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Original Research Article

Genital trauma due to coital injury in women at Pikine National Hospital: epidemiological, diagnostic, and therapeutic insights from 32 cases

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ABSTRACT

Background: Sexual trauma involves very different situations in women, most of which are uncommon in clinical practice. These are, often minor lesions following "normal" sexual act, not requiring medical attention. In general, it is estimated at less than 1% of gynecological emergencies.
Methods: This is a retrospective, descriptive and analytical study which extends over a period from March 2019 to January 2023, i.e., a duration of 3 years and 10 months.
Results: During the study period, 32 cases of per coital trauma were collected out of a total of 18,924 gynecological and obstetrical emergencies, i.e., a frequency of 0.16%. The 20–40-year-old age group was the most represented with a rate of 72.7% and most of them were married (72.7%).
The trauma occurred during consensual sexual intercourse with a male, rate of 75.8% compared to 24.2% of non-consensual reports. It was the first sexual act in 69.7% of cases and mainly occurred at night (72.7%). Patients mainly consulted for vaginal bleeding. The relationship between the type of lesion and parity as well as that between the type of lesion and the circumstances of occurrence showed that complex lesions were more frequently encountered in nulliparous women during consensual sexual act.
Conclusions: Percoital genital trauma in women remains an under-reported condition despite the enormous risks to the vital, but also functional and psychological prognosis.

Keywords: Genital trauma, Per coital, Pikine

INTRODUCTION

Sexual trauma involves very different situations in women, most of which are uncommon in clinical practice. These are, often minor lesions following "normal" sexual act, not requiring medical attention. But, in rare cases, they can be a source of serious hemorrhage that can be life-threatening. In general, it is estimated at less than 1% of gynecological emergencies.[1] Their management is poorly defined and must most often be carried out urgently.[2]

Thus, given the importance of the question and the precariousness of scientific studies on the subject, we decided for the first time to study per coital trauma at the Pikine National Hospital Center (PNHC), epidemiological, diagnostic and therapeutic profile. With the general objective of studying the importance of percoital genital trauma and the specific objectives of studying the epidemiological data relating to this type of trauma, of describing their different clinical aspect, their management at Pikine hospital, and their impact.

METHODS

This is a retrospective, descriptive and analytical study which extends over a period from March 2019 to January 2023, i.e., a duration of 3 years and 10 months.

The study focused on all patients admitted to gynecological emergencies during the study period and included all patients admitted for per-coital genital trauma.

Data were collected based on patient medical records and were entered and analyzed using statistical package for the social sciences (SPSS) 20.0 software for Windows. Continuous variables were compared using the analysis of variance (ANOVA) test and non-continuous variables using the Chi-square test or Fisher test. The student's "t" test was performed for comparisons of means and percentages, the Chi-square or Fischer test for comparisons of categorical variables; the Fischer exact test was used when the number in certain groups was less than 5. The significance threshold p value was 0.05.

RESULTS

Epidemiological profile

During the study period, 32 cases of per coital trauma were collected out of a total of 18,924 gynecological and obstetrical emergencies, i.e., a frequency of 0.16%. The 20–40-year-old age group was the most represented with a rate of 72.7% and most of them were married (72.7%). They were nulligest in 75.8% of cases and were all in the gynecological period (Table 1).

Table 1: Distribution according epidemiological data.

Variables	Effective (N)	Percentage
Age in years (20-40)	24	72.7
Married	24	72.7
Gestation (nulliparous)	25	78.8
Virgin women	22	69.7
Total	33	100.0

Clinical aspects

The patients were, for the most part, admitted directly from their home (78.8%) within less than 24 hours (69.7%). The trauma occurred during consensual sexual intercourse with a male, rate of 75.8% compared to 24.2% of non-consensual reports. It was the first sexual act in 69.7% of cases and mainly occurred at night (72.7%). Patients mainly consulted for vaginal bleeding associated or not with pelvic pain.

The general examination found a hemorrhagic shock in 18.2% of cases and a simple (isolated) lesion in 84.9% of patients. These simple lesions were mainly made up of isolated of the posterior vaginal sac of Douglas (51.5%), perineal tear (27.3%) and isolated lesion of the vagina 6.1%). These lesions were complex in 15.1% of cases involving at least two areas (Table 2).

Table 2: Distribution according lesions.

Lesions	Effective (N)	Percentage
Cul de sac de Douglas	17	51.5
Perineal taer	9	27.3
Vaginal wall	2	6.1
Multiple lesions with rectal involvement	7	21
Total	33	100

The biological assessment found an anemia in half of the patients (48.5%) and a vaginal infection in 21.2% of them.

Therapeutic aspects

In our study, 27 patients benefited from surgical treatment, a rate of 81.8%. In 23 patients (71.8%), repair of the lesions was done with general anesthesia. The procedure consisted of simple suturing of the lesions either by a simple overlock or by "X" hemostatic stitches. All interventions were carried out vaginally regardless of the extent of the lesions and this surgery was supervised by resuscitation measures especially in patients presenting a state of shock (vascular filling and blood transfusion) but also by medical treatment. based on analgesics, antibiotics and local antiseptics.

For cases of non-consensual sexual intercourse, emergency contraception and antiretroviral prophylaxis against human immunodeficiency virus were instituted.

