

Robert A.C. Biló · Arnold P. Oranje  
Tor Shwayder · Christopher J. Hobbs

# Cutaneous Manifestations of Child Abuse and Their Differential Diagnosis

Blunt Force Trauma

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 Springer

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## Foreword

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### 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.<sup>1</sup> 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.

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<sup>1</sup>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

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## Preface

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### **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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# Contents

<b>1</b>	<b>General Aspects of Physical Abuse and Neglect</b>	
1.1	Defining Child Abuse, Physical Abuse, and Neglect . . . . .	1
1.2	Epidemiology of Physical Abuse . . . . .	2
1.2.1	Physical Abuse . . . . .	2
1.2.2	Injury-Related Fatalities . . . . .	4
1.2.3	The Relevance of Unreliable Data . . . . .	5
1.3	Clinical Features . . . . .	5
1.3.1	Signs and Symptoms of Child Abuse and Neglect . . . . .	5
1.3.2	Long-Term Consequences of Child Abuse . . . . .	5
1.4	Child Abuse and the Rights of Children . . . . .	7
1.4.1	The Nineteenth Century . . . . .	9
1.4.2	The Twentieth Century . . . . .	10
1.4.3	The Convention on the Rights of the Child . . . . .	15
	References . . . . .	22
<b>2</b>	<b>Evaluating Suspicious Skin Findings in Children</b>	
2.1	Introduction . . . . .	25
2.2	Evaluating Skin Injuries: “The Kipling Principle” . . . . .	26
2.3	What: Defining Injury and Types of Skin Injuries . . . . .	27
2.3.1	Defining Injury . . . . .	27
2.3.2	Injury Classifications . . . . .	29
2.4	How and Why: Cause and Manner of Skin Injuries . . . . .	29
2.5	Mechanical Trauma . . . . .	35
2.5.1	Static Loading and Injuries . . . . .	36
2.5.2	Dynamic Loading and Injuries . . . . .	38
2.5.3	Telltale Injuries in Static or Dynamic Loading . . . . .	41
2.6	(Near) Contact with Physical Agents and Injuries . . . . .	43
2.6.1	Thermal Trauma . . . . .	43
2.6.2	Chemical Trauma . . . . .	45
2.6.3	Electrical Trauma . . . . .	46
2.6.4	Other Nonmechanical Traumata . . . . .	47
2.7	Why and How: Physical Injuries in Child Abuse . . . . .	50
2.7.1	Abusive Injuries . . . . .	50
2.7.2	Self-Defense Injuries . . . . .	51
2.7.3	Injuries Caused by Instrumental Violence . . . . .	52

2.8	Assessment . . . . .	52
2.8.1	“The Kipling Principle” in the Assessment of Child Abuse . . . . .	52
2.8.2	History . . . . .	52
2.8.3	Physical Examination and Documentation of Findings . . . . .	55
2.8.4	Supplementary Investigations . . . . .	57
2.9	Who Did It? . . . . .	59
	References . . . . .	59
<b>3</b>	<b>Blunt-Force Trauma: Bruises</b>	
3.1	Introduction . . . . .	63
3.2	Bruises . . . . .	63
3.2.1	Defining Bruise, Hematoma, and Petechia . . . . .	63
3.2.2	Clinical Features. . . . .	63
3.2.3	Dating of Bruises . . . . .	68
3.2.4	Types of Bruising . . . . .	74
3.2.5	Bruises and Child Abuse . . . . .	75
3.3	Petechiae. . . . .	95
3.3.1	Defining Petechiae . . . . .	95
3.3.2	Clinical Features. . . . .	95
3.3.3	Suction Petechiae . . . . .	98
3.3.4	Vibices . . . . .	98
3.3.5	Tardieu’s Spots. . . . .	99
3.3.6	Dating of Petechiae . . . . .	100
3.3.7	Petechiae and Child Abuse. . . . .	101
	References . . . . .	101
<b>4</b>	<b>Accidental Trauma</b>	
4.1	Introduction . . . . .	105
4.2	Trauma: Accidental Versus Non-accidental Trauma . . . . .	105
4.2.1	Age and Developmental Level. . . . .	105
4.2.2	Gender . . . . .	109
4.2.3	Shape, Size, and Number . . . . .	110
4.2.4	Location . . . . .	111
4.2.5	Pierce’s Study on Discriminating Bruising Characteristics. . . . .	114
4.3	Trauma: Insufficient or Inadequate Supervision. . . . .	114
4.4	Trauma: Bruising in Children with a Coexistent Disease . . . . .	115
	References . . . . .	116
<b>5</b>	<b>Coagulation Disorders</b>	
5.1	Introduction . . . . .	117
5.1.1	Child Abuse or Coagulation Disorder? . . . . .	117
5.1.2	Child Abuse and Coagulation Disorder . . . . .	117
5.2	Bruising and Bleeding: Hemostasis . . . . .	119
5.3	Diagnosis . . . . .	119
5.3.1	Introduction . . . . .	119
5.3.2	Medical History . . . . .	120
5.3.3	Physical Examination. . . . .	121
5.3.4	Laboratory Testing . . . . .	122

