Pattern of childhood gynaecological presentations in a Nigerian tertiary health facility

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ABSTRACT

Background: Gynaecological problems in children and adolescents are often both medically and psychologically unique and require a highly skilled approach differing from those utilized for an adult female population. There is paucity of data on childhood gynaecological problems in our environment. The purpose of this study was to document the prevalence and pattern of common gynaecological problems in the prepubertal child at Ahmadu Bello University Teaching Hospital Zaria, Northern Nigeria. **Materials and Methods:** This was a retrospective study involving case file-based data analysis over a 10-year period (1995–2004) of 62 children aged 1 month–12 years at the Gynaecology unit of Ahmadu Bello University Teaching Hospital Zaria, Northern Nigeria. **Results:** Sixty-two children were seen, 17 infants, 14 under 5 years of age, and the rest (31) were aged 6–12 years. The commonest condition was labial fusion (33.9%), urethral prolapse (14.5%), and suspected sexual assault (12%). Ambiguous genitalia (9.7%), vaginitis (6.5 %), and ovarian tumour (4.8%) were also encountered. **Conclusion:** Labial fusion, urethral prolapse, and suspected sexual assault are the commonest childhood gynaecological morbidities in Zaria. Provision of gynaecological services at every level of health care system to cater for young females is advocated.

Key words: Childhood, gynaecological morbidities

INTRODUCTION

Gynaecological problems in the prepubertal child constitute great levels of anxiety in parents. These problems are better managed by paediatric gynaecology specialists who will offer the required gynaecological and paediatric services.[1]

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The various pathologies encountered in prepubertal girls, including contemporary social issues (e.g., sexual abuse and sexually transmitted diseases), are often both medically and psychologically complex requiring a highly skilled and coherent approach.[1-4] It is therefore imperative that clinicians acquaint themselves with a clear plan for clinical management in this patient population. The purpose of this study was to determine the prevalence and pattern of gynaecological problems in a prepubertal children population. Solutions and suggestions that will enable the practicing clinicians to provide quality care to this peculiar population are discussed.

MATERIALS AND METHODS

This was a retrospective study of 62 consecutive children. The records of all new patients aged 1 month–12 years seen at the gynaecology unit of Ahmadu Bello University Teaching Hospital Zaria between 1st January 1995 and 31st December 2004 were reviewed. Information on age, tribe, and literacy level where applicable and the gynaecological condition diagnosed and the management offered was extracted and analysed.

RESULTS

A total of 3521 new gynaecological patients were seen during the 10-year period. Of these, 62 were aged 1 month–12 years, representing 1.8% of the total new gynaecological consultations. Thirty-one (50%) of them were aged 6 years and above [Table 1]. The Hausas constituted half of the total patients [Table 2].

The most common reasons for presentation to the gynaecology clinic included labial adhesions (33.9%),

Table 1: Age distribution of patients seen over the 10-year period

Age (years)	No. (%)
<1	17 (27.4)
1–5	14 (22.6)
6–12	31 (50)
Total 62 (100)	

Table 2: Frequency distribution of patients by ethnic groups

Ethnic group/tribe	No. (%)
Hausa–Fulani	32 (51.6)
Yoruba	11 (17.7)
Igbo	7 (11.3)
Other tribes	12 (19.4)
Total 62 (100)	

urethral prolapse (14.5%), ambiguous genitalia (9.7%), vulvovaginitis (6.5%), and suspected sexual assault (14.5%) [Table 3]. These conditions constituted two-thirds (72.8%) of the total childhood gynaecological attendance. Sexual assault was suspected in nine children, all aged 9–11 years. There were six cases of ambiguous genitalia, which were subsequently referred to the urologist for further management.

One child, an 11-month-old infant, had vaginal tumour (sarcoma Botryoides). Another child had imperforate anus and was subsequently referred to the paediatric surgeon. Three children had ovarian tumours, which were histologically confirmed as endodermal sinus tumour . Four patients had vulvovaginitis, one of whom was confirmed to be due to sexually transmitted infection (*Nesseria gonorrhea*) in a 10-year-old child. No infective aetiology was found in the remaining three children. There were two cases of foreign body in the vagina in a 4-year-old child and in a 7-year-old child. Two children aged 10 and 11 years with Turner's syndrome were referred to the unit after the diagnosis was established elsewhere.

DISCUSSION

Paediatric gynaecology is an emerging subspecialty involving the collaboration of health professionals in gynaecology, paediatrics, and urology. Paediatric gynaecological consultations represent 1.8% of the total gynaecological consultations in this study. There was a high prevalence rate of vulval conditions compared with pelvic or abdominal involvement. This is similar to findings in most studies.[1,3,4]

Table 3: Type of gynaecological condition among the children

Gynaecological condition	No. (%)
Labial adhesion	21 (33.9)
Urethral prolapse	9 (14.5)
Suspected sexual assault	9 (14.5)
Ambiguous genitalia	6 (9.7)
Vulvovaginitis	4 (6.5)
Ovarian tumour	3 (4.8)
Precocious puberty	3 (4.8)
Foreign body in vagina	2 (3.2)
Turner's syndrome	2 (3.2)
Vaginal tumour (sarcoma Botryoides)	1 (1.6)
Vaginal septum	1 (1.6)
Imperforate anus	1 (1.6)
Total 62 (100)	

There was practice variability among the physicians with regards to management of these patients, especially in cases of suspected sexual assault. This was probably because there was no documented departmental policy or protocol for the management of this peculiar group of patients. For the few patients that required surgery, there did not seem to be an organized collaborative effort with either the urologist or the paediatric surgeon, except in patients (cases of intersex) referred to the urologist. Such conditions like imperforate hymen, endodermal sinus tumour, and sarcoma Botryroides do require surgical intervention and, therefore, multidisciplinary approach is required for their management.

