THE SPECTRUM OF CHILD ABUSE PRESENTING TO A UNIVERSITY HOSPITAL IN RIYADH

Ibrahim H. Al Ayed, MRC.P, DCH; M. Irfan Qureshi, MD, MRC.P; Ahmed Al Jarallah, MD; Suleiman Al Saad, MD

Background: Child abuse is prevalent worldwide, although it is often underreported. We describe the pattern of child abuse and neglect presenting to the emergency room of our hospital, the sociocultural changes which brought this about, and suggest ways to deal with this emotionally sensitive issue.

Patients and Methods: Thirteen cases of child abuse and neglect were seen in the emergency room of King Khalid University Hospital over a period of one year from July 1996 to June 1997. There were four cases of non-accidental injury, three of which had serious injury. There were three cases of sexual abuse, four cases of neglect, resulting in the death of one child and severe emaciation in another. There was one suspected case of Munchausen syndrome by proxy, and one case of child labor with neglect.

Conclusion: Public awareness of the problem of child abuse has increased, and recent media reports reflect the significance accorded to the issue. As more information is obtained on this subject and policies and guidelines are set in place, efforts at reporting and preventing physical and psychological trauma will gather momentum.


Key Words: Child abuse, Munchausen syndrome by proxy.

Child abuse is a worldwide problem that is very often underreported. The myth that child abuse is a rare occurrence in conservative middle eastern societies has long been dispelled, since the first reports from the Kingdom of Saudi Arabia alerted us to this unrecognized problem.1

The definition of child abuse includes physical and sexual assaults on children, child neglect, emotional abuse, and deprivation of necessary physical and moral supports for a child's development.2 As child advocates, pediatricians have come to recognize a broad spectrum of abnormal and pathological child-rearing practices, such as the use of inordinate physical violence, unjustifiable verbal abuse, the failure to furnish proper shelter, nourishment, medical treatment or emotional support.3 Child sexual abuse is defined as any coerced, manipulated or forced sexual contact with a child by an older person. It includes incest, sexual molestation or rape, and the making of child
pornography. In the US there were 60,000 cases of suspected maltreatment in 1974, which rose to 1.1 million in 1980 and 2.9 million in 1992. Of these, 20% were cases of sexual abuse. Reports from the United Kingdom and other countries have recorded a substantial increase in the number of diagnosed cases of sexual abuse.

At the present time in many countries, doctors dealing with cases of sexual abuse do not have the special training necessary to deal with and manage such cases. However, the increase in the number of cases and the growing body of knowledge on this subject reflect a willingness on the part of parents and care providers to address the issue and find measures to prevent its occurrence. The cases reported in this study presented to the emergency room of King Khalid University Hospital, Riyadh, over a one-year period. The spectrum includes four cases of non-accidental injury, three cases of sexual abuse, one case of suspected Munchausen syndrome by proxy, four cases of neglect, and one case of child labor and neglect. Table 1 summarizes cases of physical and sexual abuse and Table 2 summarizes cases of Munchausen syndrome by proxy and child neglect.

**Physical Abuse**

**Case 1**

A 31/2-year-old expatriate girl presented to the ER with convulsions, loss of appetite, headache and lethargy for one week. The mother, who was employed, stated that the child was frequently hit by her father. After a particularly bad battery the week before, the child had generalized convulsions, became limp and pale, and lost consciousness for about 20 minutes, followed by headache and lethargy. No medical aid was sought for her. The child had
FIGURE 1. Case 1. Linear bruises and scars of burns.

TABLE 1. Summary of cases of physical and sexual abuse.

