

Male Child Rape Cases in Brazil - An Observational Study of a Case Series Followed by A System of Points for Diagnosing it



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Abstract

Background: Cases of sexual violence against male children can involve anal coitus. This type of violence can be proved in Brazilian courts based only on the presence of sperm in the anus. However, other findings also can confirm the rape.

Objective: This work aims to describe some essential findings in these victims, besides the presence of sperm in the anus, and propose a new form of evidence collection.

Participants & setting: 127 reports of male children's victims of rape were examined in 2014 in the Legal Medical Institute of the State of São Paulo.

Methods: Retrospective and descriptive analysis. The research regarded age, type of physical findings in the anus, and the positivity of the sperm test in the anus.

Results: Anal intercourse was alleged to be the most prevalent act (15.37%). Physical findings such as anal redness with bleeding were present in 20 cases (15,74%), followed by anal dilatation over 2cm (17,87%). The mean age of the victims was 6.85 years. The most common aggressor was an acquaintance (25.19%). Sperm collection from the anal and oral cavity was negative in all cases. **CONCLUSION:** The absence of positivity of sperm research in the anus increases the need to use other methods that prove the rape. We propose that the child's testimony, anal bleeding, and dilation over 2cm should be analyzed together with spermatozoa in the anal cavity as solid elements that can be used in the Court of Law.

Keywords: Child abuse; Rape; Boys; Forensics

Introduction

The World Health Organization [1] defines sexual violence as "any sexual act perpetrated against someone's will." It can be committed "by anyone regardless of their relationship to the victim, in any setting." It includes but is not limited to rape, attempted rape, sexual slavery, unwanted touching, threatened sexual violence, and verbal sexual harassment. According to the Center for Disease Control and Prevention (CDC), the United States has millions of estimated cases annually. Estimates indicate that 1 in 3 women and 1 in 4 men experience sexual violence involving physical contact during their lifetime [2]. It also occurs in Brazil, although we do not have reliable statistics. It is a common fact that victims do not seek help because they are ashamed or

afraid of suffering negative repercussions if health professionals, public safety professionals, friends, or family expose them to other persons. According to their respective legislations, acts that consider sex crimes vary from country to country. However, a broad definition of rape is contact between the penis and vulva, or the penis and anus, involving penetration without consent. In addition, this broad definition encompasses the contact between the penis and mouth, vulva, or anus. Even without penetration, if without permission. Within this concept, we can also include manipulation of the genitalia by hand, finger, or any object used sexually. In 2009, Brazilian legislation adopted this broad concept of rape, and Law 12015 [3] defines rape as "carrying out sexual intercourse, or performing another lewd act, under violence or

serious threat." Furthermore, this same law created the figure of "rape of the vulnerable" - defined as the act committed against minors under 14 years of age or against those who cannot offer resistance for any reason.

However, sexual violence against male children has few reports in the medical and forensic literature, especially in Brazil [4,5]. This lack hinders good technical and professional practice, making it necessary to develop specific strategies to prevent this type of offense and improve health and forensic professionals' management of these cases. More importantly, this lack also contributes to the aggressor going unpunished because of the lack of reliable evidence in the court of justice. In the crime of rape of vulnerable males (e.g., boys under 14 years of age), oral sex and anal intercourse are the most common lewd acts. Therefore, in Brazilian criminal law, an expert examination of this type of activity is necessary to demonstrate the materiality of the crime [3] and the conviction of the accused. Traditionally, regarding the most common lewd acts, we can only prove the offense if the examination reveals the presence of sperm in the anus or the oral cavity. Usually, a trained medical examiner performs an official examination in Brazil upon request from a judicial or police authority. However, forensic evidence of the crime is complex, especially for young boys. Furthermore, as commented by Vrolijk-Bosschaart et al. [5] "the literature on physical signs and symptoms of child sexual abuse (CSA) in boys of this age is scarce" [5]. Guidelines regarding examining and interpreting medical findings have been developed and revised [6] by Joyce Adams et al. to guide medical and forensic practitioners. The physical forensic examination of the male victim of suspected rape begins with an external inspection. Next, we examine the children's anus in the supine knee-chest or lateral decubitus position. The objective is to detect bodily injuries or signs that suggest injuries produced for libido stimulation, such as sucking and biting, in erogenous regions. Therefore, we must pay special attention to genitals and other erogenous zones, such as the neck and thighs. Next, the kneeling position followed by buttock separation is necessary to evaluate these male victims to inspect the genitalia and perineal region. Thus, in boys, the anal area deserves special attention. Physical findings included complete anal dilatation with the relaxation of internal and external anal sphincters, fissures, abrasions, and bruises. These findings "with no expert consensus on interpretation concerning sexual contact or trauma" in Adam's classification of the victims [6] are essential to highlight the suspect of sexual violence (e.g., rape). Finally, we must make an anal smear and an anal swab to search for sperm. In addition, toluidine blue can highlight suspicious lesions. The lesions were recorded and photographed to facilitate recording. However, video recording and documenting the victim's altered behavior during the examination are currently more indicated [5,7,8]. We also should examine the same regions using filtered ultraviolet light (Wood's lamp). Parts that fluoresce with Wood's lamp may contain sperm. The collection of material from these regions should be performed for laboratory research on sperm

