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The Medical Examination of Cases of Rape

In most communities throughout the United States, an adequate medical examination of an alleged rape victim is difficult to obtain. Physicians, residents, and interns who staff emergency rooms are understandably reluctant to become involved in a case which might necessitate testimony in court. Fear of being subpoenaed months to years later, frustrating delays in court while waiting to testify, and harassment by defense attorneys are but a few reasons for refusing to examine the victim. Furthermore, most physicians have had little instruction or experience in the examination of a rape victim. It is essential, however, that an experienced physician undertake the examination, as the guilt or innocence of the accused may depend on medical findings. Misinterpretation of the history, physical observations, and laboratory findings can lead to a serious miscarriage of justice. A guilty verdict usually results in a severe penalty.

The Examination of Alleged Rape Victims

During the past ten years coordination between law enforcement personnel and forensic pathologists in the northern Virginia area has enabled them to gather complete and accurate evidence and, thus, to furnish a measure of impartial justice for both the victim and the accused. The only cases examined, over 200 females, were those in which a complaint had been registered with a police department.

The procedure is usually carried out in the emergency room of a local hospital. A preliminary assessment of the case is made by the investigating officer. If he concludes that the victim's story had some credence, he requests a medical evaluation and examination. The emergency room forms are filled out and permission for pelvic examination is signed by the victim or by the parents of the victim if she is below the age of consent. The so-called emancipated minor, a teenager who has left home and is supporting herself, can legally sign. The procedure, as outlined below, includes a history, a physical examination, and the collection of appropriate laboratory specimens.

A. Observations

1. Emotional state of victim.
2. Condition of wearing apparel (soiled, torn, etc.).

B. Questions

3. Did you know the man?
4. Did you voluntarily accompany him in his car?

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5. Did he threaten you with physical violence, a weapon, or threaten any member of your family?
6. Did he use restraints (ropes, clothes, pillow cases, etc.)?
7. Did he attempt fellatio, buggery, cunnilingus or did he insert a dildo or other foreign body such as a pen or stick into your vagina or rectum?
8. Did he use a condom?
9. Have you ever been raped before?
10. When was the last time you had intercourse prior to this event?
11. Where did the rape occur?
12. Did he steal anything (money, wearing apparel, etc.)?
13. What did he say before, during, and after the rape?
14. What did he do after the rape?
15. Was there more than one man involved?

C. Physical Examination

16. Evidence of trauma (blunt injury, ligature marks, etc.): type and distribution.
17. Foreign material (dirt, vegetation, pubic hair): buttocks, vulva, extremities.
18. Vulva—trauma
 - seminal fluid
- Hymen—intact
 - not intact (healed)
 - traumatized
- Vaginal orifice—virginal
 - marital

D. Laboratory Examination

19. Saline suspension—sperm—motile
 - nonmotile
20. Papanicolaou smears: vagina, mouth, anus—sperm—intact
 - with and without tails
21. Acid phosphatase determination: vagina.

Each of the items in this sequence will now be discussed in detail.

Observations

Emotional State of the Victim—A lack of emotional response, such as residual fright, remorse, or bewilderment, might indicate that the victim is fabricating the complaint. The reasons for false reports are many, including a fear of pregnancy in a married woman whose husband has been absent from home, a sense of guilt after intercourse, a failure to receive adequate recompense, rough treatment by a lover, and a neurotic desire to call attention to oneself [1].

For example, a unique complaint was based on the desire to obtain a physical examination. One summer evening a promiscuous 14-year-old girl solicited the affections of an older man while shopping in a grocery store. The affair was consummated in a construction area. On cleaning her external genitalia she noticed a “lump hanging down.” Fearing that her “insides were falling out,” she returned home and told her parents that while crossing a construction area she had fallen and been rendered unconscious. When she regained consciousness she noticed that her wearing apparel was disarranged and thus thought she had been molested. Her parents immediately sought help from the police. Physical examination revealed the presence of a traumatized pedunculated condyloma accuminatum. When the young woman was assured that her “insides were not falling out”

and was confronted with the possibility that she could be arrested for registering a false report, she reluctantly related what had happened.

Condition of Wearing Apparel—Torn or soiled clothing is examined for seminal stains. Suspicious areas can be cut from the garment, placed in a petri dish, and moistened with saline. The supernatant is tested for spermatozoa and acid phosphatase [2]. It is not uncommon for a victim to return to her living quarters after being assaulted, discard her soiled garments, shower or douche or both, and change into newly laundered clothes before she decides or is advised by friends or relatives to register a complaint. A properly dressed woman does not rule out a sadistic rape.

Questions

Experience has shown that the answers to the twelve key questions outlined in the examination are helpful in deciding whether the complaint merits further investigation and will occasionally furnish information pertinent to previously examined cases.

