Trauma Related to Sexual Assault In Calabar, South Eastern Nigeria.

¹J. E. Ekabua FWACS, ¹T. U. Agan FWACS, ¹. C. U. Iklaki FWACS, ¹E. I. Ekanem FWACS, ¹I. H. Itam FRCOG, ²D. S Ogaji MBBS ¹Department of Obstetrics and Gynaecology, ²Community Medicine, University of Calabar Teaching Hospital, Calabar, Nigeria

ABSTRACT

Background: A woman who is sexually assaulted experiences intense anxiety and fear. The associated stigmatization often results in under reporting and management difficulties. The aims of this study are to document the types of injuries seen in victims of sexual assault and to highlight problems in management of cases.

Method: Twenty-two case files of sexual assault victims between January 1998 and December 2001 were reviewed for age, types of injuries sustained and treatment received.

Result: Age range of all victims was 4 to 23 years. The knife was used by the perpetrator in 8 (36.4%) cases. Time interval between assault and presentation to hospital was up to 12 hours in 13 (59.1%) cases. Superficial abrasions, bruises, and lacerations were observed in 12 (54.6%) cases. Six (27.3%) victims paid for human immunodeficiency virus screen and the results were non-reactive. Ten (45.5%) victims had primary repair of perineal tear.

CONCLUSION: Sexual assault is associated with multiple bruises, lacerations, and perineal tears. Commercialization of medical services was a hindrance to proper management of cases.

KEYWORDS: Sexual assault; Trauma; Management.

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INTRODUCTION

Criminal sexual assault is defined as any genital, oral or anal penetrations by a part of the accused body or by an object, using force or without the victim's consent¹. Sexual assault occurs in all age, racial and socio-economic groups. The very young, the handicapped and the very old are particularly susceptible ². A 1987 report from the United States Department of Justice showed that the annual incidence of sexual assault was 73 per 100,000 females 3. Many victims are often reluctant to report sexual assault because of embarrassment, fear of retribution, feelings of guilt or simply lack of knowledge of their rights 4. A woman who is sexually assaulted loses control over her life for the period of the assault. Her integrity and sometimes life are threatened. The act may be committed by a stranger but frequently is committed by someone known to the victim⁵.

Up to 40% of victims of sexual assault sustain injuries; while most injuries are minor about 1% of the

injuries require hospitalization and major operative repair⁶. Somatic symptoms are common during the acute phases of the rape-trauma syndrome and include musculo-skeletal soreness, fatigue, tension headache, sleeping and eating disorders, intense startle reaction, vaginal irritation and bleeding⁷. Ongoing health concerns include gynaecological trauma, risk of pregnancy and the potential for contracting infections including human immunodeficiency virus (HIV)⁶.

The aims of this study are to document the types of injuries seen in victims of sexual assault in Calabar and to highlight difficulties encountered in the management of these cases.

PATIENTS AND METHOD

Case files of sexual assault victims treated between January 1998 and December 2001 were reviewed for age, time interval before presentation, type of injuries sustained, weapon used by assailant and management measures including emergency contraception. Data obtained were analyzed using tables and percentages.

RESULTS

Age range of subjects as shown in Table I, was 4 ½ to 23 years with a mean of 13.6 ± 2.5 years. The commonest age range was 9-14 years (54. 6%). The commonest reported weapon used by assailant (Table II), was the knife in 36.4%. In 31.8% of cases, the weapon used was not stated or could not be recalled. Time interval between assault and presentation to hospital (Table III) was up to 12 hours in 59.1% cases and more than 72 hours in 9.1%. Superficial bruises and lacerations (Table IV), were the commonest type of injuries sustained (54.6%). Second degree perineal tear occurred in 5 (22.7%) cases. Most perineal injuries involved the posterior vaginal wall (31.8%), while 9.1% had combined posterior and lateral vaginal wall injuries. Eight victims needed blood transfusion (Table V), but only 4 (50.0%) of them could afford the cost. Seven victims (31.8%) did PCV estimation and urinalysis. Six (27.3%) victims paid for initial HIV screening and the results were non-reactive. Further screening in 6 months time could not be done as all cases were lost to follow-up. Surgical intervention (Table VI) involved examination under anaesthesia and repair of perineal wounds in 54.6% of cases. Emergency contraception with levonorgestrel was offered to 6 (27.3%) victims on admission in the ward who reported within 72 hours and had attained menarche. Professional counselling service was not provided for victims during hospitalization and after discharge.

Table I. Age Distribution	Table	l.	Age	Distr	ibutio	n
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Age (year)	Number	Percentage
4 - 8	3	13.6
9 - 14	12	54.6
15 - 23	7	31.8
Total	22	100.0

Table II.	Weapon	used by	/ Assai	lant
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Types of weapon	Number	Percentage
Pen knife	8	36.4
Club	3	13.6
Strangulation with cord	3	13.6
Matchet	1	4.6
Cannot recall/not stated	7	31.8
Total	22	100.0

Table III. Time Interval Before Presentation

Time (hour)	Number	Percentage
3 - 5	6	27.3
6 - 8	3	13.6
9 - 12	4	18.2
13 - 23	2	9.1
24 - 47	3	13.6
48 - 71	2	9.1
71 - 72	2	9.1
Total	22	100.0

