

## COITAL TRAUMA AS SEEN AT THE UNIVERSITY OF MAIDUGURI TEACHING HOSPITAL, MAIDUGURI

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### ABSTRACT

**Background:** Evidence suggests that coital trauma is a common occurrence in the society but grossly underreported as most of the injuries are minor and self limiting. **Objective:** To document the pattern of coital trauma. **Method:** This was a retrospective descriptive study of cases of coital trauma seen at the University of Maiduguri Teaching Hospital [UMTH] over a period of 20 years (1990 – 2009). **Result:** The incidence of coital trauma in this study was 0.34% of the total gynaecological patients seen within the period. The mean age was  $19.88 \pm 6.75$ , 45.8% of them were teenagers and 16.7% were prepubertal girls. Alleged rape was the commonest aetiological factor seen in 13 (54.2%) of the patients while in 6/24 (25.0%) of the cases no obvious cause was detected. Injury occurred at coitarche in 16/24 (66.7%) of the patients and in 58.3% of them the sexual intercourse was non-consensual. The commonest site of coital injury was the lower vagina 13/24 (54.2%) and 8/24 (33.3%) had laceration on the posterior fornix. A patient presented in shock and another with a rectovaginal fistula. **Conclusion:** Coital injury in the society is not an uncommon occurrence but seldom reported and still poses a great challenge as regards to its prevention. Sex education, counseling and enforcement of stringent penalties to the perpetrators of rape will go a long way in reducing its occurrence.

**Key words:** Coital trauma, teenagers, pre-pubertal girls, rape, non-consensual, bruises,

### INTRODUCTION

Coital trauma constitutes a common type of female lower genital tract injury, yet, seldom reported gynaecological emergency<sup>1</sup>. Coital injuries range from simple abrasions to extensive laceration of the vaginal walls, fornices, cervix and urethra, rarely leads to rectovaginal or vesico-vaginal fistula<sup>1-4</sup>.

Most coital injuries seen in Nigeria occur among the reproductive age group especially among married women and rape cases. The incidence is also higher in nulliparous and low parity women<sup>5,6</sup>.

Predisposing factors include forced or rough coitus, sexual brutality as in the case of rape and when the woman is not adequately prepared as

in marital homes and consensual intercourse. Others include genital disproportion, post menopausal vaginal atrophy, pregnancy, puerperium, congenital and acquired shortness of the vagina and the position assumed during sexual intercourse such as sitting and dorsal decubitus positions<sup>3,4,7-9</sup>.

Management is multidisciplinary and depends on extent of the injury, blood loss and the associated complications. Major complications of coital injuries are haemorrhage, vaginal stenosis, sepsis, transmission of infections, injury to abdominopelvic organs, rectovaginal fistula, vesico vaginal fistula and occasionally death<sup>1,3,10-14</sup>.

This condition might be prevented by sex education for all and curbing the unacceptable habit of rape in the society.

This study aims to determine the incidence, clinical presentation and risk factors to coital injuries at the UMTH, Maiduguri.

### MATERIALS AND METHOD

A 20 year (1990-2009) retrospective descriptive study of all patients with coital injuries seen at the UMTH was conducted. Records of the patients were obtained from the operation

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register, gynaecological emergency records, ward register and case notes recovered from the medical records department. These were studied for socio-demographic characteristics, clinical presentation and findings, treatment, complications and predisposing factors. The information was recorded on a profoma designed for the study and entered into an IBM computer and SPSS version 16 statistical package was used to analyze the data and then presented in tables as frequencies and percentages.

### RESULT

There were a total of 27 patients seen with coital injuries out of the 7,867 new gynaecological patients seen during the study periods. Twenty four cases with full details were recovered and analyzed (retrieval rate=89%).

The mean age of the patients was  $19.88 \pm 6.75$  years with the range of 7 to 39 years. Most of the patients were teenagers, 11/24 (45.8%) and 4/24 (16.7%) were prepubertal girls. Nulliparous and women of low parity constituted 22/24 (91.6%), 16/24 (66.7%) were single and 13/24 (54.2%) had at least primary

education as shown in table 1.

Alleged rape was the commonest aetiological factor seen in 13 (54.2%) while in 6/24 (25%) of the cases no obvious cause was detected. Injury occurred at coitarche in 16/24 (66.7%) of the patients and in 58.3% of the women the sexual intercourse was non-consensual as shown in table 2.

Table 3 depicts the clinical presentations, complications and sites of coital injury. All the patients presented with vaginal bleeding and pain while 18/24 (75.0%) had vaginal lacerations. The commonest site of coital injury was the lower vagina as seen in 13/24 (54.2%) and 8/24 (33.3%) had laceration on the posterior fornix. One of the patients with laceration in the lower vagina also had a concomitant rectovaginal fistula.

All the patients had broad spectrum antibiotics. Examination under anaesthesia and repair of laceration was done for 20/24 (83.3%). Vaginal packing was the treatment offered in 3/24 (12.4%) and a patient had 2 units of blood transfused to correct anaemia.

Table 1: Socio-demographic characteristics

Characteristics	Frequency (%)
1. Age group	
<10	2 (8.3)
10-19	11 (45.8)
20-29	8 (33.3)
30-39	3 (12.5)
Total	24(100)
2. Parity	
0	17 (70.8)
1	3 (12.3)
2	2 (8.3)
3	1 (4.2)
≥4	1 (4.2)
Total	24 (100)
3. Educational status	
No formal education	11 (45.8)
Primary education	2 (8.3)
Secondary education	7 (29.2)
Tertiary	4 (16.7)
Total	24 (100)
4. Marital status	
Single	16 (66.7)
Married	8 (33.3)
Total	24 (100)

Table 2: Causes, risk factors and consent.

