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Blunt Force Trauma

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Authors
Robert A.C. Bilo, M.D.
Department of Forensic Medicine
Netherlands Forensic Institute
The Hague, Netherlands

Arnold P. Oranje, M.D., Ph.D.
Department of Paediatric Dermatology
Erasmus MC - Sophia
Rotterdam, Netherlands

Tor Shwayder, M.D.
Director of Pediatric Dermatology
Department of Dermatology
Henry Ford Hospital
Detroit, Michigan
USA

Christopher J. Hobbs, M.D.
St. James's University Hospital
Leeds, United Kingdom

Contributing Authors of Chapter 9
Frans Bel, RMF
Medical Photographer
Erasmus MC - Sophia
Rotterdam, The Netherlands

Andre van den Bos
Medical Forensic Photographer
Netherlands Forensic Institute
Department of Forensic Medicine
The Hague
The Netherlands

Hubert G.T. Nijs
Netherlands Forensic Institute
Department of Forensic Medicine
Section Forensic Pediatrics
The Hague
The Netherlands

Illustrations by
Pieter Van Driessche
Netherlands Forensic Institute
Department of Forensic Medicine
The Hague
The Netherlands

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Foreword

About 80,900,000 Results in 0.11 s

If you google the term "child abuse," you will get over 80 million hits in less than 1 s. If you search in "PubMed," you will find more than 30,000 hits in the medical literature. Child abuse has many appearances and is often difficult to recognize by professionals like physicians and police despite the availability of an enormous amount of professional literature.

We are all in shock when we hear about child abuse. We are willing to accept the existence of child abuse in our professional lives, but in our private lives we still assume that it is rare and does not exist in our neighborhoods. From recent statistics, however, it is known that each year 1 in 20–30 children in the Netherlands will be victim of some form of child abuse. Looking at these numbers and considering the short- and long-term effects on children, families, and society, it is important that child abuse is recognized as soon as possible. Despite or maybe because of the huge amount of publications, many physicians do not have enough knowledge, experience, and the right tools for recognizing child abuse in an early stage.

With the introduction of forensic pediatrics at the Netherlands Forensic Institute (NFI) in 2008, we decided not only to focus on forensic cases and case reports but also on education and training of professionals in the field of forensic medicine, healthcare, civil and criminal justice, for example, pediatricians, family physicians, forensic doctors, other medical disciplines, police, and prosecutors.

Physical violence against children can lead to many different physical findings, for example, unexplained fractures. In 2010, Bilo, Robben, and van Rijn published a book in which the forensic aspects of fractures in children are discussed in an accessible way.[1] It describes the differential diagnosis of fractures. It has become a reference book worldwide for child protection professionals.

"Cutaneous manifestations of child abuse" by Bilo, Oranje, Shwayder, and Hobbs is an important addition to the former book, because it discusses injuries caused by the most prevalent form of physical violence against children: blunt-force trauma like hitting, kicking, biting, twisting, and pinching.

[1]Bilo RAC, Robben SGF, van Rijn RR (2010) Forensic aspects of paediatric fractures – differentiating accidental trauma from child abuse, 1st edn. Springer, Berlin/Heidelberg

It contains a comprehensive description of the differential diagnosis of suspicious cutaneous findings.

I am convinced this book will become a worldwide reference book for professionals working with children. In the end, children and families will benefit.

The Hague, Netherland Dr. Ellen van Berkel

Preface

My Skin Is Only the Top Layer of the Problem…

In July 1995, Irene A. Crosby wrote an article for the Archives of Dermatology, titled "My skin is only the top layer of the problem." She described the problems she encountered as a patient with atopic dermatitis: *"As a dermatologist, you see many patients with atopic dermatitis. There are a lot of us. We come to you in the arms of anxious parents who feel personally responsible for our agony and look to you for absolution of their erroneously perceived guilt. Regardless of how your atopic patients arrive, we all expect a cure in short order. Sometimes we heal, but often we do not. At this point, you and your patients like me are often thrown into an uneasy symbiosis where each unfairly blames the other for the chronicity of the disease."* As a patient with atopic dermatitis, she wants to be treated in a respectful and proper way.

The same accounts for victims of child abuse. Just replace "dermatologist" by "doctor" and "atopic dermatitis" by "a suspicion of child abuse" and you read a fascinating introduction that could have been written by a victim of child abuse: *"As a doctor, you see many patients with a suspicion of child abuse. There are a lot of us."* At the same time, the quote shows some of the quandaries of physicians who are confronted with a suspicion of child abuse, because a physician practically always examines a child when one parent is or both parents are present: *"We come to you in the arms of anxious parents who feel personally responsible for our agony and look to you for absolution of their erroneously perceived guilt…"* The parent who accompanies the child is not necessarily the parent who abused the child and does not always know what happened, but will feel guilty even when unjustly accused of child abuse. When "dermatologist" is replaced by pediatrician and/or pediatric dermatologist, a fascinating introduction arises that clarifies the role of these disciplines in the diagnosis as well as in the differential diagnosis of skin findings whenever a suspicion of child abuse arises.

