

VULVO-VAGINAL INJURIES: ANALYSIS OF 170 CASES AT KOMFO ANOKYE TEACHING HOSPITAL, KUMASI, GHANA

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SUMMARY

A total of 170 out of 186 cases of vulvo-vaginal injuries occurring outside labour and delivery seen among admissions to the Gynaecology ward of Komfo Anokye Teaching Hospital in Kumasi over a two-year period were retrospectively reviewed. There were 7,986 admissions to the Gynaecology ward over the period. Vulvo-vaginal injuries therefore formed 2.3% of the admissions to the Gynaecology ward.

The main injuries were lacerations 97(57%), erythema 27(15.9%), haematoma (19(11.2%), abrasions 19(11.2%) and contusion 8(4.7%). The main causes of the injuries were falling astride 76(44.7%), insertion of herbal preparation into the vagina 28(16.4%), sexual assault or rape 26(15.3%) and consensual sexual intercourse 18(10.5%). Children were the most vulnerable group for falling astride.

Effort must be made to educate female children on how to play safely. Adult women must be educated on the dangers of inserting herbal and chemical preparations into the vagina. The fight against sexual assault or rape must be intensified.

Keywords: Vulvo-vagina, injuries, non-sexual trauma, Komfo Anokye Teaching Hospital.

INTRODUCTION

The study of trauma has become important in medical practice in recent times. This is because modern life styles such as high speed road transportation, recreational activities and increasing antisocial behaviours such as sexual assaults, domestic violence and armed robbery often lead to injuries to the body. Although work on trauma to other parts of the body has been reported in Ghana¹⁻⁵, there is no publication yet on trauma to the vulvo-vagina or female lower genital tract. Worldwide, publications on the subject are rare

although deep vaginal lacerations following water-skiing douche have been reported⁶. However, accurate and reliable data on all body injuries are needed to make informed decisions on how to deal with the injuries.

The objective of this paper was therefore to document injuries to the female lower genital tract in Ghana as seen among patients at the Komfo Anokye Teaching Hospital (KATH), Kumasi.

MATERIALS AND METHODS

This was a retrospective study carried out at the KATH, a general and tertiary referral hospital in Kumasi, Ghana. The records of all patients treated at the Department of Obstetrics and Gynaecology between 1st January 2001 and 31st December 2002 inclusive with vulvo-vaginal injuries that did not occur during labour and delivery were retrieved and analyzed.

The admission and discharge register of the Gynaecology Ward, where all such cases are admitted, was first searched and cases diagnosed or treated for injuries of the lower genital tract were listed. The folders were then retrieved from the Medical Records and Statistics Department. The socio-demographic profile and clinical injury data of the patients were compiled from the folders for analysis. In each case the principal complaint as listed in the patients' folders was taken as the leading complaint.

RESULTS

During the two-year period, there were 186 cases of vulvo-vaginal injuries admitted to the Gynaecology ward. Of these, 170 case notes, representing 91.4%, could be retrieved for analysis. There were 7,986 admissions to the Gynaecology ward over the two years. Vulvo-vaginal injuries therefore constituted 2.3% of admissions to the Gynaecology ward.

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The highest proportion of injuries of 22.9% occurred among the under 10-year age group. The mean, median and modal ages of the patients with vulvo-vaginal injuries were 18.6 years, 17.0 years and 8.0 years respectively. The youngest patient was 4 years and the oldest was 53 years.

Table 1 Leading presenting complaints of 170 women reporting with vulvo-vaginal injuries

Presenting complaint	Number of women	Percentage
Bleeding per vaginam	104	67.1
Painful vulval swelling	39	22.9
Pain/discomfort in vagina	11	6.5
Vulval laceration	6	3.5
Total	170	100.0

Table 1 shows the leading presenting complaints of the females reporting with vulvo-vaginal injuries. The leading presenting complaint was bleeding per vaginam and was found in 67.1% of the cases.

The most common injury found on physical examination of the genitalia was laceration which occurred in 97

(32.2%), vaginal wall (29.9%) and vaginal fornix (16.5%). In another 22 patients (13%), the injury involved both labia and vaginal wall. The fourchette and the clitoris were involved in 4.7% and 3.5% of cases respectively.

The main causes of injury were falling astride (44.7%), insertion of herbal preparations into the vagina (16.4%), sexual assault or rape (15.3%) and consensual sexual intercourse (10.5%). Two of the cases of falling astride occurred in children whilst they were getting onto pit latrines. Other causes of injury were falling from bicycle, falling from a tree, insertion of chemical preparations and gunpowder into vagina and road traffic accident. Two children also sustained injuries whilst swimming in streams. The culprits in 16 out of the 44 coitus related injuries were not stated. In the remaining 28 cases, the culprits were strangers (5), boyfriends (14), husbands (4) and armed robbers (5).