	Frequency (%)
<b>1. Causes</b>	
Rape	13 (54.2)
Rough	5 (20.8)
None	6 (25.0)
Total	24 (100)
<b>2. Risk factors</b>	
Coitarche	16 (66.7)
Pregnancy	3 (12.5)
Puerperium	3 (12.5)
Influence of drugs	2 (8.3)
Total	24 (100)
<b>3. Consent</b>	
Non consensual	14 (58.3)
Consensual	10 (41.7)
Total	24 (100)

Table 3: Clinical presentation and site of injury

<b>1. Clinical presentation.</b>	<b>Frequency (%)</b>
Laceration	18 (75.0)
Bruises only	2 (8.3)
Vulvovaginal haematoma	2 (8.3)
Hypovolaemic shock	1 (4.2)
Fistula	1 (4.2)
Total	24 (100)
<b>2. Site of injury</b>	
Lower vagina	13 (54.2)
Posterior fornix	8(33.3)
Vulva	3 (12.5)
Total	24 (100)

**DISCUSSION**

Even though the act of coitus is supposed to be pleasurable, it could result in considerable morbidity and mortality in some women. However, these complications are preventable. Abstinence is the ultimate prevention but, it is a difficult and unrealistic prescription in a male dominated society like ours. Therefore, epidemiology of coital injuries is of great importance in the diagnosis, treatment and prevention of its complications<sup>7</sup>. Coital trauma is not an uncommon occurrence worldwide but grossly under reported perhaps most cases have minor injuries and are self

limiting or due to shame associated with it<sup>3,8,9</sup>. In this study, coital trauma constituted 0.34% of all gynaecological patients seen. This is lower than 0.7% reported in Abraka<sup>6</sup> and Calabar<sup>7</sup>, Nigeria. The lower incidence may be related to the shame and secrecy attached to the condition which makes most cases to linger in silence and only a few severe cases and those due to rape do report to the hospital for medical help<sup>3,9</sup>. Also Dao et al in the USA reported higher occurrence of 30 cases per year<sup>14</sup> and Cisse et al in Dakar Senegal also reported 32 cases per year<sup>15</sup>.

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Young ladies are the commonest victims of rape<sup>7</sup> and therefore it is not surprising that teenagers constituted 45.8% of our patients. This is also because rape is the commonest cause of coital injury in our study. A similar finding has also been reported in Calabar<sup>7</sup>, Nigeria. While in Abraka, Delta State, rough coitus or lack of fore play was reported as the commonest risk factor in coital injuries<sup>6</sup>.

The offence of rape is the most heinous sexual offence under the Nigerian criminal law<sup>16</sup> and is punishable by life imprisonment<sup>17</sup>. Even an attempt to commit it attracts a penalty of 14 years imprisonment<sup>18</sup>, yet this despicable act still persists in our environment. This may not be unconnected to the fact that the perpetrators are hardly prosecuted and most of the cases are covered in secrecy in an attempt to cover up for the victims. There is a need to divulge from this attitude and allow the law to take its course. This may serve as a deterrent to others and could reduce the occurrence of coital injuries in our environment.

The majority of the patients were Nulliparous and had no formal education while the most affected age group were the teenagers. This findings is similar to the findings reported at Abraka, Ile Ife and Ilorin<sup>1,6,8</sup>.

Coitarche was the predisposing factor in majority of our patients and this could be traumatic especially when it is non consensual as was the case in 58.3% of our patients. Coitarche is also the commonest risk factor identified in Ilorin<sup>8</sup>. Occurrence of rectovaginal fistula following sexual intercourse is not an uncommon finding as reported by Ijaiya et al<sup>3</sup>. One of our patients had rectovaginal fistula which was repaired. One other patient presented in shock which

is also a rare complication of coital injury as reported in USA<sup>14</sup>. She had 2 units of blood transfused to correct anaemia

Lower vaginal injuries were the commonest in our study and this is in consonance with the findings of Abasiattai and colleagues in Calabar, Nigeria<sup>7</sup>. The lower vagina including the fourchette and the introitus can easily be injured during forceful penile penetration as obtained in rape and non consensual intercourse. This type of injury is more likely in young nulliparous women and at coitache as obtained in our study.

Posterior vaginal fornix was the commonest site of injury reported in Benin<sup>6</sup> and Ilorin<sup>8</sup> but it is the 2<sup>nd</sup> commonest site in our study. This is because the posterior fornix is the part of the vaginal that receives the penile thrust during intercourse. This type of injury is more likely in parous women and during consensual intercourse. Our finding could be because only a 3<sup>rd</sup> of our patients were parous and intercourse was consensual in 41.7% of them.

Vaginal bleeding and pain were the commonest clinical presentations found in this study, majority presented with severe laceration that necessitated repair, this findings were similar to the findings reported in other centres.<sup>1,3,5-9</sup>.

Prevention of coital injuries can be achieved by sex education, counseling and enforcement of laws to ensure that the perpetrators of rape do not escape the wrath of the law.

In conclusion, coital trauma is not uncommon in our environment but under reported. Sex education, counseling and enforcement of laws to forestall occurrence of sexual violence will go a long way in reducing the menace.

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