

Examination of sexually assaulted child

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Summary

Sexual assault to the child has been accepted as one of greatest crimes in the World. In case of sexually attacked child presented to an health center, priority management must be protecting the physical and psychological health of the child. Clinical and other examinations have to be performed immediately and medicolegal report should also be prepared as soon as possible. It should be kept in mind that medicolegal report will provide the most substantial contribution to the subjects being sexually assaulted during the course of the judgement. It is the most important documentation that reflects the intensity of the event and the trauma experienced by the victim. From this perspective, medicolegal report has to cover all findings related to the event in a case of sexual assault.

In this paper, the rules of examination of the sexually assaulted child, appropriate environment, the qualification of examiners and obligatory procedures for physicians before, during and after the examination were described. (*Turk Arch Ped* 2011; 46: 99-104)

Key words: Child, sexually assault, examination

Introduction

The World Health Organization describes child abuse as follows: "All actions taken by an adult, a population or a government purposely or inadvertently which affect the general health and physical and social development of the child negatively are defined as child abuse." This definition also includes the actions which are not perceived as abuse or violence by the child or which are not accepted as abuse by the adults. It is not a requirement that the action is perceived by the child or taken by the adult deliberately. Child abuse is seen widely in all populations. According to the statistics performed in USA, more than 3 million children are exposed to abuse each year. In other words, 25 out of every 1000 children are abused in one way or another (1). When the types of child abuse are considered, physical, sexual and emotional abuse and negligence should be examined separately. Certain protocols have been developed to evaluate these.

Sexual child abuse

Sexual assault to the child is evaluated as one of the most violent crimes against humanity. It covers all actions taken against the child with an intent of sexuality. These include a wide range from sniping, groping, behavior intended to have sexual pleasure to the extreme point of rape (2).

Child sexual abuse is defined as using the child as a sexual object for sexual satisfaction. The definition of the National Clearinghouse on Child Abuse and Neglect (NCCAN) is as follows: "Contact and relation between a child and an adult is considered to be child sexual abuse, if it is used for sexual arousal of that adult or of another person. Sexual abuse can also be performed by another child, if this child has marked physical power or psychologic control over the other or if a marked age difference is present"(3).

Sexual exploitation is another term used identically to sexual abuse. Children and adolescents are exposed to exploitation, because sexual abuse takes away their

ability to control their bodies which vary according to the level of development and their preferential rights and renders the victim a sexual partner at the same level as the exploiter. As well as a single assault involving violence performed by a stranger, the above mentioned exploitation is seen in all intra-familial sexual abuse relations which most frequently last for years in the presence or absence of enforcement (4).

Investigators think that sexual abuse in childhood and adolescence is not infrequent. In USA; a marked increase in cases of sexual abuse reported to institutions protecting children was observed between 1976 and 1986 (5,6). With increase in sensitivity of physicians in diagnosing sexual exploitation, reports have been increased (1,7). 20% of girls and 9% of boys are estimated to be exposed to inappropriate sexual behavior during childhood and adolescence (8,9). In another large scale study, one out of every 10 boys and out of every 3 girls has been found to carry a risk of sexual abuse before 18 years of age (10). The rates of sexual abuse are higher than the estimates, because it is difficult to diagnose and is concealed. The rate of sexual abuse in children and adolescents is also higher than the estimates in our country. In a study performed in university students, 26.0% of girls and 19.8% of boys reported that they were exposed to sexual abuse during the childhood (11). In a study performed in İstanbul, 13.4% of the female high school students reported that they had been exposed to sexual abuse (12). In our country, in a study performed in Trakya University, the rate of intra-familial sexual abuse was found to be 1,4% (13). In a study performed in high schools in Malatya provincial center, the rate of children who had been exposed to sexual abuse was found to be 4,3% (3). In an analysis of 22 studies performed in USA, 30-40% of women and 13% of men were reported to have been exposed to sexual abuse during childhood (10).