and the genetic profile of the aggressor. In addition, it is essential to identify with whom did sexual contact occur because the aggressor is unlikely to be discovered purely based on genital injury [9]. Other complementary exams should be collected, such as blood and urine (for investigation of sexually transmitted infections, drugs, and other psychoactive substances) and saliva.

Finally, to complete the report, it is essential to classify physical findings in the victims using Adam's classification updated for 2018 [8], based on anogenital results in children with suspected sexual abuse. The expert must discuss the findings using this classification, explaining whether the findings are typical to the authorities. If it is related or unrelated to a child's disclosure of sexual abuse or if the results are commonly caused by medical conditions other than trauma or sexual contact, and if the findings are "diagnostic of sexual" contact [8]. Besides, as stated by Walker, "in most cases, prepubertal child sexual abuse only comes to light sometime after the incident. Acute injuries normally heal before the examination, with or without residual evidence." Thus, evidence of injury to the anal region in this group of children is of "particular significance in the clinical evaluation of child sexual abuse [9]". Anogenital findings consistent with acute sexual abuse in male children are perianal swelling, marginal hematomas, radial fissures, dilated anus, and linear skin abrasions [7]. However, many of these findings are questionable. For example, "the significance of reflexive anal dilation remains controversial. A dilation of less than 2 cm can be considered a normal reflex reaction. It is also associated with constipation, encopresis, and neuromuscular diseases." [7] In addition, anal fissures may appear in perianal infections or skin irritations of other origins. Furthermore, "in most cases, penetration (or repeated penetration) of the anus does not result in injury or other changes" [1]. It is essential to point out that a "significant inter-observer variability in the accuracy of detection and interpretation of genital injury" [9] can cause a wide variation in the reported prevalence of genital injury following rape. Some topics in Adams' classification generate controversy, and experts have no consensus on specific points. Still, the author recalls that "as always, the details of the disclosure of abuse from the child is the most important part of an evaluation, whether or not a physical or laboratory finding is present" [8].

It should be noted that under Brazilian medicolegal doctrine [10], anal intercourse is mainly proven when sperm are found in the anus. Currently, the technical evidence of the crime (rape with anal intercourse) only exists beyond doubt if research on spermatozoa in the anus is positive. Performing anal sperm screening within the first 24-48 hours after the alleged rape gives better results [1,7,8]. Papanu Suttipapit [11] stated, "Semen is crucial evidence for some sex crimes, with its sole confirmation being sperm detection." However, the author also affirms that "The success of sperm detection depends on all levels of preanalytical and analytic procedures. Specimen collection must be performed by well-trained and competent forensic physicians and nurses, with proper preservation before laboratory transfer." It does not frequently occur, which is a cause of failure in that type of exam.

