International Journal of Health Research and Medico-Legal Practice

Copyright © Kumar RV, Yadaiah A, Subhedar A
This is an open-access article distributed under the Creative Commons Attribution
License permits unrestricted use, distribution, and reproduction in any medium,
provided the original work is properly cited



CASE REPORT

Humanity in danger

Manuscript ID: 585 Kumar RV¹, Yadaiah A², Subhedar A³ Address for correspondence:

Address for correspondence:

¹Second year Postgraduate
varun.cmchrc@gmail.com
Mobile: +918667091498

²Assistant Professor
yadi2k1@gmail.com
Mobile: +916309371036

³Professor and Head
drabhijits@gmail.com
Mobile: +919440238643
Department of Forensic Medicine and
Toxicology
Osmania Medical College, Hyderabad,
India.

Article received: 20-10-2023.
Received (revised): 17-11-2023.
Editorial approval: 12-12-2023
Checked for plagiarism: Yes.
Peer-reviewed article: Yes.
Editor who approved: Prof. Putul
Mahanta

ABSTRACT

According to the police inquest, the deceased, a 4-year-old female child, fell accidentally from stairs on 19/12/2022 at around 02:00 am, cried and slept. The next day morning, when her father tried to wake her up, she didn't wake up and didn't even respond. The patient was admitted to Osmania General Hospital in due course of treatment, and the patient was declared dead on Dec 21 2022. On post-mortem examination, multiple patterned contusions suggestive of teeth bite marks over the face and upper limbs. Multiple contusions and abrasions are present over the face, neck, back of chest and front of both the thighs. All the injuries were of different ages. Internally, contusion was noted over the inner surface of the scalp and subdural hematoma on opening the skull vault. Contusions were noted over retroperitoneal tissue and the fundus of the uterus. Abnormal dilatation of the vagina and anus was noted, along with abrasions of various ages present inside the vaginal and anal introitus. The hymenal tear was also noted. Swabs from vaginal and anal introitus preserved for DNA analysis turned out to be negative. The cause of death was given as 'head injury and its complications with signs suggestive of repetitive forceful penetration of vagina and anus'.

Keywords: Patterned contusions; contusions; linear abrasions; subdural hematoma; Hymenal tears.

Cite this article: Kumar RV, Yadaiah A, Subhedar A. Humanity in danger. Int J Health Res Medico Leg Prae. 2023 July-Dec;9(2):66-72. Doi:10.31741/ijhrmlp.v9.i2.2023.10

INTRODUCTION

Section 45 of the Indian Evidence Act 1872 states that a medical witness is neither a prosecution nor a defence witness but only an expert witness. The updated legal definition of rape - the penetration, no matter how slight, of the vagina or anus with any body part or object or oral penetration by a sex organ of another person without the consent of the victim. The National Crime Reports Bureau (NCRB) released statistics from 2020, reporting sexual crimes against children and a rise in cases reported under the Protection of Children against Sexual Offences (POCSO) Act. It is likely that there is significant under-reporting given the social stigma against boys and their families speaking up on child sexual abuse. In 94.6% of cases

of child sexual abuse, the perpetrators were known to child victims in one way or another; in 53.7% of cases, they were close family members or relatives/friends.³ The conviction rate for POCSO cases has increased, but the number of cases pending is still very high.

THE CASE HISTORY

On Dec 23, 2022, around 12:30 pm, we received an inquest from the station house officer of Narsingi police station of Hyderabad city police division. According to the police inquest, the deceased, a 4-year-old female child, fell accidentally from stairs on 19/12/2022 at around 02:00 am, cried and slept. The next day morning, when her father tried to wake up, she didn't wake up and didn't even respond. Then,

her parents took her to a nearby hospital, and they referred them to Niloufer Hospital. The duty doctor suggested brain surgery for the child and referred them to Osmania General Hospital. A neurosurgeon in Osmania said that the child could not undergo brain surgery, prescribed medicines and referred them back to Niloufer Hospital. They were admitted on Dec 20 at around 9.30 pm as a case of Battered baby syndrome. Later, the child became unresponsive, connected to a ventilator and then declared dead on Dec 21 2022, at 5 pm. During admission to the Niloufer hospital on Dec 21, a gynaecologist's opinion was taken to rule out sexual abuse. The gynaecologist examined the child with the written consent of the mother and opined that there were no signs of sexual abuse (as mentioned in the discharge summary Figure 1). The case was filed under section 174 of the Criminal Procedure Code, and the corpse was brought to our institute for autopsy.

eyon reologist has examined the child office laking central along the formal of nother of document that no signe of convaluations of the had admited to the her case to vincous hapital and plorned for surgery ifter the case to vincous hapital and plorned for surgery istory

Figure 1 Discharge summary given by Niloufer Hospital

POST-MOTEM EXAMINATION

An average built, 04-year-old female child of 106 cm height. The body was wrapped in a brown, floral-designated fleece blanket. The body was dressed in a cement-coloured half-sleeved T-shirt and multicoloured pants. A red colour thread of one row is present around the right wrist. A black colour thread of one row is present around the waist. A black colour thread of one row is present around the left ankle. The body was prone, eyes were closed, and mouth was partly open. Scalp hair was black. Eyes, lips and all the nail beds appeared pale. Post-mortem lividity was present over the back of the body and fixed. Rigor mortis had passed off.