Did you know the man? Did you voluntarily accompany him in his car?—If the victim was acquainted with the attacker or voluntarily accepted transportation from him, the probability that a sadomasochistic rape has occurred is lessened. The current hitchhiking fad among teenagers falls into this category. During the past six months we have examined seven such cases. The complaints were usually registered after the young woman had been subjected to rough treatment or abnormal acts by one or more of the males who offered her the ride.

Did he threaten you with physical violence?—Most experts agree that it is impossible to have intercourse with a healthy, unrestrained, uncooperative girl unless she is intimidated by the threat of physical violence or is confronted with some kind of weapon. In one case the rapist threatened to harm a young baby unless the mother consented to his abnormal acts. The nature of the weapon and the type of threat should be clearly documented.

Did he use restraints?—In a number of cases some form of restraining device was used. Also, manual restraint can be provided by one or more partners in a rape attempt. In one case, a girl's long scalp hair formed an *in vivo* ligature which was wrapped around the anterior aspect of her neck. At the time of the physical examination, a ligature-like abrasion was clearly visible on the skin of her neck. In other cases ropes, belts, wearing apparel, and pillow cases have been used. If possible, the pattern of the injuries is correlated with the type of restraint said to have been used.

Did he attempt fellatio, buggery, or cunnilingus or to insert a foreign body into your vagina?—A sadomasochistic rapist will attempt not only vaginal intercourse but also cunnilingus, buggery, and fellatio. Because of embarrassment, confusion, and remorse, such acts performed during the rape attempt will not be voluntarily described by the victim: the examiner must ask whether the three acts were attempted. If there is an affirmative answer, smears are taken from the oral and anal cavities, as well as the vaginal vault. Occasionally the rapist will attempt to insert an inanimate object into the vagina, such as a dildo, pen, or a variety of other objects. A positive history of buggery, fellatio, and cunnilingus or use of a foreign body in the vagina, plus the laboratory findings of sperm in the rectum or mouth or both, are strong points of evidence in proving that a sadistic rape has occurred.

Did he use a condom?—In five instances the victim alleged that the rapist used a condom. Obviously, this information is important in the interpretation of the negative laboratory tests and places an increased importance upon the history and physical findings in the collection and documentation of evidence.

Have you ever been raped before?—It is of interest to note that some females appear to be rape prone. A history of a previous rape does not strengthen the evidence for the prosecution should the case come to trial. In this series of examinations three victims had been raped at least once before. The mentally retarded, on escaping from parental or institutional protection, are easily molested by the prowling male. If intercourse does occur, these cases are designated rape irrespective of age and consent.

When was the last time you had intercourse prior to this event?—It is essential to obtain the time of the last intercourse prior to the alleged rape. Intact spermatozoa or heads can be recognized up to four days after intercourse. Therefore, the finding of nonmotile sperm does not always indicate that vaginal intercourse has taken place a few hours prior to examination.

Where did the rape occur?—An important source of evidence is the description of the geographic area in which the attack occurred. Rapists, like other criminals, usually have a *modus operandi* and tend to operate in the same or similar environments. This series of examinations includes a lovers lane rapist, who used a gun to intimidate his victims; two black males, who accosted young teenagers while they were parked in high school parking lots at night, using a tire iron or ax to threaten the males and then raping their female companions; a black male and a white male driving an airport taxi, who used a gun in robbing and raping their passengers; and two colored male subjects, who entered beauty parlors, robbed the customers at gunpoint, locked them in a room, and raped the proprietor or one of the customers. These last attacks occurred in the late afternoon in the middle of busy shopping centers! When a gun is used, a homicide sometimes results. The shooting occurs during the first phase or approach of the robbery-rape attack when the victim panics and attempts to escape or a male companion attempts to protect his partner.

Did he steal anything?—The robbery-rape combination is common. The stolen articles should be documented, because not only the money but on occasion certain articles of clothing manifest a psychiatric characteristic of the rapist [3].

What did he say before, during, and after the attack?—The comments of rapists before, during, and after the attack are recorded. Frequently, the rapist will repeat what he has said to other victims. The statement, "I am doing this because my grandmother was used by white men," was elicited in eight rape cases; in others comments such as "Am I better than your boyfriend or husband?" were made. Lewd remarks concerning the victim are not uncommon.

What did he do after the rape?—A bizarre reaction on the part of some rapists after accomplishing orgasm is the manifestation of remorse, in the form of long conversations with the victim describing why the act was perpetrated or by an expression of help such as offering to drive the victim home. Either can put the rapist in danger of being apprehended through identification. All such information should be properly documented and compared with previous cases having a similar *modus operandi*.

Was there more than one man involved?—When two or more males were said to have been involved in the attack, the probability that a true rape had occurred obviously is increased. It is easy for one or more young males to physically subdue a female while another member of the group has intercourse. In two cases, up to six males allegedly participated in the attack.