In Brazil, many forensic examiners confirm rape in boys, usually by the presence of recent anal or perianal lesions [12]. In the series in this study (although their cohort was composed of boys and girls), the authors found that “recent anal or perianal lesions were present in 35 (87.5%) of the confirmed cases involving boys. Laboratory confirmation based on spermatozoa or prostate-specific antigen detection occurred in only 4.2% of the cases. In all cases, sample collection was performed within 24 h of the alleged abuse. Thus, in most cases with material evidence of sexual abuse, the confirmation criteria consisted of a ruptured hymen and recent perianal lesions” [12]. As pointed out above, it can be (or not) a questionable conclusion regarding perianal lesions. There is a contradiction between the knowledge we have now concerning proving the rape based only on the presence of sperm in the oral cavity or anus and the value of the physical signs (e.g., anal or perianal lesions) in front of the court of law. And it raises some fundamental questions, such as how can we prove the alleged rape if the sperm research is negative? The finding of anal or perianal lesions is sufficient to do it so. As Walker [9] stated, “the potential contribution that the findings of a forensic medical examination can make in corroboration should not be underestimated. This requirement for corroboration is sometimes misunderstood; it does not require two separate proofs beyond a reasonable doubt. It just requires that key facts of the case are backed up with a secondary piece of evidence consistent with an incriminating hypothesis. Hence, even non-conclusive medical evidence could be vital in this regard.” So, the forensic physician must set the findings (e.g., the physical signs he found) into context, explaining how the evidence shows that the presence of genital injury or the presence of sperm on the anus should not be required to validate an allegation of male child rape. As Walker pointed out, “the message to convey is that a neutral forensic examination, i.e., one which neither confirms nor refutes the allegation, is not a negative finding” [9]. Thus, the objective of this study was to evaluate the results of sperm research on the anus of male children (under 14 years old) who were victims of alleged rape and the presence of anogenital injuries, to verify the importance of this evidence in proving the alleged rape. Besides, we aim to propose a rational and new form of evidence collection based on a system of points according to the child’s testimony, the presence of anal injuries, and the presence of sperm on the anus.

Method

It is a retrospective, cross-sectional analysis. Data were extracted from reports from medicolegal examinations of male victims of the alleged rape. The study period was 2014. This study was conducted at the Medicolegal Institute of the State of São Paulo, Brazil. Sample size: 350 medicolegal reports of sexual assault in children in 2014. Variables analyzed in the reports: age, alleged aggressor, time of occurrence of the aggression, and forensic examination. In addition, the type of lewd act was mentioned in the complaints, whether there was previous medical care, the type of lesions on the anus, other bodily injuries, or sperm (in the anal and oral cavity). Examiners and exam method: Different

experienced forensic experts performed all the examinations. As proposed by Magalhães et al. [13], “information related to the victim, their family background, the abuser, the event and the forensic examination are analyzed. Therefore, before contacting the child, the forensic doctor should have in his/her possession all the information available about the case. The evaluation began with an interview of the adult who accompanied the child initially (the child was not present). The child was then interviewed separately”.

For the anal exam, the child was examined in a supine knee-chest position, and the examiner promoted a buttock separation or a prone knee-chest with a gluteal lift. Again, a confirmatory technique is used, reassessing after bowel movement, ambulating, or alternate position.

Statistical Analysis

Responses were analyzed using SPSS® Version 22.2 (SPSS® Inc; Illinois, USA). Descriptive statistics with relative frequencies were determined for all the variables. We present age variables by median and interquartile range due to asymmetric distribution. Qualitative variables were presented by absolute (number of cases) and relative (percentage) frequencies. We assess the normality of data distribution using the Shapiro-Wilk test. For the age and other variables, we use the Chi-square test. We use two tests to verify the existence of a correlation between variables: a) Chi-Square, to correlate two qualitative variables; and b) Kruskal-Wallis, to correlate qualitative and quantitative variables. P-Value < 0.05 was used as the level of significance. We did not make any corrections for multiple comparisons. Research on spermatozoa in the anus: in victims who complained of anal penetration, a smear was collected, placed on a glass slide by a forensic examiner, and sent to the laboratory. The sections were stained with hematoxylin-eosin and visualized under a microscope in the laboratory.

DNA extraction: A cotton swab soaked in saline solution was introduced into the anus and dried. The swab was sent to the laboratory for DNA extraction only if the results for spermatozoa were positive.

Inclusion criteria: All reports referring to forensic examinations performed on male children (under 14 years of age) were included in the study.

Exclusion criteria: all reports referred children over 14 years old or female children.