The skin is the most accessible organ of the body and is therefore easy to observe for anybody. The skin is also the primary target organ to become damaged in physical abuse of children. Furthermore, skin findings may be encountered in all types of child abuse. Therefore, these findings often play a central role in the recognition of child abuse. These abnormalities can be observed by well-trained physicians and by untrained bystanders. Nevertheless, the interpretation of skin lesions is primarily the task of physicians in general and (pediatric) dermatologists in particular and is not always simple. In recent

years, many reports have been published on pediatric (dermatological) disorders and accidental injuries that were unjustly regarded as physical signs of child abuse. Knowledge of the differential diagnosis of unexplained or apparent skin findings is essential for an accurate diagnosis, sometimes even vital because errors in either direction (false positive and false negative) can be disastrous.

Doctors do have a specific role in the medical diagnosis of cases of physical violence and neglect, sexual abuse, and artificial disorders like pediatric condition falsification (formerly known as Munchausen's syndrome by proxy), factitious disorders (formerly known as Munchausen's syndrome), and self-mutilation. When a suspicion of child abuse arises because of physical findings, it is important to avoid jumping to conclusions. No physical sign or symptom is in itself an absolute proof of child abuse. The combination of physical findings, a thorough medical history, and the determination of the child's developmental level allows a well-trained physician to conclude whether a story told by the parents is consistent with the findings in the child. In other words, a suspicion of child abuse arising from physical abnormalities must be approached in the same way as any other medical problem:

- Formulating and testing a differential diagnosis (including a detailed history)
- Undertaking additional (e.g., laboratory) investigations
- Establishing a definite diagnosis

Therefore, it is essential that the physical examination is done by well-trained physicians, and in case of skin findings in cooperation with an experienced (pediatric) dermatologist.

Robert A.C. Bilo
Arnold P. Oranje
on behalf of
Tor Shwayder and
Chris Hobbs

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Many colleagues and friends helped us to write this book. We will not be able to mention them all. Some of them we would like to thank in person for their contributions to this book.

Firstly, Pieter Van Driessche, M.D., forensic (neuro) pathologist. He used one of his many talents to create the hand-drawn illustrations in this book.

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Last but not least, we would like to express our appreciation for everybody who (unknowingly) contributed to this book by providing photographs to the World Wide Web and placing these photographs in the setting of the public domain. Most figures were derived from the archives of the Netherlands Forensic Institute, the Erasmus MC - Sophia and the Henry Ford Hospital.

Contents

General Aspects of Physical Abuse and Neglect

1

1.1 Defining Child Abuse, Physical Abuse, and Neglect

There is no universal definition of child abuse or of any of its subtypes (Table 1.1). Definitions vary according to their function, for example, whether used for political, cultural, sociological, scientific, or legislative purposes. They may also vary from concise and to the point to comprehensive and more descriptive. The American Humane Association (2000) defines child abuse concisely as "harm resulting from inappropriate or abnormal childrearing practices". The definition of the World Health Organization (2006a) is more descriptive and also includes the various types of child abuse into their definition: "child abuse or maltreatment constitutes all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power."

Physical abuse of a child is defined as the deliberate physically violent behavior toward a child, committed by parents, care providers, and other known (such as brothers, sisters, acquaintances, and teachers) and unknown individuals. Child abuse is very rarely caused by the last group of unknown individuals. This behavior leads to actual or potential physical harm that is the result of the interaction, or lack of an interaction, which should reasonably be within the control of a parent or person in a position of responsibility, power, or trust (WHO 2006a). The severity of the behavior may range from frequent physically aggressive behavior, such as beating, punching, kicking, biting, and burning with or without visible injuries and/or scars, that is not life-threatening to a single incident with severe life-threatening and even lethal consequences.

Hobbs (1999) defined physical abuse from the perspective of the child: "a physically abused child is any child who receives (received) physical injury (or injuries) as a result of acts (or omissions) on the part of his parents or guardians. This includes the actual or probable physical injury to a child or the failure to prevent physical injury (or suffering) to a child, including deliberate poisoning, suffocation and pediatric condition falsification."

Neglect is the failure to provide for the needs of the child in every aspect of a child's life: health, education, emotional development, nutrition, shelter and safe living conditions, within the context of resources generally considered available to the family or caretakers, and causes or has a

Table 1.1 Types of child abuse in clinical practice

• Physical abuse
• Neglect, including physical neglect and other types of negligent behavior
• Sexual abuse
• Psychological/emotional abuse
• Pediatric condition falsification/fictitious disorder by proxy/medical child abuse (US terminology)/fabricated or induced illness (UK terminology) (formerly known as Munchausen syndrome by proxy)

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high probability of causing harm to the child's health or physical, mental, spiritual, moral, or social development. This includes the failure to properly supervise and protect children from harm to the best of one's ability (WHO 2006b).

As a result of the aggressive or negligent behavior, the child may suffer injuries. However, the absence of physical injuries at physical examination does not exclude the existence of physical abuse or neglect since not all physically violent or negligent behavior will result in apparent physical injuries. Moreover, not all physical injuries are noticed at the moment they are present or, when they are present, they may not be recognized by the person examining the child.

1.2 Epidemiology of Physical Abuse

1.2.1 Physical Abuse

Official reports about the epidemiology of physical abuse will underestimate the scale of the problem. It is now and will be in the future impossible to establish the exact incidence and prevalence of child abuse in general and physical abuse in particular. This is due to several issues, like definitional problems, including the defining of child abuse related to the function of the definition (Sect. 1.1), study design, and studied populations, and in particular to the fact that child abuse is underreported due to its occult occurrence (Keenan and Leventhal 2009).