Physical Examination

Evidence of Trauma—The sadomasochistic rapist is frequently bent upon inflicting some form of trauma to his victim, as in many cases the act of sexual intercourse appears to offer minor satisfaction. Therefore, a detailed description of the types and distribution of

injuries should be made. It has been our experience that, during the presentation of evidence on behalf of the prosecution, the description of the distribution of injuries is as important, and sometimes more important, than the laboratory findings. Well documented records are invaluable for later testimony.

Foreign Material—The entire body must be examined for foreign material that might have come in contact with the body at the scene or during the attack. Dirt, grease, fragments of vegetation, pubic hair, etc., are all important pieces of evidence. The material is collected in a paper envelope which is sealed, dated, and signed by both the police investigator and the examining physician. A receipt for the envelope is given to the physician by the investigator, thus maintaining continuity of evidence.

Examination of Genitalia—Examination of the vulva, hymen, and vaginal orifice includes a documentation of the types of injuries, condition of the hymen (intact; not intact—healed), and condition of the vaginal orifice. Relaxation of the vaginal orifice, with accompanying downward digital pressure on the perineum, is reliable indication that the subject is accustomed to intercourse. In the virgin, the perineal body is usually firm and unyielding. If there is fresh trauma, photographs may prove valuable as evidence of penetration, especially if the laboratory findings are negative. This is particularly important when examining children.

Laboratory Examination

Examination of vaginal contents (as well as the mouth and anus if indicated) should be performed at the earliest opportunity [4]. A specimen is obtained from the body orifices by means of dry cotton or synthetic swabs. Smears are made on slides using the same technique as the collection of cervical material for routine cytologic examination. They are fixed by any of the commercial sprays. These slides are a permanent record of the case.

A second swab is inserted into a small amount of physiologic saline and this material can be examined for motile sperm. If the examination is carried out within an hour after the act, motile sperm can be identified; motility is not usual after three hours. A third swab is placed in a dry test tube for acid phosphatase determination. If this test is not to be done immediately, the tube should be placed in a freezer. In our laboratory the results obtained from this procedure have been of great value, in that, although sperm can be present up to four days after intercourse, a positive acid phosphatase signifies recent intercourse [5].

The swab for acid phosphatase determination is diluted in 3 ml of normal saline for half an hour and an aliquot of the solution is then tested. The Shinowara, Jones, and Reinhart method [6] using Harleco dry-pack reagents is followed and the results are expressed in Bodansky units. Within the first few hours following intercourse, the results range from 120 to 150 Bodansky units. Three to four hours after the attack, the results usually drop to 50 units or less. The results will be negative if the victim is examined more than twelve hours after the alleged attack. Because acid phosphatase activity is enzymatic, variations in value are due to the time factor, the amount of semen in the vaginal pool, the vaginal environment, and the activities of the victim after the attack (bathing, douching, etc.). Present data are insufficient to allow a statement of how long acid phosphatase remains active in the mouth or anus. A positive result is obviously significant. With the current popularity of vasectomies, the acid phosphatase test is of increasing value.

Report

After the history and physical and laboratory examinations have been completed, a report such as the following is submitted to the investigating officer:

EXAMINATION OF ELLEN KANDY SMITH

22 years old

General Hospital Emergency Room

15 July 1971—1.00 a.m.

History:

At approximately 11 p.m. on 14 July, this young, married female was forced at gunpoint by a white male into a car in the parking lot of the high-rise apartment building in which she lived. She was driven to a woody area, where, at gunpoint, she was forced to disrobe. Vaginal intercourse and fellatio were attempted. During the attack the rapist commented on his prowess as a lover. The gun used was a small, black revolver.

Physical Examination:

Emotionally disturbed. No evidence of trauma about head and face, trunk, or extremities. Grass and twigs on buttocks. Hymen not intact, healed.

Laboratory Examination:

Vagina—Saline smears—positive for nonmotile spermatozoa.

Papanicolaou smears—positive for spermatozoa.

Acid phosphatase—70 Bodansky units.

Mouth—Negative.

Impression:

Rape within a three-hour period prior to examination.

If there is some doubt in the examiner's mind, after all the data have been reviewed, that the case represents an actual sadomasochistic rape, the impression is usually expressed as "rape or intercourse" within a given time period. Occasionally the impression rendered is "No physical or laboratory evidence of rape."

If the victim desires prophylactic treatment against venereal disease, 2,400,000 units of procaine penicillin are given after she is questioned concerning allergy and sensitivity. The victim is then advised of the possibility of pregnancy, and should this exist she is referred to her family physician or obstetrician. If the injuries caused by the attack require further treatment, the appropriate specialist on call is contacted. Psychiatric follow-up has not been done, although it is certainly indicated [7].

Summary

The medical evaluation and examination of an alleged rape victim should be carried out by a physician who is experienced in this field, because the guilt or innocence of the accused may depend on the medical findings. Misinterpretation of the evidence can lead to a serious miscarriage of justice. A procedure for the examination of alleged rape cases being carried out in the northern Virginia area is described in detail.

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