Outcomes expected: negative research on sperm in the anus isolated is sufficient to exclude rape in a male child? If not, are there other parameters to collect evidence?

Ethical approval

The Ethics and Research Committee of the University of São Paulo approved the study, which waived the requirement for written consent. However, according to the norms of the

Medicolegal Institute of Sao Paulo (Brazil), the data contained in medicolegal reports can only be released for research five years after its completion. Therefore, these data are not available to other users. All ethical standards were adopted, as determined by the resolution of the National Health Council.

Results

Of the 350 reports analyzed, 127 met the inclusion criteria. The other 223 reports were excluded. The legal guardian’s most prevalent libidinous action that was the subject of a complaint was anal intercourse (25.19%), followed by manipulating the victim’s anus (13.88%), as shown in Table 1.

Table 1: Lewd act or physical sign that were the subject of a complaint by the legal guardian.

Lewd Act Referred	N*	%*
Anal intercourse	32	25,19
Anus manipulation	17	13,38
Not mentioned	11	8,66
I don't know how to refer	10	7,87
Manipulation of the genitals	19	14,95
Fellatio	28	22,01
Redness in the anus	8	6,29
Anal bleeding	1	0,78
Kiss	1	0,78
Total	127	100

*N = Number of cases, %=percentage

Table 2 presents the distribution of alleged aggressors reported by victims. The aggressors identified as male represented 80.31% of the total, while the remaining 19.68% were not identified. The alleged aggressor was mostly the father or acquaintance, representing 24.4% of cases ($p < 0.001$), and the victims identified 62 correctly of them. The 127 cases analyzed presented an asymmetrical age distribution ($p < 0.001$), with a median of 06 years and an interquartile range of 03 (range = 03 to 14 years) (Figure 1).

Table 2: Alleged aggressor reported by the victim.

Aggressor	N
Known	32
Father	30
Other	11
Schoolmate	11
Cousin	8
Don't know how to refer	7
Neighbor	6
Brother	6
Uncle	4
Not mentioned	4
Stepfather	3
Stranger	3
Friend	1
Roommate	1

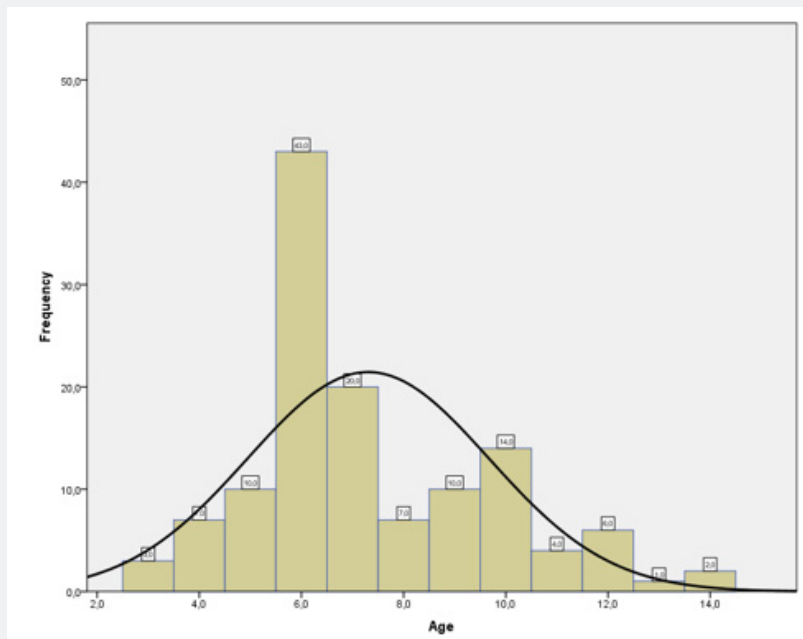


Figure 1: Sample distribution by age.