EXTERNAL INJURIES

Head and face: A crescent-shaped abrasion (Figure 2) and two patterned contusions (Figure 3) semilunar in

shape, brownish-yellow with multiple crescent-shaped linear abrasions with brown scab (suggestive of teeth bite marks) were noted over the right side of the face. Multiple bluish-black contusions were present over the left side of the face and left ear lobule.



Figure 2 Crescent-shaped abrasion on glabella



Figure 3 Two patterned contusions on right side of the face



Figure 4 Multiple contusions over the left side of the face



Figure 5 Contusion over left ear lobule

Neck: Multiple linear abrasions with reddish brown scabs were noted over the front aspect of the left side of the neck, as shown in **(Figure 6)**.



Figure 6 Multiple linear abrasions over the front of the left side of the neck

Back of chest: Multiple bluish-black colour contusions **(Figure 7)** with multiple crescent-shaped linear abrasions are present, suggestive of nail marks.



Figure 7 Contusion with nail mark abrasion over the back

Upper limbs: An oval-shaped, bluish colour contusion **(Figure 8)** is present over the front and inner aspect of middle $1/3^{rd}$ of right forearm and a non-continuous oval-shaped contusion, bluish-brown in colour, is present obliquely **(Figure 9)** over the back and outer aspect of upper $1/3^{rd}$ of left forearm suggestive of old teeth bite marks.



Figure 8 Oval-shaped contusion over right forearm

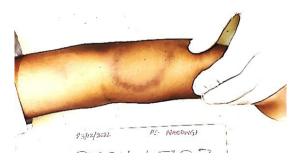


Figure 9 Non-continuous oval-shaped contusion over the left forearm

Lower limbs: Multiple contusions of various sizes and shapes, purplish blue, were noted over the front aspect of the upper $1/3^{rd}$ of both thighs, as shown in **Figure 10**.



Figure 10 Multiple contusions over the front of thighs

INTERNAL INJURIES

A red contusion is noted on the scalp (Figure 11), and the left temporalis muscle was contused. On opening the skull vault, a subdural hematoma with about 50mg of clotted blood present over the left occipitoparietal lobes of the brain (Figures 12 and 13) was noted.



Figure 11 Inner surface of the scalp contusion



Figure 12 and 13 Subdural hematoma over left occipitoparietal lobes

On opening the peritoneal cavity, contusions were noted in the retroperitoneal tissue and over the fundus of the uterus, as shown in **(Figure 14)**.



Figure 14 Contusion over the fundus of the uterus

Abnormal dilatation of the vagina was noted **(Figure 15)**, and vaginal mucosa was erythematous, red. Hymenal tears were noted at the 1' 0' clock position; margins were red with erosions **(Figure 16)**.



Figure 15 Abnormal dilatation of vaginal introitus



Figure 16 Hymenal tear with erosions

The anal orifice was lax and abnormally dilated (Figures 17 and 18), showing a gaping of 3cm in diameter with multiple old, healed, and healing tears and fissures around the anal orifice (Figure 18), more prominent on the right side with irregular edges. A contusion was present at the 2 o'clock position (Figure 19). There is no evidence of discharge. Anal and rectal mucosa showed erosions (Figure 20) at multiple sites, suggestive of repeated anal violation.



Figure 17 Lax anal orifice



Figure 18 Abnormally dilated with multiple tears



Figure 19 Contusion at 2'o clock position



Figure 20 Multiple erosions in anal and rectal mucosa

The injuries mentioned above show different ages and suggest different times of infliction of injuries and repeated assault. Lungs were mildly congested, and all other organs were nil particular.

Biological samples preserved and the result of examination:

- 1. Swabs from labia majora, labia minora, vagina, cervix, anus, and mouth were collected for semen analysis, and nail clippings were for DNA Analysis, but all turned out to be negative.
- 2. Routine viscera were preserved for chemical analysis, but no poisonous substance was detected.