Definitional problems are mainly created by the fact that no universal definition exists and that the definition of child abuse in general and of physical abuse more specifically may vary from concise and to the point to comprehensive and more descriptive. There may also be a difference in the scope of the definition: the narrower the definition, the lower the incidence and prevalence will be. If physical abuse is defined as an act of a carer leading to physical injuries (e.g., slapping, beating, or kicking, leading to bruises and abrasions), the incidence and prevalence will be lower than in a situation in which the act in itself is defined as physical abuse and in which the defining of physical abuse does not depend on the finding of injuries but on the chance that physical or other, for example, emotional injury may occur.

This also means that it will be impossible to give a reliable estimate of the underreporting. Estimates vary from one to two unrecognized cases for each reported case (American Humane Association 2000) up to possibly as many as four unrecognized cases for each known case (Oosterlee et al. 2009).

According to the 2007 UNICEF report on child well-being in Europe and Northern America, the United States and the United Kingdom ranked lowest with respect to the well-being of their children (UNICEF 2007). The Netherlands ranked the highest according to the same report. Despite the difference in ranking, there seem to be similarities in the incidence and prevalence of child abuse in the Netherlands on the one side and the United States and the United Kingdom on the other side.

In 1998, Straus published the data of a survey in which they asked parents in the United States how they disciplined their children (Straus et al. 1998). From this survey, an estimated rate of physical abuse of 49 per 1,000 children (1:20) was obtained when the following kinds of behavior were included in the definition of child abuse: hitting the child with an object other than on the buttocks and/or kicking and/or beating the child and/or threatening the child with a knife or gun. In 2000, about three million cases of suspected child abuse were reported in the United States (American Humane Association 2000). About 1 in 4 reports was confirmed (12.2 per 1,000 children). A more recently published study in the United States (2008) again illustrates the influence of differences in definitions on incidence and prevalence data: about 1 in 50 children fell victim of a nonfatal form of child abuse (assault, neglect, and/or abuse) (CDC 2008).

In the United States, about 1 in every 4 or 5 abused children is a victim of physical assault (National Committee to Prevent Child Abuse 1998), and about 10% of all children under the age of 5 who visit an emergency department with injuries do have non-accidental injuries resulting from assault or neglect (Holter and Friedman 1968).

Child abuse (physical violence, neglect, and sexual abuse) was reported as a possible cause in 2–25% of the children who required medical care for burns (Hight et al. 1979; Deitch and Staats 1982; Jones and Pickett 1987; Purdue et al. 1988; Andronicus et al. 1998). After bruises and burns, fractures are the most prevalent injuries in child abuse (McMahon et al. 1995; Cramer 1996). Often (maybe even as many as 1 in 5 victims) fractures are the first sign of child physical abuse (Sinal and Stewart 1998). More than 30% of children evaluated in the emergency department because of suspected abuse appear to have fresh and/or healing fractures (Hyden and Gallagher 1992). In children less than 1 year old, 50–75% of all fractures are reported to be sustained by physical abuse or neglect (King et al. 1988; Leventhal et al. 1993).

In the United Kingdom, as in many other countries such as the USA and the Netherlands, it is still common practice to use physical methods to control children, including hitting, slapping, and kicking (Smith et al. 1995; Cawson et al. 2000). Smith (1995) found that 15% of all children had been severely punished defined as the use implements and occurring over a protracted period of time, (potentially) causing physical or psychological damage. They also found that 9 out of 10 children had been hit at some time in their life and that the frequency with which they were hit decreased with age (hit more than once per week: 38% at 4, 27% at 7, and 3% at 11 years of age). In the United Kingdom, 7–9% of all children had been physically assaulted (hereby physical assault was certainly considered if clinically visible injuries were encountered) (Cawson et al. 2000). These percentages are comparable to the data of Straus (1998) on physical abuse in the United States.

In the Netherlands (almost 16 million inhabitants with a birth figure of 180,000 births per year), it is expected that each year somewhere between 100,000 and 160,000 minors will fall victim to child abuse (van IJzendoorn et al. 2007; Lamers-Winkelman et al. 2007).

Van IJzerendoorn (2007) used data, collected in 2005, to estimate the prevalence of child abuse in the Netherlands. These data were collected by more than 1,100 carefully selected professionals working in various health care, child care, and educational institutions in society across all major regions of the Netherlands. The informants were carefully instructed in the use of a uniform definition of child abuse and of a uniform registration system for child abuse. Also the registrations of all Dutch Child Protection Services in 2005 were included. Van IJzerendoorn estimated that the prevalence in the Netherlands may be 30 cases of child abuse per 1,000 children. About 1 in 5 abused children was victim of physical abuse. The results of the second prevalence study by the same research group showed comparable data (Alink et al. 2011).

Lamers-Winkelman (2007) used a questionnaire to interview 1,845 adolescents from 14 randomly selected secondary schools. Of the interviewed adolescents, 1 in 3 indicated that they had experienced an event in their lives which may be regarded as a form of child abuse (serious psychological aggression by parents, domestic violence (including physical abuse), perceived physical conflicts between parents, sexual abuse, and/or severe neglect). Nearly 20% appears to have experienced one form or another of child abuse during the past 12 months before the interview. One out of fifteen adolescents reported to have been a victim of a combination of different forms of child abuse during the past 12 months before the interview.