Regarding the anal lesions found, there was no statistically significant difference between them ($p=0.472$). However, anal redness with bleeding (15,74%) and anal dilatation more significant than 2 cm (7,87%) were the most frequent physical signs on anal examination. It is important to note that in 90 cases examined (70,86%), no anal injuries were found to justify the complaints of the legal guardian, as shown in Table 3. Regarding the time elapsed between the occurrence of violence and the completion of the expert examination, we obtained the following results: 23% of victims were examined on the first day; 5% on the second day; 6% between the second and third days and 16% between the third and thirtieth days. Approximately 10% of victims were examined 30 days after the alleged rape and 5% one year after the reported date of the alleged rape. In 35% of the cases, it was impossible to specify the exact violence date. In our series, 22 victims received medical care before the forensic examination. Regarding sperm research in the anus, there was no collection of material in 54 cases (42,52%) because there were no complaints of anal penetration. In the other 73 cases, research on sperm was negative (57,48% of the total 127 patients). A similar result was observed in the investigation of spermatozoa in the oral cavity: it was not collected in 90 cases (78,87%), and in the remaining 37 cases (29,13%), the results were negative.

Table 3: Anal lesions found in forensic examination.

Anal Lesion	N	%
Anal redness + bleeding	20	15,74
Anal dilatation > 2cm	10	7,87
Bruises	5	3,93
Fissures + bruises	2	1,57
None	90	70,86
Total	127	100

In 37 of the 127 cases (29,13%), the reports concluded that there was rape (e.g., anal intercourse) based on general findings in the anal examination. Of these cases, 20 presented anal redness with bleeding (15,74%); 10 presented anal dilation more remarkable than 2 cm (7,87%); 5 presented bruises alone (3,93%), and two presented fissures with bruises (1,57% of total cases), as shown in Table 3. In the other 90 cases with no evident physical signs of the anus, the result was "inconclusive." Finally, in our series, there was no correlation between the victim's age and the other variables as the alleged aggressor ($p=0.168$), the reported complaint ($p=0.533$), or the anal lesion found in the exam ($p=0.199$). Also, there was no correlation between the alleged aggressor and the reported complaint ($p=0.073$) or the type of anal lesion found ($p=0.259$).

Table 4: Points system for anal intercourse assessment.

Type of Evidence	Value (Maximum 6 Points)
Child Testimony	4 points
Anal redness + bleeding*	2 points
Anal dilatation > 2cm*	2 points
Bruises, fissures*	2 points
Research on sperm positive	6 points

*In the absence of other predisposing factors such as constipation, encopresis, sedation, anesthesia, and neuromuscular conditions.

Discussion

In our series of 127 reports of forensic examination in vulnerable male child victims of alleged rape, in only 37 cases (29,13%), the forensic experts concluded in a positive form, that is, that there was rape (e.g., anal intercourse). It is a worrying number because it is not fair to assume that the complaint was unfounded in the other 90 cases. In the other 90 cases, the forensic examination could not fully demonstrate the existence of the alleged rape. Similar results are found in other studies. For example, Myhre et al. state that "there is general agreement that among children who are evaluated for suspected sexual abuse, especially for non-acute examinations," the percentage of cases showing abnormal medical findings is low [14]. Magalhães et al. [13] demonstrated that "there were no physical signs of the abuse in 63,5% of the cases" in their series. In our series, the number is slightly higher: 70,86% of the victims have no physical sign of abuse. Otherwise, our data show that in the 37 cases that the forensic experts concluded in a positive form, the conclusion that rape existed was based on general signs around the anus of the victims, such as anal redness, bleeding, bruises, fissures, and anal dilation. Although these findings could be significant in highlighting the suspicion of sexual violence (e.g., rape), there is no expert consensus on interpreting sexual contact or trauma [6]. Therefore, it raises the question: How can we demonstrate the rape of male children clearly and objectively? It is essential to note that medical literature on sexual violence against male children cannot answer this question. It has been an issue that commonly appears only within works that study the problem more broadly, not focusing on this specific type of violence (e.g., rape with anal intercourse). It is a crime that is difficult to prove for several reasons. One reason is that the general physical findings around the anus, as the only instrument of evidence before the courts, especially regarding the rape of vulnerable male children, are questionable [7]. They are questionable because general physical signs such as redness or anal fissures are often caused by perianal infections and skin irritation of other origins, as pointed out above. In addition, penetration of the anus does not result in injury sometimes [1]. In addition, there is the problem of the "inter-observer variability in the accuracy of detection and interpretation of genital injury" [9]. Many confounding variables

can hamper a more objective conclusion when examining a male victim, particularly a child.