<table>
<thead>
<tr>
<th>Age and type of abuse</th>
<th>Perpetrators</th>
<th>Management plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.5y/F</td>
<td>Father</td>
<td>Transferring care of the child to an aunt; counselling and supporting the parents</td>
</tr>
<tr>
<td>5m/F</td>
<td>Mother</td>
<td>Lost to follow-up</td>
</tr>
<tr>
<td>3.5y/F</td>
<td>Maternal uncle</td>
<td>Keeping the child away from the uncle</td>
</tr>
<tr>
<td>6m/M</td>
<td>Mother</td>
<td>Treated for head injury and convulsions</td>
</tr>
<tr>
<td>Sexual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7y/M</td>
<td>Expatriate worker</td>
<td>Legal action initiated by the parents</td>
</tr>
<tr>
<td>4y/F</td>
<td>Expatriate worker</td>
<td>Legal action initiated by the mother</td>
</tr>
<tr>
<td>11y/F</td>
<td>Neighbor</td>
<td>Advised to keep away from the offender</td>
</tr>
</tbody>
</table>

TABLE 2. Summary of cases of abuse and neglect.
Age and type of abuse | Perpetrators | Management plan
--- | --- | ---
Munchausen syndrome by proxy | | 
10.5y/F | Mother | Eventually recovered
Neglect | | 
9y/F | Family | Counselling the family and child
NB/M | Unknown mother | Admitted to ICU but did not survive
NB/F | Unknown mother | Referred to social services
4y/M | Parents | Admission to the ward; nutritional therapy; counselling the parents
Child labor | | 
10y/M | Relatives | Treatment of skin lesions

previously been staying with her grandmother in her home country before arriving in Saudi Arabia to live with her parents. Upon arrival, the child developed many symptoms, such as anxiety, crying, rejection of her parents, and interrupted sleep with nightmares. Unfortunately, the parents failed to manage this separation anxiety adequately. The father in particular found this situation compounding his problems—lack of job satisfaction, poor financial status and marital disharmony. He took care of the child while the mother was on duty, and this led to physical maltreatment of the child.

Physical examination revealed multiple bruises of varying duration and scars of recent burns over both feet (Figure 1). The child had bilateral papilloedema but no neurological deficit. CT scan and MRI study of the brain showed normal-sized ventricles and no intracranial hemorrhage. She continued to have headaches and convulsions. Eventually she had a ventriculoperitoneal shunt inserted to relieve her symptoms, after which she made a total recovery in the ward. Social and psychological support was initiated to rehabilitate the family. The care of the child was transferred temporarily to an aunt who was also their neighbor. After satisfactory psychotherapy and guarantees from the father, the child was returned to her parents. A few months later the child was seen in the clinic for vaccination. The mother informed the doctor that the physical abuse still continued, and that just the day before, the father had broken the child’s front teeth. She expressed dissatisfaction over her married life. The family was leaving on their annual vacation but we requested that they continue their follow-up. The child was, however, left in the care of her grandmother and other relatives in their home country. She started going to school and was doing very well. The parents now regularly talk with or write to her, and all seem to be happy with this arrangement. They have a second child, a two-year-old son, who is looked after very well and has never been subjected to abuse.
Case 2

A 5-month-old Saudi girl was brought to the ER with inability to move her right upper arm for the previous 36 hours. She had been seen earlier at another hospital, where an x-ray of the right upper arm revealed a comminuted fracture of the lower end of the humerus (Figure 2). She was referred to our hospital for further management. The parents and the maid were apparently unaware of how the injury occurred, and the only thing they noticed was that the child was not moving her right upper arm and was crying. They did not seem concerned.

A skeletal survey showed a linear fracture of the right parietal bone (Figure 3), and metaphyseal chip fractures of both femurs (Figure 4). The mother of the child thought that the child was possessed by a spirit. Unfortunately, the child had to be referred elsewhere because of lack of beds. When contacted later by phone, the grandmother of the child expressed dissatisfaction over the referral and refused any further comment.

Case 3

A 31/2-year-old Saudi girl was seen many times in the ER with recurrent epistaxis and multiple ecchymotic patches. Clinical examination revealed multiple bruises of varying duration, mostly over the hands and face. Coagulation profiles were normal and her findings were not fully explained. On further inquiry the mother revealed that she was divorced and lived with her own mother in an extended family. One of her brothers in his twenties, a paraplegic due to a road traffic accident, also lived in the same house and was indeed the source of the child's bruises and bleeding episodes, as he frequently hit her. The mother admitted that the situation at home was chaotic and she commented that the girl was also having behavioral problems. The mother was asked to speak to her brother and stop him from causing harm to the child, which she did. On follow-up, the child was doing well but still had minor behavioral problems.