Another Dutch study focused on the effects of infant crying on parental actions ($n = 3{,}259$, aged 1–6 months) showed that 5.6% of the parents reported that they had smothered, slapped, or shaken their baby at least once because of their crying (Reijneveld et al. 2004).

Child abuse occurs in all social classes in the United Kingdom, although identified cases predominate in poor and disadvantaged families. Postcode-derived deprivation scores confirmed that subdural hematoma or effusion following non-accidental injury occurred in all socioeconomic quintiles of the population but was more common in the least affluent populations compared with the most affluent (Hobbs et al. 2005). Van IJzerendoorn (2007) found that the risk for child abuse increases almost sevenfold in

families with very low-educated parents. When both parents were unemployed, the risk increases at least fivefold. In families with parents from ethnic minorities, the risk for child abuse is about 3.5 times larger, but when their lower educational level is taken into account, the risk becomes much smaller. In families with single parents and in larger families (three or more children), the risk of child abuse and neglect doubles (van IJzendoorn et al. 2007).

Children most at risk of serious or fatal injuries due to child abuse and neglect are young, preverbal children (including infants). Children with any kind of disability have child abuse rates 3–4 times that of non-disabled children (Sullivan and Knutson 2000). The relationship between disabilities and abuse is complex. One should always consider that a disability is not only a risk factor for abuse but may also be the outcome of abuse, for example, in abusive head trauma.

1.2.2 Injury-Related Fatalities

The most prevalent causes of death and physical disabilities in children under the age of 15 are injuries by accidental and by non-accidental causes. According to the WHO, annually about 27,900 children will die of their injuries in Europe, which is equivalent to 36% of all deaths (WHO 2006b). Of these, 24,700 (89%) are due to accidental injuries and 3,200 (11%) are non-accidental (violence-related and self-inflicted) (Table 1.2). For every child who dies, there are several thousand victims of injury or violence who live with varying degrees of disability or psychological scarring. The WHO cites a Dutch study, which concludes that for every death from home- and leisure-related injuries, there are about 160 hospital admissions and 2,000 emergency department visits. If these figures are generalized for all injury-related deaths in Europe, this would translate into 4.5 million hospital admissions and 56 million emergency department visits (WHO 2006b).

The WHO defines as strongly associated risk factors for childhood injuries: poverty, single parenthood, low maternal education, low maternal age at birth, poor housing, large family size, and parental alcohol and substance abuse (WHO 2006b). These factors contribute to unsafe environments and risky behavior. The gender of the child also plays a role; boys are more at risk than girls. After the age of 1 year, all injury rates are higher for boys than for girls. Under 5 years of age, the rates for boys are 30% higher than for girls; however, this increases to 200% higher between 5 and 14 years of age (WHO 2006b). One should bear in mind that in injury-related fatalities, the differentiation between death due to "true" accidental causes, preventable death due to a momentary lapse in supervision, and preventable death due to "true" neglect will demand a comprehensive investigation of the circumstances.

Table 1.2 Deaths in relative percentage of total numbers from injury categorized by cause in the WHO European Region

Cause	%
Road traffic	23
Drowning	17
Poisoning	7
Self-inflicted	6
Violence	5
Fires	5
Falls	4
Other injury causes (incl. choking, smothering, venomous animals, electrocution, firearm incidents, war)	33

Children <15 years, 2002 (WHO 2006b)

In 2002, the World Health Organization concluded the following on fatal child abuse worldwide (WHO 2002):

> In 2000 there were an estimated 57,000 deaths attributed to homicide among children under the age of 15 years. Global estimates of child homicide suggest that infants and very young children are at greatest risk, with rates for the 0 to 4-year-old age group more than double those of 5 to 14-year-olds. The risk of fatal abuse for children varies according to the income level of a country and region of the world. For children under 5 years of age living in high-income countries, the rate of homicide is 2.2 per 100,000 for boys and 1.8 per 100,000 for girls. In low- to middle-income countries, the rates are 2–3 times higher (6.1 per 100,000 for boys and 5.1 per 100,000 for girls). The highest homicide rates for children under 5 years of age are found in the WHO African Region (17.9 per 100,000 for

boys and 12.7 per 100,000 for girls). The lowest rates are seen in high-income countries in the WHO European, Eastern Mediterranean and Western Pacific Regions. Many child deaths, however, are not routinely investigated and postmortem examinations are not carried out, which makes it difficult to establish the precise number of fatalities from child abuse in any given country. (Cited from the report)

1.2.3 The Relevance of Unreliable Data

Although precise definition of child abuse is difficult and measures of incidence and prevalence inevitably are imprecise, child abuse is clearly a major societal and health problem (Sect. 1.3.2). It also is one of the leading causes of child mortality.

In his report following the violent death of Victoria Climbié on February 25, 2000, Lord Laming writes on the incidence and prevalence of child abuse: "I have no difficulty in accepting the proposition that this problem (deliberate harm to children) is greater than that of what are generally recognized as common health problems in children, such as diabetes mellitus or asthma" (Laming 2003).

