

Forensic Emergencies in The Context Of Genital Injuries: A Case Report

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Abstract

A review of gynecological emergency cases shows that traumatic injuries observed in consensual sexual relations, sexual abuse victims or following an abortion, secondary infections, internal organ injuries, and massive bleeding are gynecological forensic cases that may require an emergency approach. In this case; it is aimed to discuss the case of a child who was diagnosed as sexual abuse and reported as a forensic case. In the evaluation of the case of a 15-year-old girl who applied to the emergency service with a history of the foot of a stool entering her vaginal area, it was seen that she had a complaint of active vaginal bleeding but was referred to Child Monitoring Center (ÇİM) without taking a detailed anamnesis or performing any tests. During the forensic interviews at ÇİM, on account of the fact that the patient complained of dizziness, an emergency forensic vaginal examination and operation was performed. Active vaginal bleeding, 3 cm transverse laceration, and uterine artery injury were found in the area between the upper cervix and lower uterine segment. Our study aims to contribute to raising awareness about the importance of medical evaluation and healthy anamnesis in the emergency department regarding these issues.

Keywords: Forensic medicine, emergency medical services, child abuse, accidental falls, medical history taking

Introduction

Emergency services include all health services that take measures to prevent the deterioration of the current health status of a person whose health has been jeopardized for any reason and also dispatching the patient to an appropriate unit in the same hospital or to a different health institution if necessary (1). In emergency cases, emergency medical intervention, consultation, or a referral chain should be established immediately after the preliminary diagnosis or definitive diagnosis is made, if necessary.

Gynecologic emergencies are among the groups that constitute a majority of the workload of an emergency department. A review of gynecological emergency cases shows that traumatic injuries observed in consensual sexual relations, sexual abuse victims or following an abortion, as well as secondary infections, internal organ injuries, and massive bleeding are gynecological forensic cases that may require an emergency approach (2).

The process is carried out by the Child Monitoring Center (CMC) in sexual abuse cases where the victims are under the age of 18 after a judicial notification is made by the emergency service (3). However, prior to the forensic process, determining whether the case needs urgent medical attention and implementation or not is considered one of the main professional responsibilities of a physician. The process may be prolonged for minors referred to the CMC

as it also includes forensic medical stages. In child abuse cases admitted to the emergency department, it should first be determined whether emergency intervention is required, and later on, the victim should be included in the forensic medical process after the primary treatment is completed.

Case Report

Our case is a 15-year-old girl who lives with her family. The day before the incident, she watched a video of sexual intercourse between a man and a woman with adult content on social media applications. On the day of the incident, she stated that while she was taking a bath she inserted the foot of the shower stool into her vagina for masturbation out of curiosity. And added that she felt on the stool because the floor was slippery. She also said that 13-15 cm of the foot of the stool entered her vagina after which she started to bleed. The patient was admitted to the emergency department with her mother, the preliminary examination revealed active bleeding in the vaginal area and her Hgb was: 12 mg/dL, Hct: 34.4. The case was reported as a forensic case without any further consultation or examination and transferred to the CMC after informing the hospital police. At the CMC, the victim had to wait for the public prosecutor to arrive after which her statement was taken with a forensic interviewer. During the interview, the forensic medicine specialist was informed that the patient was complaining of dizziness and

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in the following examination active vaginal bleeding, low blood pressure, and increased pulse were detected. Then the patient was evaluated together with a pediatric surgeon and gynecologist and consulted for preoperative emergency examination. In the subsequent follow-up, the Hgb value first decreased to 10.3 mg/dL and then to 8 mg/dL. In the preoperative examination, the hymen was elastic and intact. During the operation, a 3 cm transverse laceration and uterine artery injury were found in the area between the upper cervix and lower uterine segment and sutured. A postoperative genital examination revealed a delaceration and abrasion of the hymen in the 6 o'clock direction due to the iatrogenic use of an excavator. In addition, 2 units of erythrocyte suspension treatment were administered during the operation. The patient was hospitalized and discharged the following day.

There is a detailed statement that written patient consent/next of kin. And also the study was approved by Karabük University Non-Interventional Clinical Research Ethics Committee's decision dated 07/11/2023 and numbered 2023/1482.

Discussion

The most important duty and responsibility of a physician is to provide the necessary medical response to every patient admitted to the emergency department, regardless of whether the case is forensic or not (4). In forensic cases evaluated in the emergency department, physicians are expected to prioritize the necessary diagnosis, treatment, effective medical response, and referral procedures by acting according to medical protocols.

Some of the emergency cases are etiologically forensic cases. Emergency departments are frequently the first place where forensic cases as well as emergency cases are admitted. The rate of competency felt by both physicians and other healthcare personnel regarding forensic cases is quite low and avoidance of taking responsibility is frequently observed (5) working at 112 emergency stations in the province of Artvin, to encounter with regarding forensic cases and determine their practices aimed at recognizing, protecting, and reporting the evidences that may affect the forensic process.