These confounding variables are why most experts advocate that only the finding of sperm in the anus is concrete proof that anal intercourse has taken place. However, this concept remains questionable. Magalhães et al. [13] showed that “sperm studies were carried out in 27 cases and were positive in only one (from the victim’s clothes)”. In our series, we did not have any cases of positive detection of sperm in the anus (73 patients collected-57,48% of the total) or oral cavity (37 cases collected-29,13% of the total). Despite these findings, in 37 of the 127 patients (29,13%) of our series, the reports concluded that there was rape (e.g., anal intercourse) based only on general anal findings. Our results demonstrated that the negative survey of sperm in the anus does not rule out the possibility that rape occurred. In other words, the presence of other physical signs is beneficial in showing that the absence of sperm in the anus does not imply that sexual contact, including rape, has not occurred.

It is also essential to note that finding sperm in the anus is not a simple task. It depends on other series of factors. The first is the time interval between rapeseed and material harvesting. Ideally, this collection should occur within the first 24-72 h after the alleged rape [10,11], which is not always the case. The ideal collection time was forty-six hours for anal and six hours for oral swabs. In our study, 23% of the victims were examined on the first day. The remaining 5% were reviewed on the second day and 6% between the second and third days. In other words, only 34% of the victims in our series were examined within a reasonable time, which may have compromised the chance of finding sperm in the anus and oral cavity.

The slides’ preparation and type of staining is another critical factor that requires an experienced professional in forensic pathology. For example, the “Christmas tree” stain is more suitable than hematoxylin-eosin. Preferably, the forensic examiner should prepare the smear with the laboratory scientist’s design later [15].

Two questions arise at this point. First, to what extent would Adams’ criteria be sufficient for the offender’s conviction in a court of law? The second question is: What standard should be used for forensic examination to reach an objective conclusion beyond a reasonable doubt? The first question is relatively simple: “physical signs are only part of the evidence in cases of possible child sexual abuse; they have been controversial, particularly the significance of anal findings,” as stated by Robinson [16]. It is essential to say that the absence of signs of anal injuries does not exclude the possibility of sexual abuse since many types of abuse (such as anal manipulation, for example) are not expected to cause injuries [6,14]. Furthermore, most wounds can heal completely when the children are brought for a forensic examination. In our series, only 34% of the victims were examined in a reasonable time. It is also important to remark that discussions and controversies

about interpreting specific anal findings still exist. Myhre et al. [14] stated that “especially for non-acute findings like venous congestion, erythema, and anal dilatation, there seem to be different approaches to interpretation.”

A proposal of diagnostic criteria

As stated by Robinson [16], the physical signs attributed to sexual abuse are not unique, requiring experience to elicit and interpret them. There are limitations regarding sensitivity and specificity for the conditions they are meant to help diagnose. Making a diagnosis based on a single sign is very dangerous, and the chance of error is not negligible. So, based on our findings, some criteria, and a system of points (Table 4) should be placed in order of importance. The purpose of it is to gather as much evidence as possible during the examination, and facilitate the diagnosis of abuse, specifically anal penetration, to avoid misdiagnosis:

a) The first criteria were the child’s testimony, cited above as “the most important part of an evaluation, whether or not a physical or laboratory finding is present” [8]. In our series, 62 children correctly identified the aggressor. Fortin and Jenny [17] stated that “a child’s statement about sexual abuse is the strongest evidence of abuse in most cases,” following Magalhães et al. [13]. We agree with them and think it is the most critical evidence if an experienced forensic psychologist conducts the interview. In Brazil, Law 13.431/2017 created a standard procedure called “hearing of children and adolescents in the justice system, using interview techniques scientifically recognized by specialized professionals” [18]. A positive testimony of the child can receive 4 points in our proposed classification.

b) The second criterion is the physical finding of the anus. Specifically, regarding the anus, in our series, the most critical result seems to be anal bleeding, erythema, and anal dilatation over 2 cm. Myhre et al. call special attention to complete anal dilatation [6] in children examined in the prone knee-chest position, in a non-acute examination, in the absence of anal symptoms (constipation, encopresis, or diarrhea). In an update of their criteria in 2018, Adams et al. [8] stated that “complete anal dilatation with the relaxation of the internal as well as external anal sphincters” has no expert consensus regarding the degree of significance.

