

# Genital Trauma of Female Children in Zawia Teaching Hospital

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## ABSTRACT

Genital trauma of female children may occur as a result of multiple injuries (as in motor vehicle accident) or an isolated injury including liquid injection, burns, penetrating injury, and sexual insult. Some children are victim of sexual insult or abuse either isolated or repeated and some incident is accident that never occur again. In case of genital trauma thoughtful approach is necessary to be supportive to the children and their parents. In some societies the family denied history of sexual insult due to some social factors which include concern about virginity and rejection of female from society (refused to be married), a clinician needs to assess whether the history provider is compatible with the injuries found in genital examination, inconsistencies between the history and physical examination should arouse suspicious of sexual assault or abuse.

The study aimed to describe the etiology of genital trauma of female children and to demonstrate that one of the commonest causes of trauma is sexual insult.

Prospective study of 50 cases of female children with genital trauma admitted in Gynecological department of Zawia teaching hospital. History of trauma was taken from the children or their parent or from the witness of the accident.

The total number of cases included in this study was 50 patients with genital trauma and their mean age is 6 years; one of them is psychologically disturbed. In all cases history was taken from the children and their families and from witness of the accident. In 75% of cases of sexual insult the family denied the history due to social factors. 84% of the cases had minor genital trauma and 16% with major trauma, this study showed that 10% of the cases the hymen was ruptured and in 6% the vagina was injured in this series. 40% of the genital injuries were due to sexual insult, 34% due to straddle injury, 10% as sharp instrument and 6% as penetrating injury. 40% of the patients need exploration under anesthesia and 20% of them needed repair.

In cases of genital trauma of female children sexual insult needs to be taken into consideration, therefore, careful and extended history should be taken and social and psychological counseling may be needed for the patients and their families. A statement should be made to recognize the magnitude of the problem and act to prevent it.

**Keywords** - Genital trauma; Etiology; Sexual abuse.

## INTRODUCTION

Genital trauma of female children may occur as result of multiple injuries (as in motor vehicle accident) or as an isolated injury to genitals (as in straddle injury), liquid injection, burns, penetrating injury.<sup>1-4</sup> Some children are victim of sexual insult or abuse either isolated or repeated and some incident is accident that never occur again.<sup>2</sup> Perineal injuries represent 0.2% of all injuries in children 15 years of age and younger.<sup>5</sup> Many genital injuries are minor and do not require hospitalization; however, serious coitus-related and accidental injuries do occur and require appropriate evaluation and management. Due to anatomical and physiological differences, injuries in children need to be approached differently to those in adults.<sup>3</sup> In case of genital trauma thoughtful approach is necessary to be supportive to the child, who may be bleeding, in pain, and frightened and to the patient's parent who have concern about the assessment and repairer of an acute injury and to long term significant of

future reproduction.<sup>6</sup> In some societies the family denied history of sexual insult due to some social factor which include concern about virginity and rejection of female from society (refused to be married), a clinician need to assess whether the history provider is compatible with the injuries found in genital examination, inconsistencies between the history and physical examination should arouse suspicious of sexual assault or abuse.<sup>7</sup> This study describes the etiology of genital trauma and qualify the magnitude of this problem and confirm that the majority of genital trauma due to sexual assault although the family denied the history due to social factor.

The study aimed to describe the etiology of female children with genital trauma and to prove that the most common cause of genital trauma is due to sexual insult and the family deny that fact because of social factors and to recognize the magnitude of the problem and its effect on the child.



## MATERIALS AND METHODS

Prospective study of 50 cases of female children with genital trauma admitted in Gynecological department of Zawia Teaching Hospital for examination and management. The mean age of the patient is 6 years; one of them is psychologically disturbed. History was taken from the child and her family and some time from witness of the accident.

## RESULTS

After exploration and examination we found that (84%) of the cases were having minor genital trauma and (16%) with major trauma, 10% of the cases the hymen is ruptured

and 6% of the cases the vagina included in the injuries. 40% of the cases, the cause of genital injuries is due to sexual insult, 34% due to the straddle injury, 10% sharp instrument and 6% penetrating foreign body injury. 60% of the patient need exploration and examination without anesthesia due to minor injury and 20% need exploration under anesthesia without repair and 20% need exploration and examination with repair under anesthesia. The most common cause of genital trauma in the study is due to sexual insult although the family denied the history of sexual insult in 75% of the cases. Confirmation of sexual insult taken from extra source related to the family later on.