Case 4

A 6-month-old Saudi boy was seen in the ER for a short generalized convulsion which had occurred at home an hour earlier. There was a past history of hypocalcemic convulsions six weeks before, for which the child had been admitted to our hospital. He was found to have Vitamin D deficiency-related hypocalcemia and was discharged on Vitamin D and oral calcium supplements. Clinical examination revealed a pale, fretful child who had a subgaleal hematoma extending
over the right parieto-occipital area. Calcium levels were normal but there was a drop in the Hb as compared to the previous reading six weeks earlier. The mother stated that his three-year-old sibling had hit the child with a shoe earlier that morning, but she was completely unaware of the hematoma until she arrived at the hospital. An x-ray of the skull showed a fracture of the right parietal and occipital bones (Figure 5). CT scan of the brain showed no internal injuries. On further inquiry the mother said that the elder sibling had probably pushed him down from the bed. She was 20 years old from a neighboring country, the second wife of her husband, who was 55 years old. He was apparently at his place of work when the injury occurred. It was noticed that the three-year-old child was also suffering from severe stomatitis, which the mother admitted was due to ingestion of chlorox (a bleaching agent) a week earlier, for which he was treated at another hospital. The child made an uneventful recovery. The mother was the prime suspect in this case.

**Sexual Abuse**

*Case 5*

A seven-year-old Saudi boy was brought to the ER with abdominal pain of five days' duration. According to the father, the child had informed him that he had been sexually abused by an expatriate worker who was well known to the family. When asked, the child had described what had happened. Examination revealed a healing anal laceration at the 6 o'clock position. The cause of the abdominal pain was discovered to be due to acute appendicitis. However, the disclosure of abuse was taken seriously by the parents, who had already initiated legal proceedings on their own.
FIGURE 2. Case 2. Comminuted fracture of the humerus.
Case 6

A 4-year-old Arab girl was rushed to the ER by her mother, who stated that the family's part-time male domestic had abused the child on finding the rest of the family preoccupied. She immediately confronted the worker who admitted to wrongdoing and asked for forgiveness. She informed the police, who took the offender into custody and brought the child to the hospital. The child was admitted for a proper examination, which revealed normal external genitalia and rectum. Microscopic examination of discharge on the child's underwear revealed many spermatozoa and squamous epithelial cells.

Case 7

An 11-year-old Saudi schoolgirl was brought to the ER by her father. The father stated that according to his
daughter, the driver who usually fetched her from school had been caressing her thighs for the previous three days. The father requested extreme secrecy and did not wish to involve the police or any other authority, as the offender was his neighbor and a respectable person. His only reason for bringing the child to the ER was to have the girl examined to make sure her external genitalia, especially her hymen, was intact. It was suggested to him that a busy ER was not the right place for such an examination. A calm and quiet room in the wards where the gynecologist could examine the child without causing psychological trauma was advised, but the father refused and took his daughter away.

Munchausen Syndrome by Proxy

Case 8

A 10½-year-old Saudi girl was frequently seen in the ER with complaints of vomiting of blood and chest pains. The child had been seen at a children's hospital and diagnosed to have a lower respiratory tract infection. The mother was unhappy with the previous treatment. The child's first presentation of hematemesis was sufficiently convincing to admit her for a workup. Her chest pain, though, seemed without any organic cause. In the ward she had similar complaints. Extensive investigations failed to reveal any pathology. Multiple endoscopies and CT scan of the nasopharynx were performed. An endobronchial biopsy and echocardiography were done. Stool for occult blood was negative. She was discharged as a case of hematemesis under investigation, only to return to the ER with the same complaint. There was no drop in her hemoglobin count. On each appearance at the ER, the patient's mother brought with her a sample of the vomitus in a plastic container. The patient was readmitted again and discharged without any intervention or diagnosis. The mother was very cooperative and seemed concerned. On one of the visits when they brought the sample of the blood, we tried unsuccessfully to get a typing done. Following this, the mother stopped coming to the hospital for no apparent reason, and requested a medical report on her daughter's condition. Almost a year later, while preparing this article, we contacted the family to ask about the child. The mother told us that she had been admitted to a more specialized center where another set of extensive investigations had not revealed any pathology. However,
they had found a bleeding tooth after almost four months of investigations, and since the removal of that tooth she had been well. With regards to her chest pain the mother said that it had probably been functional in nature and that it was not troubling her much. This was a highly suspicious case of Munchausen syndrome by proxy.