Table 2 shows the cross tabulation of age and cause of injury. More than half of cases of falling astride occurred in those aged 14 years and below, with the highest number occurring in those under 10 years. Insertion of herbal and chemical preparations into the vagina was found mostly among the 15-34 years. Four children under 10 years were admitted with injuries from insertion of herbs into the vagina by their mothers. Consensual sexual intercourse as a cause of injury was mainly seen among 15-34 years. Nearly half of all cases of rape related injury occurred among the 15-19 years. Four

Table 2 Age group and cause of vulvo-vaginal injury among 170 women

Age group/cause of injury	Under 10	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45+	Total
Fall astride	30	17	11	4	6	2	-	4	2	76
Fall from tree	-	-	-	2	-	2	-	-	-	4
Fall from bicycle	-	5	1	-	-	-	-	-	-	6
Insertion of chemical preparation into vagina	-	-	-	2	2	-	-	-	-	4
Insertion of herbal preparation into vagina	4	-	6	5	6	3	2	-	2	28
Insertion of gunpowder into vagina	-	-	-	2	-	-	-	-	-	2
RTA	-	-	-	-	-	2	-	-	2	4
Consensual sexual intercourse	-	-	8	5	4	1	-	-	-	18
Sexual assault (rape)	4	4	12	2	3	-	1	-	-	26
Swimming	1	1	-	-	-	-	-	-	-	2
Total	39	27	38	22	21	10	3	4	6	170
Percentage (%)	22.9	15.9	22.4	12.9	12.3	5.9	1.8	2.4	3.5	100.0

cases (57%). This was followed by erythema of the genitalia in 27 cases (15.9%). Haematoma and abrasions each had an occurrence of 19(11.2%) and contusion 8(4.7%). The anatomic sites of injury were the labia

children under 10 years were also admitted with sexual assault related injuries.

DISCUSSION

This study found that female lower genital tract or vulvo-vaginal injuries constitute 2.3% of Gynaecological admissions to KATH. The injuries occurred in all age groups. Patients reporting with vulvo-vaginal injuries commonly complained of bleeding per vaginam, vulval pain, swellings and lacerations. The injuries commonly found were lacerations, erythema, haematoma and genital abrasions. The most common causes of the injuries were falling astride, insertion of herbal and chemical preparations into the vagina and coitus.

The most vulnerable age group for falling astride was the under 14 year olds. This finding agrees with other studies which identified falls to be the leading cause of injury in childhood^{7,8,9}. This is not surprising because children in general do not have a well developed sense of danger and are not mindful of their environment particularly when they are playing. They therefore fall down easily. However, a hospital-based survey of paediatric trauma in Kumasi found transport-related injuries the most common with falls the second most common cause of injury among children¹.

Young girls, usually less than 4 years of age, may insert foreign objects that may include toilet paper, crayons, beads, pins or buttons¹⁰. These can lead to injury to the genitalia. This was however not found in this study. The insertions into the vagina of young girls found in this study were rather of herbal preparations inserted by their mothers ostensibly to treat vaginal discharges or as a form of punishment in one case. In the case of adults, the materials inserted were herbal and chemical preparations and even gunpowder. The reasons were either to terminate unwanted pregnancy, treat dysmenorrhoea, vaginal discharges and itching or to narrow the vagina and feel tight to achieve pleasurable sexual intercourse. These are clearly harmful practices likely to result in unsafe abortions, vulvo-vaginal infections, pelvic inflammatory disease, infertility, acquired gynaectresia and subsequent obstructed labour. Such practices must therefore be discouraged.

Coitus-related injury accounted for a quarter of the cases in this study, sexual assault or rape representing 15.3% and consensual sexual intercourse 10.5% of cases. These figures may be higher in real life. Coital injuries are usually under reported because of the sensitivity of the issue and the fact that many of the lesions are minor and self-limiting. Indeed, the exact incidence of sexual assault is unknown in many communities though a

study conducted in the USA indicated that approximately 7-18% of females are raped¹¹.

The sexual assaults in this study were associated with the antisocial and criminal behaviours of raping and armed robbery. Even more devastating was the involvement of four of the under 10 years and another four of the 10-14 years as victims of rape. These are clear instances of violence against women which health care providers must look out for and assist in eradicating from the society by facilitating notification of the law enforcement agencies. The issue with consensual coital injury on the other hand is different. Injuries are likely to occur in consensual sexual intercourse under the following conditions: lack of foreplay, peno-vaginal disproportion, bad posture such as stooping for rear entry or dorsal decubitus with hyperflexion of the thighs and rough coitus under the influence of alcohol and hard drugs¹². These could be identified through tactful history taking. The patients should then be counselled accordingly.

Cases of injuries due to recreational activities, bicycling and swimming, were few. Elsewhere injuries from such activities are commonly found¹³⁻¹⁵. Injuries from harmful traditional practices such as female genital mutilation were not seen in this study probably because the practice is not indigenous to the study area.

In conclusion, female lower genital injuries occurring in Ghana are commonly due to falls, insertion of herbal and chemical preparations into the vagina and coitus. Children must be educated on how to play safely to avoid falling down and on how not to become victims of sexual assault. The fight against rape and armed robbery, including imposing stiffer punishments, must be stepped up. Adult women must be educated on the dangers of inserting herbs and chemicals into the vagina.

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