Table IV .	Type of	Iniuries	Sustained
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INJURY	PART OF BODY	NUMBER
		(%)
Superficial abrasions, bruises	Face and neck	4 (18.2%)
& laceration	Chest and abdomen.	2 (9.17%
	Perineum and thigh	6 (27.3%)
Deep lacerations, tissue	Face	4 (18.2%)
contusion with	Chest and abdomen	3 (13.6%)
haemorrhage/haematoma	Limbs	3 (13.6%)
First degree perineal tear	Posterior wall of vagina /vulva	3 (13.6%)
	Lateral vaginal wall	1 (4.5%)
Second degree perineal tear	Posterior vaginal wall	3 (13.6%)
with haemorrhage	Lateral vaginal wall	2 (9.1%)
Third degree perineal tear with	Lateral/posterior vaginal wall and anal	
haemorrhage	wall	1 (4.5%)
	Posterior vaginal wall and rectal	
	sphincter	1 (4.5%)
Cervical laceration with	Left lateral aspect of cervix extending	
haemorrhage	to the vaginal vault posteriorly	1 (4.5%)

Table V	Laboratory	Investigation	Paid For:
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Investigations	Total	Number of test	Percentage test
•	request made	done	done
Packed cell volume (PCV)	22	7	31.8
Grouping and cross matching	8	4	50.0
Urinalysis	22	7	31.8
High vaginal swab culture	22	3	13.6
Ultrasound to confirm pregnancy	1	1	100.0
Retroviral screening	22	6	27.3

Table VI . Intervention Measures.		
Intervention	Number	Percentage
Body wound suturing	10	45.5
Primary perineal tear repair	10	45.5
Secondary perineal tear repair	2	9.1
Emergency contraception with levonorgestrel	6	27.3

DISCUSSION

The incidence of sexual assault during the study period was 2.1% of 1038 gynaecological admissions. This value is higher than that reported from Ile-Ife 9. The low incidence may be related to reluctance to report cases because of feelings of guilt and embarrassment 4. Many victims are adolescent girls and children 9, 10. In this study 68.2% of victims were 14 years and below. This age range is reported to constitute a risk factor for sexual assault as these victims are incapable of consenting to sexual intercourse and are unable to defend themselves against an armed assailant ^{11, 12}. The commonest reported weapon used by the assailant was the knife (36.4%). Seven victims (31.8%) were unable to state the weapon of the attacker or recall weapon used. This was due to the very young age of victims (4 to 8 years) and the surprise element in the attack of the assailant.

There was generally a delay in presentation to hospital for treatment by the patients. About 40% of victims presented for treatment within 8 hours and 9% presented after 72 hours. The reason for delay in presentation was not apparent in all cases. However, where the assailant was known to the victim, time used in reaching amicable settlement on the care of the victim may result in delay. Also attempt at concealment of assault because of the associated stigmatization may be a factor in late presentation for treatment. Presentation for treatment was however necessitated by the development of symptoms or complications such as musculo-skeletal pain, vaginal soreness and haemorrhage and irritation. One victim developed faecal incontinence following a third-degree perineal tear. Delayed presentation adversely affected the outcome of surgical intervention with 2 (9.1%) victims requiring secondary repair of perineal injury. Also emergency contraception with levonorgestrel could not be offered to 2 victims who presented after 72 hours. The use of intrauterine device for emergency contraception is contraindicated in these cases because of the high risk of pelvic infection ¹³. The prevention of pregnancy is a primary concern in the management of rape victims ⁸. The time of presentation is of medico legal concern. In general, evidence of coitus may be present in the vagina for up to 48 hours, but other orifices may retain evidence for only 6 hours ². However, no case during the study period was charged to court.

The victims that presented for treatment in our hospital appeared to have suffered violent attack, with weapons ranging from the knife, club and matchet to strangulation with a cord reported in 68% of cases. Injuries of various degrees of severity were seen in the victims. The severity of injuries sustained may be related to the type of weapon used by the assailant in subduing the resistance of the victims. Superficial bruises and lacerations of the perineum and thighs (27.3%) were the commonest minor injuries sustained. Deep lacerations and tissue contusion with haematoma commonly occurred on the face (18.2%). Perineal injuries occurred in 54.6% of cases (second degree 22.7%; third degree 9.1%; and cervical laceration 4.5%). Most perineal injuries involved the posterior vaginal wall and vulva in 31.8% of cases. Lesions of the vagina and vulva occurred more in victims below 14 years. This may be related to the small capacity of the vagina and lack of vaginal lubrication during forceful penetration. No foreign body was extracted from the vagina, urethra or rectum during examination. All cases of perineal injuries had examination under anaesthesia and appropriate surgical intervention was carried out as indicated.

A major area of problem in the management of cases was the carrying out of appropriate investigations. An on going health concern in victims of sexual assault is the potential for contracting infection including HIV. This concern was not properly addressed in our patients as only 14% could afford the cost of microbiological evaluation of a high vaginal swab and only 27% were screened for HIV infection. Initial test results were non-reactive. Subsequent screening after 6 months was not done as the victims were lost to follow-up. Since the introduction of the structural adjustment programme in the country and commercialization of health service 14, the cost of medical care has gone out of the reach of most Nigerians. There is a need for advocacy groups and special funds set up to assist these unfortunate victims of sexual assault in obtaining appropriate medical care and follow-up. Professional counselling and emotional support were not provided for the victims. This may have been due to lack of invitation and involvement of the professional counselor in the

management of cases by the attending physician. Sexual assault often results in the "rape trauma" syndrome ⁷; the acute phase is characterized by a distortion or paralysis of the individuals coping mechanisms; while the delayed phase is characterized by flashbacks, nightmares, phobias and a need for reorganization of the thought processes. Counselling and emotional support should be phase specific and is important in the resolution of this lifethreatening crisis. Therefore, professional counselors and medical social workers should be involved in the initial and follow-up management of sexual assault victims.

CONCLUSION

The victims of sexual assault appeared to have suffered violent attacks as evidenced by the types of weapon used by the assailant and injuries sustained. Difficulties experienced in the management and follow-up of cases may be overcome by the setting up of advocacy groups and special funds to assist these unfortunate women. Counselling and emotional support is an integral part of treatment.

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