DISCUSSION

A total of 1,49,404 cases of crime against children were registered during 2021, showing an increase of 16.2% over 2020 (1,28,531 cases). In percentage terms, major crime heads under 'Crime Against Children' during 2020 were Kidnapping and Abduction (45.0%) and the Protection of Children from Sexual Offences Act, 2012 (38.1%), including child rape. The population's crime rate registered per lakh children is 33.6 in 2021, compared with 28.9 in 2020.⁴

POCSO victims below six years were 675 children, girls were 650, and boys were 25.4 This case can be classified as 'Aggravated Sexual Assault' as POCSO ACT

2012 states.⁵ Whoever commits penetrative sexual assault on the child more than once or repeatedly or whoever commits penetrative sexual assault on a child below twelve years; or (n) whoever is a relative of the child through blood or adoption or marriage or guardianship or in foster care or having a domestic relationship with a parent of the child or who is living in the same or shared a household with the child, commits penetrative sexual assault on such child, whoever commits penetrative sexual assault on a child and attempts to murder the child comes under the POCSO Act. Timely examination of the victims is essential to document injuries.⁶

LIMITATION OF THE CASE

20th Morning at 7 am

↓ (78 Hours)

23rd Afternoon at 1 pm

Ministry of Health and Family Welfare guidelines say, in cases of sexual offences, the likelihood of finding evidence after 72 hours (3 days) is significantly reduced. However, it is advised to collect evidence for up to 96 hours. Hence, we collected it, but it was still negative. The reasons may be because of the delay in the collection; the perpetrator might have used a condom/coitus was interrupted. Some other objects might have been used instead of male organs, which may also be a reason.

From teeth bite marks: It should have been examined at the earliest. Saliva from the teeth bite marks could have been recovered using the two-swab technique, which could have been used for⁷ ABO blood grouping, and typing was not done in this case. To generate DNA, which could be used to compare with the DNA collected from the genital region, if any, can

be matched with the suspect, and it would have been inculpatory solid evidence. Dental impressions from the indentations can match the suspect's impressions. But it should have been collected within 24 hours, best within 6 hours as suggested in research.⁸ The bite marks, in this case, clearly show individual teeth indentations. If dental impressions were made when the patient was seen first, and dental casts were prepared, they could have been used to compare with the suspect's teeth. If matching, it would have been inculpatory evidence, as suggested in research.⁸

CONCLUSION

Initial opinion was given as 'head injury and its complications with evidence of repetitive sexual assault.'

After Telangana State Forensic Science Laboratory reports, the final opinion was given as 'head injury and its complications with signs suggestive of repetitive forceful penetration of vagina and anus.'

The accused, in this case, is the stepfather of the victim. As the findings are suggestive of repeated sexual abuse of the victim, it is deemed to be understood that the mother of the victim is also involved or at least did notice these happenings. To prevent such abuse, the parents should undergo psychological counselling and a briefing about how to protect their children from such incidents, what to do and whom to approach for help if such incidents happen in their family before getting married.

Source of funding: None declared.

Ethical clearance: Informed consent was taken from the patient attendant to publish the case findings.

Conflict of interest: None declared.

REFERENCES

- 1. India Code: Section Details [Internet]. [cited 2023 Sep 2]; Available from: URL:www.indiacode.nic. in
- 2. Section 375 in The Indian Penal Code. India Code: Section Details [Internet]. [cited 2023 Sep 2]; Available from:https://www.indiacode.nic.in/show-data?actid=AC_CEN_5_23_00037_186045_152 3266765688 §ionId=46151§ionno=375&orderno=424

- 3. ncrb.gov.in. [cited 2023 Sep 2]. Available from: https://ncrb.gov.in/sites/default/files/TABLE%20 4A.2_0.xlsx
- 4. ncrb.gov.in. [cited 2023 Sep 2]. Available from: https://ncrb.gov.in/sites/default/files/TABLE%20 4A.9.xlsx.
- 5. The Protection Of Children From Sexual Offences Act, 2012 [Internet]. Available from: https://www.indiacode.nic.in/bitstream/123456789/9318/1/sexualoffencea2012-32.pdf
- 6. Mahanta Putul. Rape, sodomy and murder of a minor girl. Journal of Indian Academy of Forensic Medicine. 2012;34(4):358 to. 360
- 7. Obtaining saliva samples from bitemark evidence: office of justice programs [Internet]. [cited 2023 Nov 12]; Available from: https://www.ojp.gov/ncjrs/virtual-library/abstracts/obtaining-saliva-samples-bitemark-evidence#:~:text=Saliva%20samples%20can%20provide%20information
- 8. Pretty IA, Hall RC. Forensic dentistry and human bite marks: issues for doctors. Hosp Med. 2002 Aug;63(8):476-82. doi: 10.12968/hosp.2002.63.8.1968.