It is of particular importance that the physician who examines the victim of a sexual assault is educated and experienced on this subject. Eckert et al. (14) found in their study that the level of experience of the physicians who perform the examination caused significant differences in terms of determining and interpreting the findings after a sexual assault and the gender of the physician did not cause any difference. Therefore, the medical team who will evaluate the children who have been assaulted sexually should be educated periodically to have a standart level of knowledge (15).

It is possible to examine sexual abuse in seven groups.

1. Types of sexual abuse which do not involve contact: speech of sexual content, exhibition, peeping etc.
2. Touch with sexual intention.
3. Oral-genital sex.
4. Interfemoral intercourse
5. Sexual penetration: penetration with fingers, penetration with objects, genital intercourse, anal intercourse.
6. Sexual exploitation: child pronography, child prostitution.
7. Sexual exploitation also involving other exploitation types (3).

Incest: This a special type of child sexual abuse. It is the sexual relation which occurs inside the family, which is prohibited and which occurs between the child and the family members who are blood related. It may be seen between the child and the father, paternal uncle, maternal uncle, sibling, mother, grandfather and grandmother. In case of stepfather or stepsibling, sexual abuse is also considered as a case of incest. It is most frequently seen between the female child and the father and between the female child and the big brother (16-19). Although it is prohibited, it is seen in all populations. Since it occurs inside the family, it is very difficult to disclose it. It usually starts at ages of 8-9 years. When the child grows up (average 14 years old), he or she starts to understand the mischief. To avoid the situation, he or she usually deserts home. The mother is generally aware of this relation. Exploited sexuality and severe emotional damage are observed in these children (20). They can not establish a healthy family. They can not have a normal sexual relationship with the opposite sex. Sometimes pregnancy (as a result of incest relation) may occur. If the physician diagnoses a pregnancy in the childhood or is suspicious of sexual abuse, he/she should absolutely exclude an incest relation (21), because the exploiter is usually inside the family in such cases. While the traumatic dimension of an incest relation is very important for physicians, incest is prohibited by laws and when such a case is determined, judicial authorities should be informed. According to our law (TCK Item 103), in case a child is exposed to sexual abuse by family members or individuals who are responsible for the care of the child, increase in the penalty will be made.

The exploiter initially behaves friendly and comradely, then comes the stage of seduction and later silent enforcement and pressure starts (20). In children who have been assaulted sexually, "child sexual abuse accommodation syndrome" is observed (22). In this syndrome, the following stages occur:

1. (Secrecy): At the beginning, secrecy of the sexual abuse is in effect. This may arise from many factors including an approach or threat of "this is our secret, do not tell anyone!" by the exploiter, the concern of the child that nobody will believe him/her or that the family will breakup.

2. (Helplessness) : In the second stage the child feels helpless.

3. (Entrapment, accomodation): Later the child feels entrapped and relatively accomodates to the situation.

4. (Delayed, conflicted and unconvincing disclosure): In time the child or adolescent gets back one's strength and a delayed, conflicted and unconvincing disclosure is made.

5. (Retraction): Later retraction and a behavior as if nothing has happened is exhibited (22).

Examination and medico-legal report in cases of sexual abuse

Examination of the victim of sexual abuse is specifically important and requires special care. If sexual abuse is confirmed, those concerned should be immediately informed. In these cases, examination should be performed in a place where the child can be at ease. Examination findings should be recorded in certain forms which have been previously prepared (23). Thus, all findings can be determined without skipping. This is important in terms of determining the findings (3). For this purpose, standart forms have also been prepared in our country (7,24,25).

During "Determination if the child's physical or psychologic health status is damaged or not" which is stated in our law (TCK Item 103), objective criteria including DSM-IV or IDC-10 should be considered. While preparing a medicolegal report the following steps should be taken and recorded:

Referring institution and identity information: No examination should be performed without the official letter from the legal authority. The number of the official letter of the legal authority and information of the person who has brought the victim should be written in the report. The identity information of the child who has been examined should be recorded.

