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# Medical Examination of Sexually Abused Children: Medico-Legal Value

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**ABSTRACT:** The Department of Forensic Medicine (forensic pathology and clinical forensic medicine), Aarhus, Jutland, Denmark, performs examinations of children suspected to have been sexually abused when reported to and requested by the police in Jutland, Denmark. Jutland covers an area of 210,000 km<sup>2</sup> with about 300,000 inhabitants in Aarhus. A colposcope initially equipped with an Olympus camera, but now with a video camera attached has been used since 1994. Since 1994 the department has performed more than 100 examinations of children suspected of having been sexually abused. A preliminary study was taken to evaluate all cases from 1995 including the legal outcome. Results: The material included 34 cases with three boys, mean age 11 years, and 31 girls, mean age 8 years, at the time of the examination. The sexual abuse events were fondling, including penetration of the vagina, vaginal (14), anal (7), and oral (5) intercourse as well as cunnilingus and nontouching abuses. The medical examination was most often performed more than a week after the abuse. The examination revealed normal findings in 23 cases, nonspecific findings including erythema in 13 cases, and in only one child was a traumatic lesion with rupture of the hymen seen. The perpetrators were above 25 years of age and were family members or someone known to the child. Nine perpetrators were convicted at court, of whom three admitted having abused the child. Conclusion: A medical examination in cases of sexual child abuse seldom provides a legal proof of sexual abuse. The most important is the story told by the child. Therefore, the examination is a supplement which may support or remain neutral to the story told by the child.

**KEYWORDS:** forensic science, child sexual abuse, colposcope, medical examination, legal outcome

The incidence of sexual abuse of children in Denmark is not known with certainty.

The definition of sexual child abuse is inconsistent; it has, however, on the basis of the literature, been estimated that the prevalence of repeated and serious abuse is about 5% in the Nordic countries (1).

The medical examination of children suspected to be sexually abused in Denmark is mainly performed by forensic medical doctors, i.e., forensic pathologists trained to perform these examinations, and seldomly by pediatricians or gynecologists. That is, however, only if the case is investigated by the police in preparation for court procedure.

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The legal value of the medical examination has, on the other hand, been questioned. It is thus known that the medical examination seldomly provides legal documentation for sexual abuse (2–6). Moreover, some people consider the examination a further and unnecessary abuse of the child, but most children accept the medical examination without problems, when it is conducted by an experienced examiner (7).

To interprete ano-genital findings it is necessary to be familiar with the normal anatomy, variations of the anatomy, as well as pathological changes and lesions inflicted by things other than sexual abuse (8–15). An overview of normal ano-genital anatomy, acute, healing, and healed ano-genital trauma can be found in the *International Journal of Child Abuse and Neglect* (16).

Our forensic department, which serves an area with about two millions inhabitants, has since 1994 performed colposcopic examinations of the ano-genital region as part of the medical examination. The colposcope—an Olympus—has a video camera attached and it provides magnifications of 5 to  $16 \times$ . It has different filters so that capillaries and vessels can be visualized more clearly.

A forensic pathologist qualified by the state to perform clinical forensic medicine is a medical doctor, who generally has specialized in morbid anatomy, pathology, and cytology, and who has spent more years at a forensic department performing—primarily under supervision, but later on by him/herself—examinations of victims (or perpetrators) of violence, including children suspected of sexual abuse.

All cases, including the colposcopic findings (photographs/ videos) are reviewed by a qualified senior, and the legal report, based on the examinations, are signed by both doctors. Only senior doctors are qualified to appear in court.

The medical examination takes about one hour. The child has previously been informed about the purpose, and how the medical examination will be performed. It is mandatory that the child has been questioned by the police before the examination to avoid any influence from the medical examination in the child's testimony.

The purpose of this investigation is to evaluate the medico-legal value of those examinations.

## **Material and Methods**

The material includes all cases from 1995, all examined on request by the police. All written material including court decisions were reviewed.

## **Results and Discussion**

The material included 34 children; 31 girls with a mean age of eight years (range 2 to 19 years), and three boys with a mean age of eleven years (range 10 to 13 years).

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The suspected perpetrator was in general a man with a mean age of 36 years; more than half of the cases were within family, with the biological father as the perpetrator in 32% of the cases, a family member in 42%, a friend or a neighbor in 17%, and others in 29%.

Suspicion and information about sexual abuse came mostly from the mother (44%), 9% came from the kindergarten or the school, 24% from the medical examiner, and 23% from others.

Most of the children had been abused for a long period; 40% for more than  $1\frac{1}{2}$  years, 7% from 1 to  $1\frac{1}{2}$  years, 20% from 3 to 6 months, and 30% for less than 3 months. Moreover, 6% of the children were abused once, and more than 50% were abused several times; 37% more than ten times.

The medical examination was performed more than a week after the last episode in most cases (90%).

The signs, symptoms and complaints from the children were dysuria, abdominal pain, ano-genital pain, constipation, bleeding, and vaginal discharge. The type of sexual abuse events were most often fondling (N = 29, 85%), and genital touch (N = 10, 29%); penile coitus, however, was also seen very often: in 14 cases penile/vaginal coitus, in seven penile/anal coitus, and in five oral penile/oral coitus. Vaginal penetration with other objects, including a finger, was seen in eight cases.

A medical examination disclosed signs of violence in 44% of all cases with bruises, wounds, and haematomas of the skin outside the ano-genital region.

# **Ano-genital Findings**

Most children (23) had normal findings. Erythema of the labia, vestibulum, and hymenal mucosa was the most common finding (seen in 11 children). Irregular hymenal rim (bumps/notches/clefts) were found in seven girls, and a congestion of the hymen was seen in only one case. Venous congestion, thickened anal folds and fissures were seen in a few cases (three). That is, only one of 34 children disclosed clear medical evidence of vaginal penetration (Fig. 1); in all other cases the ano-genital findings were inconclusive.

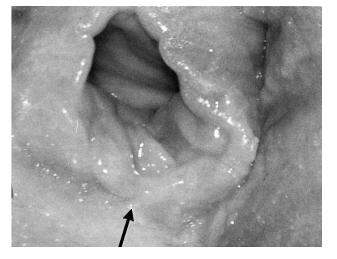


FIG. 1—Colposcopic photograph; patient supine, using labial traction. A 14-year-old girl stated vaginal intercourse at the age of 13 years. Complete cleft of the hymen at the 6 o'clock position, extending to the vaginal wall.



FIG. 3—Colposcopic photograph; patient supine, using labial traction. A 10-year-old girl stated being photographed naked, normal finding.



FIG. 2—Colposcopic photograph; patient supine, using labial traction. A 14-year-old girl stated vaginal penetration with a finger six months prior to examination, normal finding.



FIG. 4—Colposcopic photograph; patient supine, using labial traction. A 4-year-old girl stated vaginal penetration with a finger three weeks prior to examination, normal finding.

# Legal Outcome

Half the cases were dismissed by the police and the authorities before coming to court. Fourteen cases were brought to court, and nine were convicted at court. One man was convicted in four cases; he and three other perpetrators admitted their guilt.

#### Conclusion

On the basis of this preliminary investigation it can be concluded that the most important evidence in cases of suspected sexual abuse of a child is the testimony given by the child. The medical examination is, however, an important supplement, which can support the testimony given by the child or remain neutral to what is told.

However, it has to be noted that most children were examined more than a week after the last event, and the possibility of positive findings will certainly increase the earlier the child is examined after a sexual abuse event.

Forensic pathologists interested and trained in clinical forensic medicine are suited to perform these examinations.

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