1.3 Clinical Features

1.3.1 Signs and Symptoms of Child Abuse and Neglect

The wide range of clinical presentations, symptoms, signs, and radiological features of physical abuse and neglect includes (Hobbs et al. 1999):

- Injuries arising from abusive and negligent behavior
- Signs of neglect, for example, infestation, lack of hygiene or care, failure to thrive, gross and untreated obesity, vitamin deficiencies from poor or inappropriate diet, injuries from lack of supervision, delayed development and poor educational attainment, cold injury, untreated medical conditions, and lack of educational opportunity
- Behavioral problems
- Emotional signs
- Other signs and symptoms, for example, skin lesions caused by self-mutilation or unexplained symptoms of illness in an otherwise healthy child which defies diagnosis

Because of this wide range of signs and symptoms, the evaluation of suspected child abuse demands multidisciplinary cooperation, involving welfare agencies, health professionals, and civil/criminal justice systems. Within the health care for children, it demands the cooperation between different pediatric disciplines, like forensic pediatrics, community pediatrics, pediatric dermatology, and pediatric radiology. Examples of the importance of cooperation in case of physical findings and their differential diagnosis are shown in Figs. 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, and 1.8 and in the following chapters.

1.3.2 Long-Term Consequences of Child Abuse

The health consequences of all forms of child abuse are long-standing and serious (Table 1.3) (WHO 2002). Apart from death or handicap following injuries such as brain injury or abdominal trauma, most effects are seen in the child's emotional and intellectual development. Also, it has a negative effect on the social functioning and general well-being of the child in his or her life for

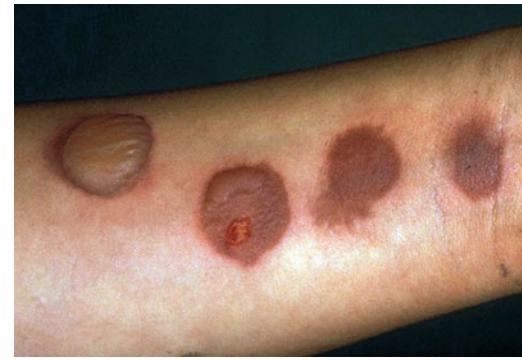


Fig. 1.1 Cigarette burns due to self-mutilation (= Fig. 2.38)