Neglect

Case 9

A nine-year-old Saudi girl who is suffering from sickle cell disease is a frequent visitor to the ER, sometimes for pain and sometimes because she had nobody to look after her at home. Her story had started more than six years previously, when her mother got divorced. When the mother later remarried, the child came to live with her natural father, who had only teenaged sons to look after her. She was often left alone at home by her brothers. Whenever she was admitted for a vaso-occlusive crisis she stayed alone in the hospital because there was no woman in the house to look after her. As time passed she grew obese and became depressed. She still gets admitted as a case of "social admission," since she has nobody to take care of her at home.

Case 10

An unknown preterm baby boy weighing 1 kg was found by the police on the streets in the early hours of the morning. The child was hypothermic but active. His gestational age was 30 weeks. The child was admitted to the hospital. He had a stormy course in the pediatric intensive care for three months and then died.

Case 11

Another unknown full-term baby girl was found in the parking lot by the hospital security staff. The child weighed 2.2 kg. The baby was hypothermic but did not need intensive care. Next day the baby was transferred to a social services institution. There has been no follow-up.

Case 12

A four-year-old Saudi boy was brought to the ER by a social worker from a rehabilitation center, for severe emaciation and failure to thrive.
The boy had been seen at one of the hospitals 18 months previously, with the diagnosis of mental retardation, and had been recommended to be seen at a center for the handicapped. However, the child was not taken to the center until later. The child was the second of three children. The other two siblings, aged five and two years, were healthy. The mother was the third wife, the two before her having been divorced. Two children from the first wife lived with the husband's father in the village. The mother suffered from high blood pressure, back pain and abdominal pain during pregnancy. Delivery was at term but the baby had a cleft lip. Although he weighed 4 kg at birth he did not gain weight well. He was operated on for cleft lip at the age of two years. The mother said the boy was always fighting with his other siblings. She felt disturbed by the child, as if he were a stigma to the family. On examination, the child's growth parameters were far below the third percentile. He looked pale, silent, disinterested in his surroundings and especially in the mother, who showed no emotion towards him. He had a patch of hair loss over the occiput (Figure 6) as a result of lying on the floor unattended, and had a wasted look. His nails were long and dirty. There was a hematoma over the forehead and bruises over the hands and legs. Even his siblings showed no affection towards him. After some time in the ER, he developed a liking for the staff, who cuddled him and started feeding him, which he gladly accepted. As we were arranging the child's admission without the mother, since she refused to stay with the child because she had to look after the other two children, the father arrived. He showed impatience with the hospital procedures, did not show any emotion for the child and said that he was unaware of the injuries to the child. A few weeks later the child made excellent recovery. Social workers intervened in the case and the child was discharged after guarantees from the parents.
Child Labor

Case 13

A 10-year-old Arab boy was seen in the ER with extensive skin lesions, which were infected and formed many indurated swellings. The lesions had all started from his buttocks and inner thighs and then spread all over. He looked miserable, unclean, with very old clothes and had severe stomatitis. He was brought to the hospital by two of his uncles, who said the child had been brought over from their poor country as a jockey for camel riding. After his sickness he was unfit to ride the camels anymore. He was not provided with medical treatment and he went from one place to another in the hope of finding free treatment. We were unable to admit the child as he had no female caretaker with him. However, he was given treatment and discharged.

Discussion

For the ER physician, rising reports of child abuse and neglect are a worrisome development. The issue needs to be dealt with both
medically and socially. For this reason it is absolutely essential that the physician is well trained to recognize and manage such cases in the acute care setting. Studies have shown significant inadequacies in the physician's ability to recognize sexual abuse, because of limited knowledge of the social and medical aspects of the problem. In western countries, reporting child abuse to the authorities has become mandatory. This has largely contributed to the increasing number of reported cases. Failure to report may invite litigation or potential liability against the physician.