**Table 1:** Certain characteristic of the patient and her family.

Certain characteristic of cases	Number of cases 50
Age of the patient	3-10 years mean 6 years
Psychological behavioral disturbance of female children	1
Family disturbance	0

Mean age of female children under study is 6 years and one of them is psychologically disturbed

**Table 2:** Causes of genital trauma.

Cause of trauma	Number of cases 50
Car accident (motor vehicle)	5(10%)
Straddle injury	17(34%)
Sharp instrument	5(10%)
Penetrating (foreign body)	3(6%)
Sexual insult	20(40%)
Liquid injection	0

The most common cause of female genital trauma is sexual insult 40%, straddle injuries 34%

**Table 3:** Site of genital trauma.

The site of trauma	Number of cases 50
Abdomen and genital	3(6%)
Genital	47(94%)

Genital trauma represents 94% of the case

**Table 4:** Extent of genital injury.

Extent of genital injury	Number of cases 50
Isolated genital injury distal to hymen	42(84%)
Isolated genital injury include the hymen	5(10%)
Genital injury include vagina	3(6%)
Genital injury involving anorectic area	0

Isolated genital injuries distal to hymen account 84% of the cases

**Table 5:** Needs for operative intervention under anesthesia.

Certain characteristic of cases	Number of cases 50
Need exploration and examination without anesthesia	30(60%)
Need exploration under anesthesia without repair	10(20%)
Need exploration and stitch under general anesthesia	10(20%)

20% of the cases need operative intervention and stitch under general anesthesia



**Table 6:** History of sexual insult.

History of sexual insult	Number of cases 50
Familie deny history of sexual insult	15
Interfamilial sexual abuse	No
Extra familial sexual abuse	All of the cases reported
Actual or attempt intercourse	20
Direct disclosure:	
- Victim child statement	3
- Disclosure by victims family member or parent Indirect :	5
- e.g., someone witnesses the abuse to the child, the child contracts a sexually transmitted disease or the child becomes pregnant.	12

All of the cases are abused from extra familial source and 75% of them denied the history of sexual abuse.

## DISCUSSION

Genital trauma in the pediatric female patient can be from accidental injury or from intentional assault. Abrasions, contusions, lacerations and hematomas can all result from trauma to the genital area. The most common etiology of genital trauma in girls under the age of 14 years is straddle injury to the vulva.<sup>2</sup> In our study the commonest etiology is sexual insult and straddle injuries. A 3.5-year retrospective review of unintentional genital trauma presenting to a pediatric referral center emergency department evaluating 105 girls revealed that 81% were found to have straddle injuries from a variety of common objects such as the arms of chairs, countertops, ledges of pools and bathtubs, bicycle crossbars, and ladder rungs. Another study of 358 girls revealed that most injuries were in children younger than 10 years of age.<sup>5</sup> Assaults were more common in children 0-4 years of age, fall and bicycle injuries common in children 5-9 years of age and car accidents were responsible for the majority of genital trauma over the age of 15 years. The location of the injury, however, can cause great caregiver anxiety over concerns of future reproduction and social impact.<sup>8</sup> Perineal injuries represent 0.2% of all injuries in children 15 years of age and younger.<sup>5</sup> In the prepubertal child, unestrogenized tissue lacks dispensability and is more fragile, which can, in rare cases of blunt vehicular trauma; result in vaginal lacerations as the result of extreme pelvic compressive forces.<sup>9</sup>

The need for surgical intervention in pediatric genital trauma is low.<sup>8</sup> Patients requiring surgical repair is reported at only 15-20%.<sup>10</sup> In our study we report 20% need for surgical intervention. In patients who sustain only blunt trauma, need for surgical repair has been reported at only 9%.<sup>11,12</sup> Healing can be achieved with conservative measures such as sitz baths and decreased physical activity, especially for the first 48-72 hr to ensure the area is not reinjured.<sup>10-12</sup>

Examination of children with genital injuries must be carefully done although the need for operative intervention is low.<sup>8</sup> Injuries should be described in detail, including appearance, location and size. Photographs for documentation can also be helpful.<sup>13</sup> Although sexual

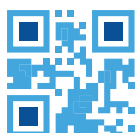
assault will not be reviewed in detail, it is necessary to consider assault in any child presenting with genital injury.<sup>14</sup> The history given by the child, caregivers and witnesses are the most important element in the initial assessment. Suspicion of sexual abuse can include a nonambulatory child, perianal, vaginal or hymenal injury without history of penetrating trauma, extensive or severe trauma, presence and lack of correlation between history and physical findings.<sup>10-12</sup> Due to some of social factors the family may deny the history of sexual abuse, this need expert clinician to examine patient thoroughly and carefully to exclude the possibility of sexual insult.

## CONCLUSION

Genital trauma is due to multiple causes either incidental or intentionally done. Sexual insult needs to be taking in consideration at first. A statement is made for the urgent need to recognize the magnitude of the problem of child sexual abuse and to act to prevent it.

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