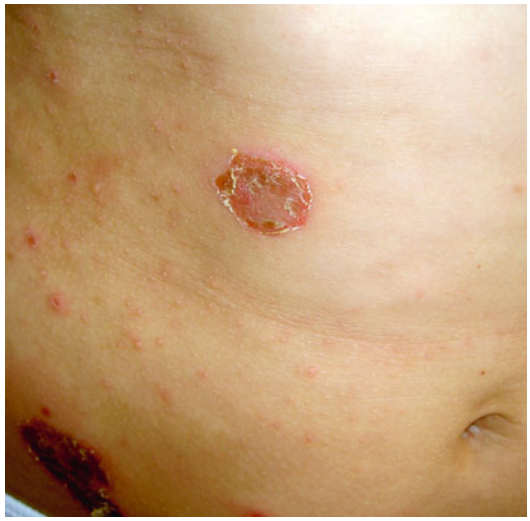


Fig. 1.2 Impetigo in the differential diagnosis of cigarette burns

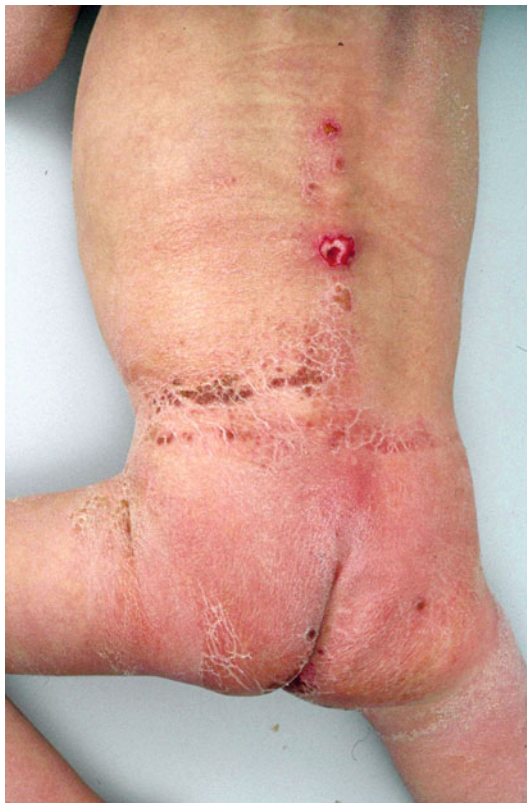


Fig. 1.3 Severe diaper dermatitis due to neglect

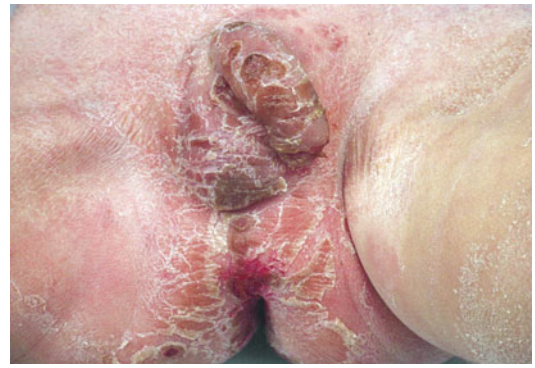


Fig. 1.4 Same child as in Fig. 1.3

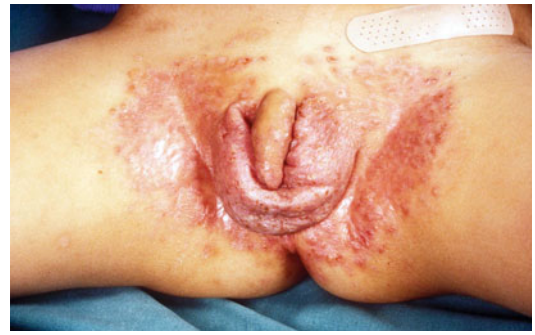


Fig. 1.5 Linear IgA disease in the differential diagnosis of diaper dermatitis

decades to come. The relationship between health-risk behavior and disease in adulthood and the extent of exposure to childhood emotional, physical, or sexual abuse and domestic dysfunction was described in the ACE study (Felitti et al. 1998). The study found a strong-graded relationship between the extent of exposure to abuse or domestic dysfunctioning during childhood and multiple risk factors for several of the leading causes of death in adults. These included alcoholism, drug abuse, depression, and suicide. Other adverse outcomes included smoking, high numbers of sexual intercourse partners, poor self-related health, sexually transmitted disease, physical inactivity, and severe obesity. There also appeared to be a connection with ischemic heart disease, cancer, chronic lung disease, skeletal fractures, and liver disease.

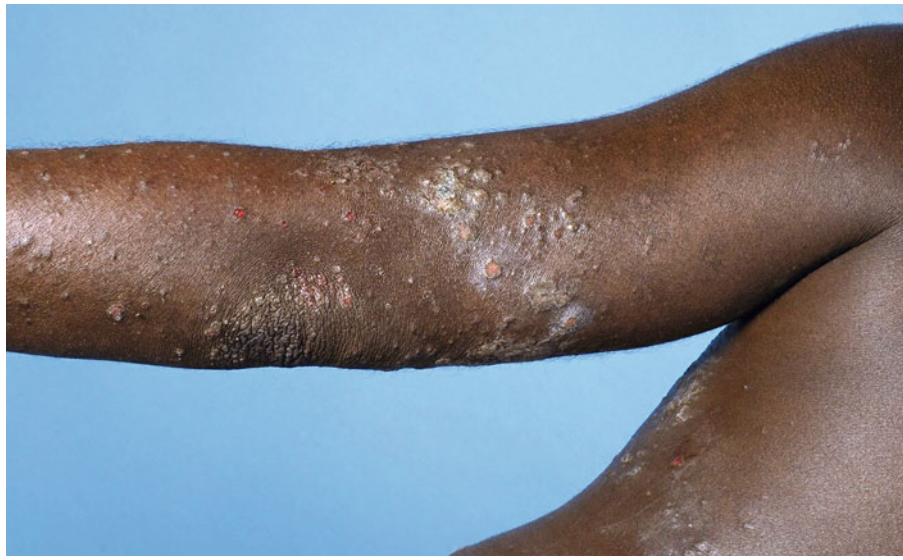


Fig. 1.6 Eczema in neglect

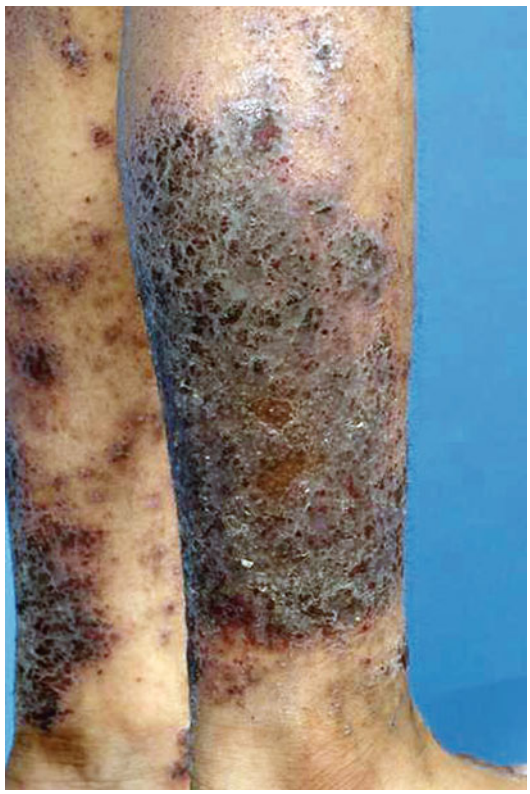


Fig. 1.7 Eczema in neglect

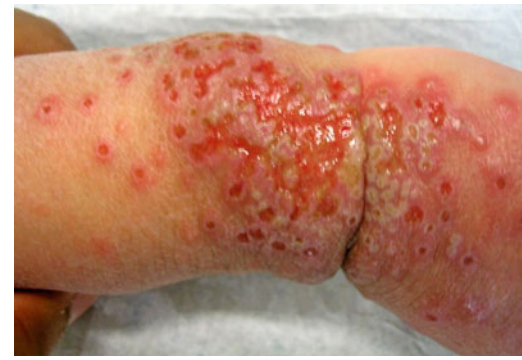


Fig. 1.8 Eczema herpeticum as differential diagnosis of neglect

1.4 Child Abuse and the Rights of Children

From a contemporary point of view, one may state that child abuse has been present throughout history in all societies and cultures. From a historical point of view, however, one should realize that the behavior that nowadays is defined as child abuse was not recognized as such in earlier