c) However, from our perspective, these findings seem more vital than fissures or bruises, although we cannot establish a positive correlation between them and anal penetration. Otherwise, in Myhre et al. [14] cohort, the authors found a “positive association of soiling, anal laceration and anal fissures with anal penetration.” In our classification, these findings can receive 2 points each if they were present on the examination; and

d) Finally, the last (but not the least) criteria: sperm founded in the anus. It remains of vital importance. It can receive 6 points if positive.

Exemplifying the system proposed

When we add up the points, if we reach a total of six points, the diagnosis of rape can be confirmed. For example, the testimony of the child (4 points) plus the finding of anal dilatation above 2 cm, the total is 6 points. If we find anal erythema (2 points), anal bleeding in the absence of other diseases (2 points), and anal dilatation (2 points), we can reach the same six points. We have different possible combinations. But the presence of sperm on the anus, isolated, earns 6 points to confirm the rape. However, we must emphasize that these criteria should not be considered for isolation. They must be analyzed together. For example, if physical findings in the anus (e.g., Adam's classification [18]) confirm the child's testimony, a negative anus sperm test is not critical to establishing rape. It is essential to say that this does not imply that research on sperm is unimportant; in our classification, it deserves 6 points. Hagemann et al. [19] demonstrated that analysis of swabs was associated with charge filling, regardless of test results. It remains crucial to convict the aggressor in a court of law.

The importance of the child's testimony

As we point out above, another important point that needs consideration is the child testimony, as "a normal genital examination is considered forensically neutral finding that cannot confirm nor deny the possibility of child sexual abuse" [20]. Other authors state that "the history from the child remains the most important diagnostic element for determining if abuse has occurred" [6,8,18,20-22]. But we must point out that it is essential to remember that taking a child's testimony about the abuse suffered requires an experienced professional, preferably with a background in forensic psychology, in a peaceful environment where the child is free from any pressure. It is also necessary to remember that our results show that the victim's aggressor alleged was the child's father in most cases. In our data, aggressors with family ties accounted for 37.79% of the patients (Table 2). It is an important finding because intrafamilial abuse is more difficult to disclose in Brazil for many (social, religious, or cultural) reasons. As Magalhães et al. [13] and other authors [22] stated, an abuse episode by a family member "has additional immediate and long-term traumatic consequences for children. The child experiences a profound breach of trust, a total loss of a safe home environment, and a threat to the child's fundamental survival requirements. To make disclosure even more difficult, the abuser generally tells the child they must keep the abuse a secret, and commonly ties a series of threats against disclosure". That is the reason why the first interview with this child must be conducted only with the participation of a forensic psychologist expert.

Weaknesses & Strengths

As we found in other studies [23,24], our study has some weaknesses that must be acknowledged. It is cross-sectional, observational, retrospective, and descriptive. Eventually, some

of our findings cannot lead to direct conclusions. However, it also has some strengths. It analyzes the characteristics of the different contact abuses independently and shows how difficult it is to isolate sperm on the anus. This result can be itemized in the context of the medicolegal doctrine. Also, the points system is a tool that can be useful to avoid misdiagnosis in cases of sexual violence against boys. As Chariot et al. stated, "psychological and social consequences of the biased interpretation of common symptoms may be dramatic in the case of child abuse" [25]. Thus, it allows comparisons with other studies, and other researchers must test the points system. Furthermore, the sample (127 boys' victims of rape) represents a pervasive Brazilian problem, covering an extensive age range. Despite this, further studies must be made to elucidate this point entirely.

Conclusion

Based on our results, we can conclude that rape in vulnerable male children is challenging to prove in a Brazilian court. Negative research on sperm in the anus isolated is insufficient to exclude rape in a male child. Thus, to improve the probative capacity of forensic examination, we propose that some diagnostic criteria should be analyzed together. That is: considering the veracity of the child's testimony taken by a forensic psychologist, the physical signs found in the anus (bleeding, bruises, dilatation > 2 cm), and the presence of spermatozoa in the anal cavity.

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