

## CHILD ABUSE: REPORT OF THREE CASES FROM KHAMIS MUSHAYT

G. Karthikeyan, MD, DNB, DM; S.K. Mohanty, MS, MCh;  
Atif Fouzi, MSc

The problem of child abuse was first described by Kempe et al. in their landmark article entitled "the battered child syndrome," which was published in 1962.<sup>1</sup> Since then, the problem has had increased recognition worldwide, and legal solutions and state-enforced statutes have been put in place to combat this menace in many Western countries. In the US, child abuse is the second most important cause of serious head injuries and deaths after motor vehicle accidents.<sup>2</sup> There are only a few published reports of child abuse in Saudi Arabia, the majority of them from tertiary care hospitals in Riyadh,<sup>3-9</sup> and a recent one from Jubail.<sup>10</sup> In this communication, we report three cases of child abuse seen in Civil Hospital, Khamis Mushayt, in the year 1999. This is the first report of child abuse to be presented from this region of Saudi Arabia.

### Case Reports

#### Case 1

A three-year-old Saudi male child who was non-ambulant and bedridden since infancy, with cerebral palsy and mental retardation, was admitted for bronchopneumonia. He was noticed to have bilateral swellings above the knee with crepitus. X-ray showed transverse supracondylar fractures of both femurs (Figure 1). The mother had noticed these swellings over the previous three days, but could not explain how they occurred and attributed it to physiotherapy the child was then undergoing. The mother had seven children of whom two had died with similar handicaps. Skeletal survey did not reveal fractures at any other site and brain CT scan was normal, except for diffuse atrophic changes. Serum calcium at 10.7 mg/dL (8.5-11 mg/dL), phosphorus at 4.3 mg/dL (3-4.5 mg/dL) and alkaline phosphatase at 262 U/L (58-279 U/L) were all normal. Skin traction was applied for 14 days, and the patient was discharged with hip spica.

On follow-up at one month, the fractures had healed completely, but five months later, he was readmitted with

#### Case 2

An 11-month-old Saudi female infant was admitted in a deeply comatose state, allegedly after a fall of approximately two feet from her cot to a carpeted floor. The infant was deeply comatose, with dilated fixed pupils, lost corneal luster and absent brain stem and deep tendon reflexes. Multiple bruises were noted over the chest, neck and face, which were compatible with fingertip bruises. There were patterned bruises on the left leg and thigh, which were strongly suggestive of human bite marks. There were no evident signs of injury to external genitalia. Fundus examination revealed bilateral retinal hemorrhages. Skeletal survey, including chest and skull x-rays, was normal. Coagulation profile (prothrombin time and activated partial thromboplastin time) was normal. Blood sugar was 96 mg%, urea 16 mg%, creatinine 0.5 mg%, sodium 136 meq/L and potassium 3.9 meq/L. Cranial CT scan revealed left frontotemporal contusion, left frontal subdural hematoma and massive bilateral cerebral infarction supratentorially. The infant was given supportive care with mechanical ventilation and coma care. No active surgical intervention was contemplated by the neurosurgeon in view of her poor general condition. The infant finally succumbed on the 20th day. Since the parents were uncommunicative, we were not able to elicit any further relevant information regarding the circumstances of her injuries.

#### Case 3

A seven-year-old Saudi child was admitted with painful anal introitus after recent forced anal intercourse. He had a small bleeding tear at the 7 o'clock anal positions, which was controlled by pressure. The boy was admitted along with his father for further evaluation and counselling, but they left against medical advice six hours after admission. They did not reveal who was responsible for the child's injury.

### Discussion

Child abuse can take many forms, such as physical abuse, sexual abuse, emotional abuse and child neglect.

---

From the Departments of Pediatrics and Pediatric Surgery, Civil Hospital, Khamis Mushayt, Saudi Arabia.

Address reprint requests and correspondence to Dr. Karthikeyan: P.O. Box 621, Khamis Mushayt 61311, Saudi Arabia. E-mail: karthik\_67@hotmail.com.

Accepted for publication 11 November 2000. Received 9 May 2000. repeat fractures at the same site. He was discharged after three weeks of orthopedic management and was lost to follow-up thereafter.



FIGURE 1. X-ray showing bilateral symmetrical transverse metaphyseal (supracondylar) fractures of femur (Case 1).

TABLE 1. *Spectrum of child abuse cases reported in Saudi Arabia.*

Authors	Physical	Sexual	Munchausen's syndrome	Neglect	Child Labor	Overall
Al-Eissa <sup>3</sup>	4	–	1	2	–	7*
Kattan et al. <sup>6,7</sup>	5	2	4	1	–	12**
Al-Ayed et al. <sup>8</sup>	4	3	1	4	1	13
Al-Jumaah et al. <sup>5</sup>	–	–	1	–	–	1
Roy et al. <sup>9</sup>	1	–	–	–	–	1
Elkerdany et al. <sup>10</sup>	2	–	–	–	–	2
Total	16	5	7	7	1	36

\*One of the children reported in this series had been intentionally poisoned with kerosene for the 3<sup>rd</sup> time, which befits the diagnosis of Munchausen's syndrome; \*\*of the 10 cases reported by Kattan,<sup>6</sup> one had been reported previously by Al-Mugeiren<sup>4</sup> et al., as the first case of Munchausen's syndrome by proxy in Saudi Arabia. Hence ref. 4 has not been included in this table.