Table 1.3 Health consequences of child abuse

Consequences	
Physical	• Abdominal/thoracic injuries • Brain injuries/injuries to the central nervous system • Bruises and welts • Burns and scalds • Disability • Fractures • Lacerations and abrasions • Ocular damage
Sexual and reproductive	• Reproductive health problems (e.g., infertility) • Sexual dysfunction • Sexually transmitted diseases, including HIV/AIDS • Unwanted pregnancy
Psychological and behavioral	• Alcohol and drug abuse • Cognitive impairment • Delinquent, violent, and other risk-taking behaviors • Depression and anxiety • Developmental delays • Eating and sleep disorders • Feelings of shame and guilt • Hyperactivity • Poor relationships • Poor school performance • Low self-esteem • Post-traumatic stress disorder • Psychosomatic disorders • Suicidal behavior and self-harm
Other longer-term health issues	• Cancer • Chronic lung disease • Fibromyalgia • Irritable bowel syndrome • Ischemic heart disease • Liver disease

WHO (2002)

days. The negative effects of the behavior on children were not known or were denied.

Greek vases and other painted images, for example, depict sexual contacts between adults and male children (Figs. 1.9, 1.10, and 1.11) (Bilo et al. 2000). These contacts were accepted in the higher circles and considered to be healthy.

Fig. 1.9 An Athenian vase, depicting a sexual contact between an adult and a beardless boy

Fig. 1.10 Same vase as in Fig. 1.1 (detail): *"the boy usually looks as if he is solving some academic problem"*

Fig. 1.11 Greek artwork, dated between 530 BC and 430 BC, depicting a sexual contact between an adult and a boy. The boy is holding a bag of nuts, probably a courting gift from or payment by the adult

The boys were rewarded for the contact materially and socially but were not expected to enjoy the contact (Isaacs 1993). Bremmer (1989) described this as follows: "The Athenian vases clearly show that only the adults were considered to derive satisfaction from pederastic intercourse; the boy usually looks as if he is solving some academic problem."

For a very long time, children had (or even still have) no rights of their own inside families and were (are) seen as personal property of their parents, especially their fathers, or the society. This principle became law in Roman times: the "patria potestas" (power of the father), which gave fathers the absolute and unrestricted authority to decide about the fate of their children. A father could, according to this law:

- Accept and raise the child as his child
- Reject and sell the child as a slave or sacrifice the child
- Decide that the child was not fit to live and to kill the child because of handicaps

1.4.1 The Nineteenth Century

In the nineteenth century, the society became aware for the first time that children should be protected against the harmful behavior of parents or carers. In fact, the child was "reinvented" as a person which had the right to be protected against maltreatment, including child abuse, child sexual exploitation, and child labor. Tardieu (1818–1879), a forensic pathologist and professor of the Sorbonne University in Paris, published a series of articles and books in which child abuse, including neglect, sexual abuse, and infanticide, was described and examples of physical findings in sexual abuse were depicted (Figs. 1.12, 1.13, 1.14, and 1.15) (Tardieu 1859, 1860, 1868).

The story of Mary Ellen Wilson is well known among people who are working in child protection (American Humane Association, not dated) (Figs. 1.16, 1.17, and 1.18). This case formed the immediate cause to create the first Society for the Prevention of Cruelty to Children in the

Fig. 1.12 Ambroise Tardieu

United States in the seventies of the nineteenth century (Fig. 1.19). On April 10, 1874, Mary Ellen herself testified before Judge Lawrence (cited from Watkins 1990): "…. Mamma has been in the habit of whipping and beating me almost every day. She used to whip me with a twisted whip – a raw hide. The whip always left a black and blue mark on my body. I have now the black and blue marks on my head which were made by mamma, and also a cut on the left side of my forehead which was made by a pair of scissors. She struck me with the scissors and cut me (figure 1.18); I have no recollection of ever having been kissed by any one – have never been kissed by mamma. I have never been taken on my mamma's lap and caressed or petted. I never dared to speak to anybody, because if I did I would get whipped…. I do not know for what I was whipped—mamma never said anything to me when she whipped me. I do not want to go back to live with mamma, because she beats me so. I have no recollection ever being on the street in my life."