Informed consent: The physician should approach the child in a calming and reassuring way and with respect, give information about the details of the interview and examination in accordance with the child's age, make explanations in the way the child can understand and provide appropriate physical conditions in the environment. If the child's age and understanding is adequate, his/her consent should be obtained in accordance with the convention on the rights of the children. If the child's age is young, written informed consent should be obtained from the parents or the person who is responsible of the child (3).

Examination setting and timing

The examination should be performed in company with a trustable and related adult (usually the mother) unless an unfavourable situation is present (no suspicion of incest etc.).

The behavior and psychologic status of the child and his/her relation with the adult or adults who take care of him/her should be described. Physical examination should include measurement of height and weight and evaluation of behavior and development. Genital examination should always be performed as a part of general examination and usually at the end (4).

The room where the child will be examined should have some properties. The examination should be performed by one physician and questions about the history should be asked by this physician. Other physicians and specialists who need to attend the examination should watch the examination behind a mirror wall. The other physicians should ask their questions via the

physician who performs the examination using technologic means. The whole interview should be recorded visually and aurally as far as possible.

While the physician interviews with the child he/she can be alone or a pediatric nurse or a social care specialist may accompany. During the interview a convenient setting should be provided for the child. The story the child tells should be repeated and realistic toy babies or projective techniques including drawing pictures should be used to animate the event. In addition, the physician should carefully evaluate the child's information, reliability and ability to discriminate between right and wrong. A complete history should be taken. During history taking, all individuals in the home, the place the family resides, the time of residence, nursemaids if present, the way the child has been grown up, the date of the trauma, presentation to the hospital, siblings, previous traumas and behaviour disorders of the child should be recorded. Everything the child expresses related to sexual abuse should be taken seriously and speech techniques appropriate to the child's age should be used, but repeated questioning should be avoided (4).

History

Interview with the child: A detailed history should be taken from the child. Care should be taken on the following points during the interview:

a) While taking history the physician should be alone with the child in conditions mentioned above, constitute a friendly relation and be supportive.

b) After introduction the physician should explain the reason and purpose of the interview.

c) The physician should sit at the same level with the child and start the conversation by talking about friends, school or the child's interests. In such a way a warm relation can be constituted between the child and the physician.

d) The tone of voice and facial expression of the examiner should not be judgmental.

e) Threatening statements should be avoided and the child's trust should be gained.

f) Initially open-ended questions should be asked, directive questions should be avoided. Examples of open-ended questions are as follows: "Did somebody touch you in a way you disliked?" "Did somebody touch your special region?" "How did it happen?" "Can you open up the subject a little more?" "Is there anything else you remember?" "Can you tell me about the last event?"

g) It should be asked if pain, bleeding or dysuria was experienced after the event of abuse. The name of the assaultive and the place where the assault took place should be learned.

h) Repeated questions should be avoided.

i) If open-ended questions are finished and the event of sexual abuse has not been elucidated, more specific questions should be asked.

j) The behavior of the child during the interview should be observed and recorded. Records should be written in the way the child has expressed.

k) At the end of the interview the child should be told that it is a right behaviour to tell what happened.

Interview with the parents: While interviewing with the parents the child should be taken to the playing room. Interview with the parents should include familial history and developmental medical history (1).

The history taken from the officials or from the mistreated child if his/her age is appropriate should include the following: the date of the assault, the place of assault (home, car, wooded area etc.), if the clothing were torn, if the child resisted or not, if condom was used or not, if the child took a bath after the event, the date of the last sexual intercourse and the date of the last defecation (7,25,26).

After sexual assault many psychologic disorders are observed in the child. These include deficiency of self-confidence, anxiety, depression, narcotic abuse, alcohol use, anormal sexual development and posttraumatic stress disorder (27). The children who are victims of sexual assault may have sexual relation with multiple partners and pregnancy at an early age may occur (28). Therefore, to avoid errors in the legal course a collective evaluation with the pediatrician and the pediatric psychiatrist in consultation with the specialist of forensic medicine should be done for treatment of the child after the event of abuse. In addition, consultation should be done with the neurosurgeon, pediatric surgeon, orthopedist, gynecologist, specialist of infectious diseases, ophthalmologist and other related specialists, if necessary. Radiologic tests and other tests should be absolutely performed.