Materials and methods

This descriptive study was conducted with nurses and emergency medicine technicians working at 112 emergency stations in Artvin between January 2013 and February 2014.

Results

Of 141 health personnel that constituted sample of the study, 48.9% were nurses, 9.9% emergency medicine technicians, and 41.1% ambulance and emergency care technicians. The rate of feeling sufficient in coping with forensic cases and incidents was 20.6%. There was a lower rate of receiving education about the approach towards forensic cases (15.6%.

Although forensic emergency cases do not constitute a significant portion of the emergency department workload,

the uneasiness felt by physicians during the forensic notification phase and their insufficient level of knowledge can sometimes make the process difficult in forensic cases. An examination of the literature reveals that most of the studies conducted for emergency workers are about recognizing and reporting forensic cases. However, in cases that involve serious injuries, the medical needs of the person should be countered before the forensic process. In this regard, while priority is given to medical response by healthcare personnel in cases such as traffic accidents, sharp object injuries, and gunshot wounds, this issue can sometimes be overlooked in forensic cases of sexual nature. In a forensic case, especially in cases of sexual abuse, inadequate response or hesitation to intervene in a patient, "perhaps out of fear of punishment if evidence is lost" can jeopardize the patient and healthcare professionals.

Since suspected sexual assault cases require more expertise than other forensic cases and are often avoided by healthcare personnel, referrals without adequate evaluation can lead to significant deficiencies. In the literature, it is stated that incomplete, superficial, and inaccurate medical history taking in cases of suspected sexual assault can incur significant damage to the forensic process (6). In genital injuries which have been caused without sexual assault, the patient may give an inadequate history as a result of embarrassment and shyness, and therefore the physician needs to take this into consideration and approach the patient with empathy and take a full history.

Genital injuries are rarely encountered in emergency room admissions. Some of these injuries are associated with sexual activity. However, when taking an initial history in such cases, detailed questions should be asked to obtain information about sexual activity, and sexual toys or other foreign objects should not be forgotten (7). Injuries incurred in the context of sexual acts are frequently encountered in males and in the rectal-anal region (8). However, the first question to be excluded in detecting an anal or intravaginal foreign body due to sexual curiosity or accident is the exposure to sexual abuse.

Our patient presented with a history of accidental vaginal injury during masturbation. It has been reported in the literature that even minor trauma can cause significant blood loss since the genital area is anatomically one of the areas with a high blood supply (9). Taking an inadequate anamnesis with the thought that the patient could be a victim of sexual assault, refraining from requesting examinations and consultations, and referring the patient to the CMC is considered to be a medically incomplete evaluation. In emergency treatment, the physician is expected to fulfill his/her medical duty systematically in a short time and save lives, as well as refrain from compromising his/her legal responsibilities and comply fully with the rules of law. Although the case is a forensic case and should be referred to the CMC, the priority is to control the bleeding.

Another point that needs to be clarified within the scope of our study is that a genital examination is not carried out only in a forensic context. Genital examinations can be performed in pregnancy follow-up and gynecological ailments after consent is obtained by the responsible physicians. It should be kept in mind that genital injuries can also occur due to any trauma (such as traffic accidents, or falls) (9). Whether these injuries are forensic or not can be determined primarily on the basis of a genital examination and detailed anamnesis, which should be performed for medical reasons. Nowadays, the fact that judicial processes are rather formidable for physicians causes genital examinations that should be performed for medical purposes to be ignored.

Adolescence is a period when the awareness of sexual identity characteristics becomes evident in children and self-care for sexual interaction increases. Curiosity about sex starts in children aged 14-15 years initiating a tendency to establish sensual contact with the opposite sex. Sex education contributes significantly to the development of sexual behavior, the establishment of a healthy sexual life, and the acquisition of a social-sexual role (10). In our case the victim could not tell her mother about the incident because she was afraid. Considering such situations, the importance of providing proper sexuality education, especially during adolescence when sexual identity becomes clear, is also seen in our case example.

Conclusion

The emergency department is considered one of the areas in hospitals with the highest workload and stress. This stress can cause disruptions from time to time. However, the duty and accepted responsibility of medical professionals requires that the emergency physician delivers the most effective treatment to emergency cases. As well as judicial notification process in severe traumatic forensic cases starts after the treatment is organized, for forensic outpatient cases with serious injuries the initial action also must be planning the treatment and synchronously reporting the situation to the judicial authorities due to the risk of evidence loss. As in our case, internal organ or large vessel injuries that may occur in forensic sexual cases without any signs of severe trauma with an external examination can have severe consequences, and therefore the primary bleeding agent should be identified and treated. Our study aims to contribute to this awareness.

Another result of our study is about sex education. Sexuality is a biological condition and as a result of the lack

of education that should be provided by competent people on the subject, especially adolescents can make erroneous decisions and mistakes with what they learn from social media and peers. In this respect; the case, which came with a serious injury, may serve as an example of the necessity of sex education in society.

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