We recommended sexual abstinence for 30 to 60 days depending on the extent of the lesions.

The evolution was favorable in all our patients with an overall hospitalization duration of less than 48 hours (Figure 1).

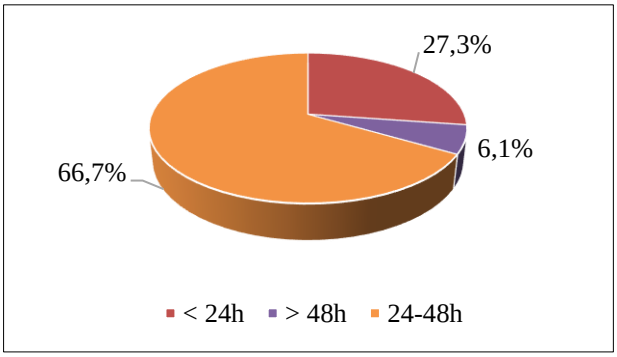

Figure 1: Distribution according the length of stay.

The relationship between the type of lesion and parity as well as that between the type of lesion and the circumstances of occurrence showed that complex lesions

were more frequently encountered in nulliparous women during consensual sexual intercourse without a statistically significant relationship. significant (p=0.66; p=0.65). On the other hand, the study of the relationship between the type of lesion and sexual experience shows a clear predominance of complex lesions during the first sexual intercourse with a statistically significant relationship (p=0.04).

DISCUSSION

The incidence of postcoital hemorrhage varies widely between different studies using a variety of methodology. In general, it is estimated at less than 1% of gynecological emergencies.[1] The true incidence of these injuries cannot be estimated due to the high rate of under-reporting.

The age group 20–40-year-old women was the majority in our study with a rate of 72.7%. This result is different from that of the study carried out by Tchounzou et al in Cameroon and Nigeria, where the 14-22 age group seemed to be the most exposed.[2,3]

The majority of our patients were married (72.7%) as in the series by Tchounzou et al with a rate of 51.1%.[2,3]

Despite a predominance among nulligests in our study (75.8%), primiparous and pauciparous represented 9.1% of cases. In the Tchounzou study the majority of patients had been pregnant at least once with a percentage of 54.3%.[2,3] These results lead us to believe that distension of the perineum does not protect patients from the risk of genital trauma during sexual intercourse, even if consensual.

In the gynecological period, it is reported in the literature that chronic vaginal infections could increase the risk of sexual injuries during coitus.

In the postpartum period, tears observed during obstructed deliveries sometimes requiring instrumental maneuvers, accidental vulvar tears, scar retractions from episiotomies or even unrecognized or poorly sutured tears can weaken the perineum. In the study conducted by Boukhanni et al in Marrakech, 7% of percoital trauma occurred postpartum.[3]

During our study, 75.8% of cases of trauma occurred during consensual intercourse but, in the literature, it is reported that percoital injuries most often occurred during non-consensual intercourse, this contradiction could well be explained by our social context; the fear of being indexed or the fear of "what will people say about it" means that trauma resulting from non-consensual relationships remains unknown in the absence of a complaint or medical visit.[4,5]

For Lincoln nearly 35% of patients had suffered injuries during their first sexual intercourse, as was the case for the majority of our patients. This could be explained by the lack of experience of the partners, excessive haste or even by the disproportion between men and women which is reported to be a predisposing factor to this type of injury.[6-8]

Ten of our patients already had more or less regular sexual activity, among them, one had a period of abstinence of three months due to the absence of her husband. In the literature, a long period of abstinence has been reported as a risk factor for per-coital injuries.[8-10]

We can conclude that if favorable conditions are met, every woman is threatened by this unpredictable complication during her sexual life.

Vaginal bleeding remains the main reason for consultation in our study as in the Lincoln study which found a rate of 76%.[6] The lesions present were most often simple tears affecting only the posterior vaginal sac, the perineum or the vaginal wall. These results agree with those of the study by Tchounzou et al where when a lesion was present, it mainly concerned the posterior cul-de-sac (28.3%) and the lateral vaginal wall (10%).[2]

There were 4 complex lesions and all concerned nulliparous women. The most serious involved the perineum, vaginal wall and rectum.

In the literature, non-consensual sex has been reported to more often result in serious injuries and consensual sex more often results in minor injuries. In our patients, the study of the severity of the lesions showed that 80% of complex lesions occurred during consensual sex without a statistically significant link.[11-13]

Treatment was mainly surgical with simple hemostatic suture of the structures concerned. This surgery was performed with general mask anesthesia in 71.8% of our patients. A blood transfusion was required in only one patient. None of our cases required laparotomy, unlike the study by Tchounzou et al.[2,14-16]

In addition to this surgical treatment, there are resuscitation measures such as blood transfusion (patient), antibiotic prophylaxis and sexual abstinence until complete healing.

Hospitalization was necessary in 72.8% of our patients with an average duration of 24 hours.

The prognosis was good in all patients with a good clinical course and no deaths were recorded.

CONCLUSION

Percoital genital trauma in women remains an under-reported condition despite the enormous risks to the vital, but also functional and psychological prognosis. They frequently affect young women during their first sexual experiences, although it seems that no woman is spared. Its

treatment is medical-surgical with good psychological support and improving its prognosis requires early consultation and appropriate care.

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