Munchausen's syndrome by proxy is a variant of child abuse, whereby parents concoct fictitious illnesses in their children for their own purposes. In the US, it is estimated that 66% of child abuse is physical, 25% is sexual abuse, and the remaining 9% is accounted for by emotional abuse, child neglect and others.<sup>10</sup> In Saudi Arabia, the existence of child abuse has recently been recognized and reported over the past 10 years. In a landmark article, Al-Eissa described seven children ranging from five months to seven years of age who had suffered from child abuse and neglect.<sup>3</sup>

Thirty-six cases of child abuse have previously been reported in Saudi Arabia before this report, the details of which are shown in Table 1. Of the 36 cases, 16 (44.4%) were physical abuse and five (13.9%) were victims of sexual abuse. All except two cases have been reported from tertiary care hospitals in Riyadh. In this report, two cases of physical abuse and one case of sexual abuse are being

reported, the first time the existence of child abuse is being documented from the Asir region.

In Case 1, the physical and mental handicaps of the child and his virtual dependence upon his parents for his daily routine was a heavy burden on his mother. This was probably the underlying cause for them to have inflicted the fractures. Though chronically immobilized children could have metabolic disease of the bone predisposing them to fractures, the serum calcium, phosphorus and alkaline phosphatase in this child were normal, and there was no radiological evidence of osteopenia or osteomalacia. The bilateral symmetrical nature of the femoral fractures suggests an impact injury (such as a stick hitting across the thighs). The fact that the fractures were not reported by the parents upon arrival at the hospital may suggest ignorance, but it is a strong evidence pointing to child abuse. It is known that handicapped children are more at risk of child abuse.<sup>11</sup> In the other two cases, the perpetrators were not revealed, despite repeated questioning, but it seems reasonable to assume that they were persons known to the family, if not family members themselves. In Cases 1 and 2, the discrepancy of the history given with regards to the serious nature of the injuries, and the remarkable indifference displayed by the caregivers to their children's clinical status during the hospital stay, made us to strongly suspect the diagnosis of child abuse. In Case 3, the nature of the act (sodomy) is by itself suggestive of abuse.

What was unfortunate about these cases is that we were not able to proceed further in identifying the perpetrators of the abuse and embark on remedial measures, including counselling of the caregivers and protection of the siblings, for want of appropriate legal provisions and guidelines in the Kingdom. The lack of national guidelines or legal directives in Saudi Arabia towards the management of cases of child abuse has been noted before.<sup>12</sup> Nevertheless, it is heartening to learn that in at least one center, the King Faisal Specialist Hospital and Research Centre, a program is in place to detect, report and prevent child abuse, modeled after the child abuse policies in North America.<sup>13</sup> There have been calls for the establishment of a National Committee for Prevention and Management of Child Abuse and Neglect, which will make reporting of child abuse cases mandatory, and facilitate multidisciplinary team management of the affected children and their families.<sup>12,13</sup> A primary health care team approach has been proposed towards managing child abuse cases, with particular emphasis on the general practitioners in providing continuing care for the child, family and perpetrators of abuse and prevention of recurrence through health education.<sup>11</sup>

## References

1. Kempe CH, Silverman FN, Steek BF, et al. The battered child syndrome. JAMA 1962;181:105-12.

2. Billmire ME, Myers PA. Serious head injury in infants: accident or abuse? *Pediatrics* 1985;75:340-2.
3. Al-Eissa YA. The battered child syndrome: does it exist in Saudi Arabia? *Saudi Med J* 1991;12:129-33.
4. Al-Mugeiren M, Ganelin RS. A suspected case of Munchausen's syndrome by proxy in a Saudi child. *Ann Saudi Med* 1990;10:662-5.
5. Al-Jumaah S, Al-Dowaish A, Tufenkeji H, Frayha H. Munchausen's syndrome by proxy in a Saudi child. *Ann Saudi Med* 1993;13:469-71.
6. Kattan H. Child abuse in Saudi Arabia: report of ten cases. *Ann Saudi Med* 1994;14:129-33.
7. Kattan H, Sakati N, Abdul Jabbar J, Al-Eisa A, Nou-Nou L. Subcutaneous fat necrosis as an unusual presentation of child abuse. *Ann Saudi Med* 1995;15:162-4.
8. Al-Ayed IH, Qureshi MI, Jarallah AA, Al Saad S. The spectrum of child abuse presenting to a university hospital in Riyadh. *Ann Saudi Med* 1998;18:125-31.
9. Roy D, Al Saleem BM, Al Ibrahim A, Al Hazmi I. Rhabdomyolysis and acute renal failure in a case of child abuse. *Ann Saudi Med* 1999; 19:248-50.
10. Elkerdany AAF, Al-Eid WM, Buhaliqa AA, Al-Momani AA. Fatal physical child abuse in two children of a family. *Ann Saudi Med* 1999; 19:120-4.
11. Khoja TAM. Child abuse and neglect: an overview. *Middle East Paediatr* 1999;4:89-93.
12. Al-Eissa YA. Child abuse and neglect in Saudi Arabia: what are we doing and where do we stand? *Ann Saudi Med* 1998;18:105-6.
13. Kattan H. Child abuse and neglect. Perspective from King Faisal Specialist Hospital and Research Centre. *Ann Saudi Med* 1998;18: 107-8.