinic where an antibiotic was administered without improvement. Vaginal examination revealed an edematous- reddish mass on the vulva that bled to touch. The hymen was intact. The mother was counseled, and surgical excision was uneventful.

Case 5

Baby CE was a 2-year-old black girl who presented to Semino Hospital and Maternity, Enugu on 18/2/2015 with a month history of a reddish mass in the vagina. The mother noticed the mass while bathing the daughter. It was not associated with any symptoms. The mother was apprehensive of sexual abuse. She took her to two medical clinics where tests were done, and antibiotics and vaginal antifungal cream were administered without improvement. Vaginal examination revealed a urethral prolapse (Figure 1). The mother was counseled, and she had surgical excision. She was discharged after 24 hours of observation. She was, however, re-admitted as an emergency on the 11th postoperative day with 4 hours history of inability to pass urine. The bladder was full to the level of the umbilicus. Attempts to empty the bladder with Foleys catheter size 10 was impossible until the four interrupted chromic catgut size 2-0 sutures used in the surgery were removed under sedation. She was discharged after 12 hours of observation when voiding of urine occurred freely.

Discussion

Pre menarcheal urethral mucosa prolapse is rare, often misdiagnosed and associated with the fear of sexual assault. The commonest presentation in this study was a mass in the vagina (4/5, 80%). It was asymptomatic in 3 patients (3/5, 60%) and was misdiagnosed in 4 children (4/5, 80%) by clinicians. There were parental fear of sexual assault in 3 cases (3/5, 60%). These findings were in agreement with some of the findings of other authors [5,12]. It is common in black African pre pubertal girls less than 10 years as in this study, but it has been reported in a black adolescent girls at 18 years [4,12,13]. None of the patients presented with acute retention of urine. Urethral prolapse is a clinical diagnosis, and simple inspection of the vulva will reveal the classical features as in Figure 1. This mass was misdiagnosed as childhood genital tumor and sexual abuse in this study as was reported by other workers [13,14]. This makes the apprehensive parents to seek all sorts of medical help with the associated wrong treatments. The initial treatment consists of parental reassurance and counseling as we did in this study [5]. The anxious mothers in this work opted for surgical excisions. Other indications for surgical excision include failed medical treatment, complications like severe hemorrhage, fast relief of symptoms, and to avoid erratic children's follow up [4,5,11]. The patients in this cohort were discharged after 24 hours without adverse outcomes. Only one child had 11th day postoperative acute retention of urine. This fear informed some authors 24 hours hospitalization after the removal of the catheter in order to monitor for a possible acute urinary retention [5]. Surgical repair was preferred because it is simple, safe, effective, and is not associated with long-term follow-up of the children which can be erratic and unreliable [5]. The outcomes of surgical excisions in this study were satisfactory. There was no recurrence. Five recurrences occurred in a medical treatment study, and the authors recommended that this method was appropriate for asymptomatic girls with a mild degree of urethral prolapse [13]. Falandry advocated that the treatment of choice for urethral prolapse should be surgical resection [15].

Conclusion

Urethral prolapse is a rare disease of the pre pubertal girls that is often misdiagnosed by clinicians. The parents are often apprehensive of sexual assaults. The diagnosis is clinical, and simply made by exposure of the classical reddish mass with a dimple at the Centre below the clitoris. The surgical resection is the advocated treatment of choice because it is simple, safe, and most effective in relieving symptoms. Acute retention of urine was the only reported complication in this series. Surgical resection is also advocated in environments where children follow up may be erratic and difficult.

References

1. Agzarian AE, Agzarian AY. Urethral Prolapse: Report of a Case UCLA Department of Medicine.
2. Guthrie B (March 2009) Vagina bleeding in the prepubescent child. Clinical paediatric emergency.
3. Jimenez Parra JD, Cebrian Lostal JI, Lozano Urunuela F, Alvarez Bandres S (2010) Urethral prolapse in postmenopausical women. Actas Urol Esp 6: 560-572.
4. Olumide A, Olusegun AK, Babatola B (2013) Urethral Mucosa Prolapse in an 18-Year-Old Adolescent. Case Reports in Obstetrics and Gynecology.
5. Shurtleff BT, Barone JG (2002) Urethral prolapse: four quadrant excisional technique. Journal of Pediatric and Adolescent Gynecology 4: 209-211.
6. Adesiyun AG, Samaila MO (2006) Childhood urethral mucosa prolapse: outcome of surgical treatment. Nigerian Journal of Surgical Research 1-2: 65-66.
7. Abouzeid H, Shergill IS, Al-Samarrai M (2007) Successful medical treatment of advanced urethral prolapse. Journal of Obstetrics and Gynecology 6: 634-635.
8. Fiogbe MA, Hounnou GM, Koura A, Agossou Voyeme KA (2011) Urethral mucosal prolapse in young girls: A report of nine cases in Cotonou. Afr J Paediatr Surg 8: 12-4.
9. Yerkes EB (2009) Urologic issues in the pediatric and adolescent gynecology patient. Obstetrics & Gynecology Clinics of North America 1: 69-84.

10. Okorie CO (2013) Urethral prolapse: contemporary report on a modified ligation over a urethral catheter treatment approach. Nephro-Urology Monthly 5: 866-869.

11. Klein I, Dekel Y, Stein A (2014) Spontaneous Postmenopausal Urethral Prolapse Treated Surgically and Successfully. Case Reports in Urology 695471: 2.

12. Lopez C, Bochereau G, Eymeri JC (1990) Urethral mucosal prolapse in girls: Apropos of 24 cases. Chir Pédiatr 31: 169-172.

13. Anveden Hertzberg L, Gauderer MW, Elder JS (1995) Urethral prolapse: An often misdiagnosed cause of urogenital bleeding in girls. Pediatr Emerg Care 11: 212-214.

14. Shavit I, Solt I (2008) Urethral prolapse misdiagnosed as vaginal bleeding in a premenarchal girl. Eur J Pediatr 167: 597-598.

15. Falandry L (1994) [Prolapse of the urethra in black girls: Personal experience in 11 cases. Med Trop 54: 152-156.