Pediatricians have also involved themselves in treating the legal and social issues associated with this multifaceted problem by forming societies and obtaining the political clout to enact laws, making reporting of even suspicious cases mandatory. The psychological impact of child maltreatment, considering the wide range of abusive experiences, has recently started unfolding as studies reveal poor cognitive and academic functioning, poor school performance and behavior disorders that in the long run may lead to transgenerational abuse, criminality and professional failure in later life.

Previous reports from Saudi Arabia have made the medical community aware of maintaining a high index of suspicion for detecting cases of child abuse and neglect. The very existence of this issue has been questioned, with traditional precepts which uphold the care of the weak and the disabled, including women and children, being cited. Subsequently, other reports have identified the severity and variety of child abuse in these parts. They have lamented the lack of policy and have admitted to hindrances towards recognition and effective management of child abuse and neglect.

In our study, the ages of the patients ranged from newborn to 11 years. There were six males and seven females, of which eight were Saudis, three non-Saudis and two were abandoned newborn babies whose nationality could not be determined. Although these cases represent an increase over the previous years, they are still a fraction of an estimated 30,000 cases seen in the pediatric ER every year. The pattern of physical abuse ranged from mild trauma resulting in ecchymotic patches necessitating multiple visits to the ER, to severe head injuries resulting in a prolonged hospital stay and a VP-shunt. In a model for understanding child abuse, low self-esteem, unemployment, temperamental differences with the child, parent-child attachment problems, and family conflict were some of the stressors associated with maltreatment, as occurred in the first case. Generally, only the severe and fatal cases of physical injury are reported and recognized as the most obvious forms, but milder forms of injury do occur, as illustrated by case no. 3. The two infants with fractures of the skull (cases 2 and 4) were most likely the victims of abuse by their mothers. In the west, physical abuse is the leading cause of head injury in infants. Head trauma is the most common cause of morbidity and death in children. The perpetrators of physical abuse in the first four
cases were either the mother or father, or a handicapped member of the family. In one study, perpetrators were identified if they acknowledged the incident or if they were alone with the child at the time of the incident or if they were convicted in a court of law. There has been a changing spectrum of perpetrators, in which fathers/stepfathers or male friends of the mother have been increasingly involved in child abuse cases.\textsuperscript{15} The mother was the perpetrator in most cases of physical abuse reported in an earlier study from Saudi Arabia.\textsuperscript{11} In our study, sexual abuse was perpetrated in two out of three cases by male expatriate workers known to the family.

We have reason to believe that case no. 8 illustrates a suspicious case of Munchausen syndrome by proxy, a rare form of child abuse defined as the fabrication of a child's medical history and/or medical symptoms by a parent, with the intent of securing unnecessary medical evaluations, procedures and hospitalization.\textsuperscript{13} It is a difficult diagnosis to establish, a problem which was faced in the previous studies from this area.\textsuperscript{12,13} Sometimes health professionals may unwittingly order a multitude of tests and procedures according to the wishes of the parents, thus perpetuating the myth that the child is indeed ill. The case of the two abandoned neonates is not an unusual occurrence,\textsuperscript{16} but caused worry since no such cases had been previously seen in our ER in the past.

Our study stresses the importance of professionals' interest in child abuse by gathering more data and eliciting public opinion on the issue. In a previous report, it was suggested that a child protection agency comprising dedicated individuals should be formed as a first step in such a program in Saudi Arabia.\textsuperscript{11} This has since been set up at King Faisal Specialist Hospital and Research Centre.\textsuperscript{17} In our own setting measures have been initiated to establish clear policies in order to guide treating physicians in their attempt to protect abused children, to support families in overcoming stressors and to deter them from causing harm to their children. we wish to point out, however, that most of the reports and studies on this sensitive issue of child abuse and neglect are from western countries who have a different socioeconomic and cultural pattern. Therefore, rules and policies need to be adapted to our situation, and the legal implications need to be studied in detail, emphasizing the fact that other societies have lessons to learn from the still low incidence of this entity in our area.

\textbf{Acknowledgements}

This study was presented at the Pediatric and Neonatology Symposium at the Riyadh Armed Forces Hospital in February 1998.
References