Examination

a) Physical examination: Forms and charts of sexual abuse should be used. For a detailed examination the victim should get undressed completely (3).

It is important that the victim gets undressed on a large brown paper, so that hair, fibers or similar objects falling from the clothes are obtained (2). Young children should be examined in their mother's lap. Location, characteristic and extent of the traumatic changes in the body (ecchymosis, abrasion, laceration, bite, rope marks etc.) should be stated. If possible, pictures of these lesions should be taken. The body should be observed carefully for hair of the assaultive. The mouth and lips, breasts, inguinal regions and buttocks should be examined carefully. Since it is known that some ecchymoses may appear after a while, examination should be repeated the next day to look for ecchymosis, if required.

b) Examination of genital organs: If the child is in the adolescence, pubic hair should be observed carefully. Pubic hair obtained by combing and samples of pubic hair obtained by cutting with a scissor should be kept for comparison. It should be examined if semen or foreign material are found on the hair. The clitoris, vulva, labia major and minor, urethral orifice, fourchette and perineum should be examined for abrasions, ecchymoses and edema. Since such lesions can specifically be overlooked, it is beneficial to use inspection methods including use of toluidine blue, examination by colposcope and photographing after obtaining consent (29-32).

Hymen examination: It should be performed under powerful light. Young children should be examined in the frog-leg position. If the child is too young, she can be examined in the mother's lap. Since anatomic structure of young children is not developed adequately, sexual intercourse is not possible without large lacerations. Considering this fact examination should be performed in a state appropriate for the age of the child to determine the findings of a sexual assault in the way of rubbing the genital organ or patting with hand which does not involve complete coitus. If the child is older, she is layed down in the dorsosacral position, the labia are kindly pulled laterally and superiorly and the hymen, vestibule and the inlet of the vagina is exposed.

The following questions should be asked during hymen examination

1. What is the type of hymen?
2. Is there laceration in the hymen?
3. Is the laceration new or old?
4. How many lacerations are there?
5. Where are the lacerations?
6. Do the lacerations reach the vaginal wall?
7. Is there any findings including ecchymosis around the hymen?

The shape and the lacerations of the hymen should be indicated on a schema. The location of the lacerations should be specified according to clock quadrant. Healing of the hymen varies according to the individual, the number and characteristics of lacerations, the presence of venereal disease or local disease and the hygiene of the vulva (3). Texeira (33) reported that the fastest healing occurred in 9 days in a case with a single partial laceration in an investigation performed by colposcope. On the other hand, more complex lacerations may heal in up to 24 days. Most lacerations (62%) are between the 5 and 7 clock position (7,33). The area of laceration is red, endurated, painful and bleeds when touched in the first two days. These usually improve in 7 days and the area of laceration wrinkles after 8-10 days (34). Hymens usually have natural notches which may be confused with old lacerations. These do not extend to the vaginal wall and are located anteriorly. Some hymens have an elastic structure and sexual intercourse is possible without laceration. The opening of such hymens may reach 3-3,5 cm in accordance with the age and the anatomic development of the child. These children are called "anatomically virgin". The incidence reaches 30% (3). The presence of laceration in the hymen does not indicate lack of consent for sexual intercourse (2).

Anal examination: Older children are examined under a powerful light in the knee-elbow position by pulling the glutei to both sides and the lesions observed are indicated on a diagram according to clock quadrant. Younger children are examined in the left lateral position relaxing the glutei and knees with the head on a pillow. The buttocks are spread by the thumbs of both hands. This action alone may cause a traction in the anus. One waits for 30 seconds. Internal and external anal sphincters relax and the anal canal opens slowly providing the exposure of the rectum.