In this study, it was noted that there was overutilization of laboratory tests to diagnose such common conditions like labial adhesion. Patients were requested to carry out such tests like electrolyte and urea, full blood count, and even buccal smear for presence of barr bodies. Improving skills in childhood gynaecological examination techniques and sonography in children, which are very simple, can lead to diagnosis in over 70% of the patients without any instrumentation.[1]

Treatment is not always necessary in labial adhesion because resolution may occur spontaneously at puberty once oestrogen is produced. However, therapy is quite simple, consisting of applying oestrogen cream to the fine thin raphe twice a day for 2 weeks followed by once daily application for 2 weeks. In this study, labial adhesions were treated by manual separation. None of the children were treated with topical oestrogen.[1,3,4] Forceful manual separation is not advised as this is often painful and traumatic to the child. In addition, recurrence is much more common. Surgical separation is rarely justified and only applicable if urinary problems result and oestrogen therapy has failed.[4]

Children with urethral prolapse were managed surgically by excision when conservative management with antibiotics and sitz bath failed. None of these cases were managed with topical oestrogen as advocated by most studies.[1,3,4] Treatment of urethral prolapse consists of oestrogen cream to the area nightly for 1–2 weeks. On follow-up, if the prolapse has not resolved, a referral for surgical treatment is indicated.

Both the cases of foreign body in the vagina had it removed under anesthesia.[3] Vaginal irrigation may

wash out any loose pieces of foreign bodies like toilet paper, but objects such as safety pins or parts of toys may require that the child be anaesthetized to be removed. Following removal, sitz baths are recommended until the residual symptoms subside.

The lack of standard protocol and departmental policy for the care of prepubertal girls with gynaecological conditions and absence of an organized collaborative effort with other specialists in this study called for concern.

Gynaecological problems encountered in the paediatric population are unique to this age group and require physician skills differing from those utilized for the adult population.[4,5] It is becoming imperative in most centers to organize special gynaecology (clinic) care for prepubertal girls in order to develop special knowledge and skills needed in paediatric gynaecology.

Because of the unique problems in the paediatric age group, the practicing obstetrician–gynaecologists are often uncomfortable evaluating and managing these children. This attitude is incorrect because gynaecologists should be part of the multidisciplinary approach to the problem. In this regard, the gynaecologist will need to be competent in basic skills of history taking, physical examination, selection of laboratory test, and differential diagnosis.[2,4,5]

Vulvovaginal inflammation is a common gynaecological disorder of prepubertal girls and accounts for over 50% of visits to paediatric gynaecological clinics.[3] Inflammation may involve the vulva or vagina or both and can result from a variety of stimuli such as poor hygiene, foreign body, chemical irritants, Pin worms, dermatologic conditions like eczema and seborrhea, and sexual abuse. For nonspecific vulvovaginitis, recommended measures include use of front-to-back wiping with warm water after a bowel movement, avoidance of deodorant soaps, bubble baths, or lotions, use of unscented toilet paper, keeping vulvar area clean and dry, and washing of hands prior to and following use of toilet. Antibiotics are used if secondary bacterial infection is suspected. Topical oestrogen cream once or twice a day for 7–14 days may promote healing if vulvovaginal denudation is suspected due to disturbed bacterial homeostasis.

Specific vulvovaginal infections that occur in the prepubertal female are often respiratory, enteric, and, less frequently, sexually transmitted. Respiratory pathogens found in the vagina of young girls include *Hemophilus influenzae*, *Staphylococcus aureus*, group A β-hemolytic streptococci, and *Streptococcus pneumoniae* causing a yellowish to greenish purulent vaginal discharge. *Shigella flexneri*, an enteric pathogen, can cause a mucopurulent, sometimes bloody discharge following an episode of diarrhoea in some young girls. Bacterial causes of vulvovaginitis should be treated with an appropriate antibiotic for 2 weeks and occasionally for longer periods of time (up to 4 weeks). Additional therapy may consist of sitz baths.

Paediatric surgical conditions in the prepubertal girls manifesting symptoms similar to other gynaecologic conditions is well documented.[6-8] The practicing gynaecologist therefore needs to know how to filter these types of cases to the relevant specialist in order to avoid mismanagement. Tertiary referral level university teaching hospitals should have at least a paediatric gynaecologist to provide gynaecological care for young patients.

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REFERENCES

1. Piippo SH, Lenko HL, Laippala PJ. Experiences of a special gynecological service for children and adolescents: A descriptive study. Acta Paediatr 1998;87:805-7.
2. Bussen S, Rahn M, Heller A. Genital findings in sexually abused prepubertal girls. Zentralbl Gynakol 2001;123:562-700.
3. Pokomy SF. Longterm intravaginal presence of foreign bodies in children: A preliminary study. J Reprod Med 1994;39:931-5.
4. Pediatric Gynecology: Assessment strategies and common problems. In Semen Repro Med. Vol. 2. Thieme Medical Publishers; 2000. p. 329-38.
5. Baldwin DD, Landa HM. Common problems in Pediatric gynecology. Urol Clin North Am 1995;22:161-76.
6. Abubakar AM, Mungadi IA, Chinda JY. Paediatric Urolithiasis in Northern Nigeria. Afr J Paediatr Surg 2004;1;2-5.
7. Abantanga FA. Acute Appendicitis in Children in Kumasi, Ghana: Macroscopic Findings at Laparotomy. Afr J Paediatr Surg 2004;1: 6-10
8. Hesse A, Appeadu-Mensah W, Onuoha CE. Paediatric acquired recto -vestibular fistula: experience in Accra /Ghana. Afr J Paediatr Surg 2004;1:52-4.

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