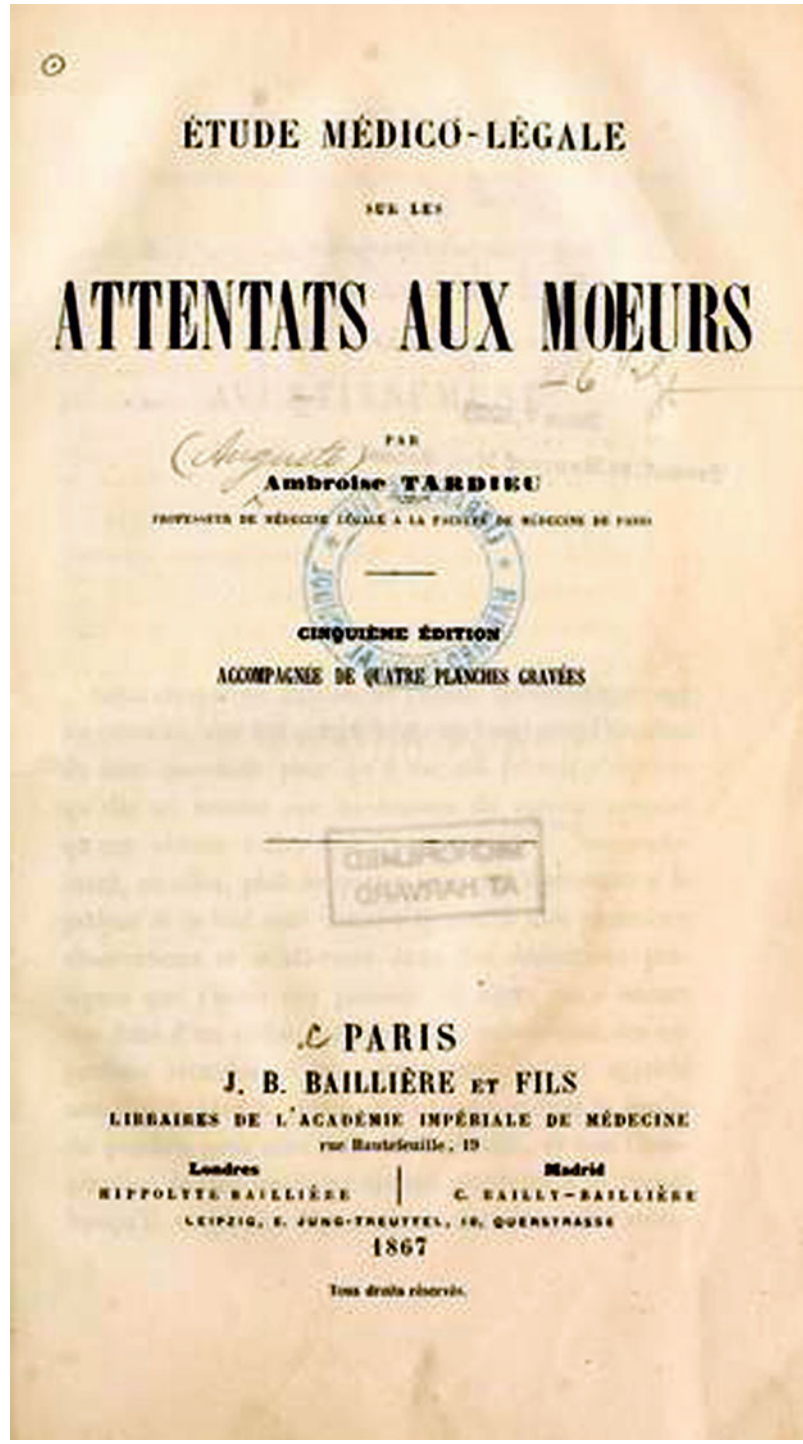
The growing awareness about what could happen to children is also illustrated by the depiction of the maltreatment of children in *Illustrated Police News* in the seventies of the nineteenth century (Figs. 1.20, 1.21, 1.22, 1.23, 1.24, 1.25, and 1.26).

1.4.2 The Twentieth Century

The awareness increased further in the twentieth century and led to the conviction that children had rights of their own. It was no longer accepted that parents did have an absolute and unrestricted authority over their children, although abusive behavior sometimes was depicted as something "funny" (Fig. 1.27).

In 1961, Kempe and coworkers published their groundbreaking article on "the battered child syndrome," in which they described the effects of parental violence toward their children (Kempe et al. 1962). In fact, this article renewed the attention for child abuse, which started a century before with the work of Tardieu.

In 1989, the "Convention on the Rights of the Child" was adopted by the United Nations General Assembly, which confirmed these enormous societal changes. Health professionals, welfare agencies, and the civil/criminal justice system must act according to their national procedures within the legislative framework of that country when confronted with suspicions of child abuse. The position may vary from one based on good medical practice to one mandated by a legal obligation to report suspected child abuse. Considering the fact that almost all countries have their own legislation, which may differ in details or fundamentally from the legislation in other countries, this aspect will not be dealt with any further within the scope of this book. It would be impossible to show all types of legislation which vary from voluntary reporting, without any consequences for the non-reporting professional, to mandatory reporting with consequences for the non-reporting professional. Reporting is done within a large variety of reporting systems with or without involvement of governmental or non-governmental child protection services and with



ÉTUDE MÉDICO-LÉGALE

SUR LES

ATTENTATS AUX MŒURS

PAR

Ambroise TARDIEU

PROFESSEUR DE MÉDECINE LÉGALE À LA FACULTÉ DE MÉDECINE DE PARIS

CINQUIÈME ÉDITION

ACCOMPAGNÉE DE QUATRE PLANCHES GRAVÉES

PARIS

J. B. BAILLIÈRE ET FILS

LIBRAIRES DE L'ACADÉMIE IMPÉRIALE DE MÉDECINE

rue Hautefeuille, 19

Londres

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1867

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Fig. 1.13 Frontpage of "Étude medico-legale sur les attentats aux moeurs"