This is defined as buttock separation or lateral buttock traction test and opening of the anal canal is defined as "reflex anal dilatation (RAD)". However, RAD is not an accurate finding of anal sexual intercourse (1). It may be observed in the presence of feces in the rectum, constipation and Crohn disease (1). During examination, presence of annular ecchymosis around the anus (may be confused with venous distension), thickening and flattening of mucosa, swelling and tenderness in the mucosa, fissures, lacerations, scar tissue and sphincter injury should be searched for. Finding of fissure, hyperemia or abrasion alone does not mean that anal intercourse has occurred (7). In differential diagnosis, constipation, poor hygiene etc. should be excluded. Especially in children below 7-8 years of age, anal intercourse is not possible without large lacerations, since anatomic structure is not developed adequately (7). Parallel to the development of the anatomic structure, in children older than 12-13 years of age, no lesion may be observed as a result of easy dilatation of the anus in anal intercourse with consent or using lubricant material.

Examination of the mouth: If it is claimed that sexual assault is made as an oral intercourse, the inside of the mouth should be carefully examined under a powerful light and ecchymoses and abrasions should be searched for. If the ejaculation has occurred in the mouth or around the mouth, swab samples should be obtained from the inside and surrounding of the mouth to search for sperm.

Taking a sample

Samples should be taken appropriately to understand the dimension of the sexual assault and to provide proof. Samples should be taken both from the victim and the assaultive person.

Samples to be taken from the child who has been exposed to sexual abuse

- a) Hair removed by pulling (roots should be present)
- b) Pubic hair combed from the pubic region and other hair
- c) Pubic hair obtained by pulling for use in comparison
- d) Blood sample to use for comparison
- e) Blood and urine samples to search for alcohol, stimulants and narcotics
- f) Swab samples from the vagina and cervical canal
- g) Swab samples from all suspicious remnants in the body
- h) If there is a history of oral-penis contact, swab sample from the mouth
- i) If there is claim of anal intercourse, swab sample from the anus
- j) Nail samples obtained for samples of skin remnants which may be found in the nails
- k) Swab samples from the regions reported to be contaminated with semen
- l) Saliva sample
- m) Blood and urine samples for pregnancy test
- n) If it is claimed that a long time has passed after the event and if pregnancy is present, sample of chorionic villus and amniotic fluid (3)

Samples to be taken from the exploiter

- a) Hair with their roots
- b) Pubic hair with their roots
- c) Blood sample to use for comparison
- d) Blood and urine samples to search for alcohol, stimulants and narcotics
- e) Nails obtained by cutting
- f) Saliva sample for comparison
- g) Swab sample from the bite Marks
- h) Swab sample from intact skin for comparison
- i) Separated hair found free on the body
- j) Swab sample may be needed to be obtained from the coronal sulcus, the body of the penis and urethral orifice (2).

In sexual assault cases of rubbing or penetration of the genital organ into the vagina and anus performed by assaultive individuals carrying venereal diseases, these infections may be transmitted to the victim. A careful examination should be performed in children to search for findings of sexually transmitted diseases. Samples may also be required to be obtained from the exploiter and the victim to determine sexually transmitted diseases. Sexually transmitted diseases found in adults and in children after infancy may strongly indicate sexual abuse, but are not a proof for it. In this case, determination of gonorrhea, chlamydia, syphilis and HIV etc. is a possible proof of sexual intercourse (4,15).

Main themes

At presentation of a child who is a victim of sexual assault in a health center, the priority is to protect the physical and psychologic health of the child. The child should be examined in the shortest time possible and medico-legal report should be prepared.

A common report should be arranged by forensic healthcare committees comprising of the physicians attending the examination.

The physician, social care specialist and nurses who attend the examination of the child should be specifically educated on sexual assault. Post graduate programs should be opened on this subject.

To avoid repeated examination the initial examination should be performed by a competent person and recorded. When the child needs to be reevaluated, these records should be examined without performing another examination unless it is mandatory.

Competent teams who can perform the examination of children exposed to sexual abuse and who can be reached in a short time when necessary should be established.

Privacy should be absolutely protected and no information should be given to unrelated individuals.

If the genital organ has penetrated into the vagina (coitus), assistance for contraception should be given.

All children exposed to sexual abuse should be included in a therapy program.

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