5.4 Disorders with Increased Fragility of the Vessels . . . . .	125
5.4.1 Genetic Disorders . . . . .	125
5.4.2 Acquired Disorders . . . . .	127
5.5 Platelet Disorders . . . . .	129
5.5.1 General Aspects of Platelet Disorders . . . . .	129
5.5.2 Inherited Platelet Disorders . . . . .	130
5.5.3 Acquired Platelet Disorders . . . . .	132
5.6 Clotting Factor Deficiencies . . . . .	136
5.6.1 General Aspects of Clotting Factor Deficiencies . . . . .	136
5.6.2 Von Willebrand Disease . . . . .	136
5.6.3 Hemophilia A, B, and C (Factor VIII, IX, and XI Deficiency) . . . . .	138
5.6.4 Deficiencies of Other Clotting Factors . . . . .	139
5.6.5 Vitamin K Deficiency . . . . .	140
5.7 Artificial Bruising and Bleeding . . . . .	141
5.7.1 Introduction . . . . .	141
5.7.2 Intended and Self-Inflicted Bruising and Bleeding: Malingering and Factitious Disorder (Munchausen Syndrome) . . . . .	141
5.7.3 Painful Bruising Syndrome . . . . .	145
5.7.4 Intended and Self-Inflicted Bruising and Bleeding: Attempted Suicide . . . . .	147
5.7.5 Intended Bruising and Bleeding Inflicted by Another Person: Factitious Coagulation Disorder by Proxy – Pediatric Condition Falsification . . . . .	147
References . . . . .	148
<b>6 Dermatological Disorders and Artifacts</b>	
6.1 Introduction . . . . .	155
6.2 Pigment Abnormalities . . . . .	156
6.2.1 Mongolian Spots . . . . .	156
6.2.2 Café Au Lait Spots . . . . .	156
6.2.3 Secondary Hyperpigmentation Because of Inflammatory Skin Diseases . . . . .	158
6.2.4 Congenital Nevi . . . . .	159
6.2.5 Other Pigmented Skin Findings . . . . .	160
6.3 Various Allergic or Toxic Reactions Due to Inflammatory Skin Diseases . . . . .	163
6.3.1 Periorbital Swellings and Bruising . . . . .	163
6.3.2 Phytophotodermatitis . . . . .	164
6.3.3 Allergic Vasculitis . . . . .	166
6.4 Disease-Related “Bruising” and “Petechiae”: Other Causes . . . . .	168
6.4.1 Hemangioma of Infancy and Other Vascular Malformations in Infancy . . . . .	168
6.4.2 <i>Haemophilus influenzae</i> . . . . .	170
6.4.3 Maculae Ceruleae . . . . .	171
6.4.4 Dermographism and Factitious Urticaria . . . . .	172

6.4.5 Ehlers-Danlos Syndrome (Classical Type) . . . . .	174
6.4.6 Ectodermal Dysplasia . . . . .	174
6.4.7 Potentially Confusing Disease-Related Skin Lesions in the Differential Diagnosis . . . . .	178
6.5 Low Temperature-Related Skin Findings . . . . .	178
6.5.1 Introduction . . . . .	178
6.5.2 Chilblains . . . . .	178
6.5.3 Frostbite . . . . .	179
6.5.4 Accidental Versus Non-accidental Cold Injuries . . . . .	180
6.6 Artifacts Caused by Traditional Medicine and Cultural Practices . . . . .	181
6.6.1 Coining and Spooning . . . . .	182
6.6.2 Cupping . . . . .	182
6.6.3 Tui na . . . . .	185
6.7 Artifacts: Other Causes . . . . .	185
6.7.1 Purpura Factitia and Other Artificial Causes of Bruising and Petechiae . . . . .	185
6.7.2 Hair-Thread Tourniquet Syndrome . . . . .	185
6.8 Rarely Reported Non-Disease-Related Skin Findings . . . . .	191
References . . . . .	191
<b>7 Blunt Force Trauma: Other Cutaneous Manifestations</b>	
7.1 Introduction . . . . .	195
7.2 Erythema . . . . .	195
7.3 Abrasions . . . . .	196
7.3.1 Defining Abrasions . . . . .	196
7.3.2 Clinical Features . . . . .	197
7.3.3 Types of Abrasions . . . . .	198
7.3.4 Dating of Abrasions . . . . .	203
7.3.5 Abrasions and Child Abuse . . . . .	204
7.4 Lacerations . . . . .	210
7.4.1 Defining Laceration and Avulsion . . . . .	210
7.4.2 Clinical Features . . . . .	210
7.4.3 Types of Lacerations . . . . .	212
7.4.4 Incision-Like Lacerations . . . . .	213
7.4.5 Blunt Penetrating Injuries . . . . .	215
7.4.6 Dating of Lacerations . . . . .	216
7.4.7 Lacerations and Child Abuse . . . . .	216
References . . . . .	217
<b>8 Bitemarks</b>	
8.1 Introduction . . . . .	219
8.2 Epidemiology . . . . .	220
8.2.1 Human and Animal Bites . . . . .	220
8.2.2 Anatomical Location of Bitemarks Caused by Human Biting . . . . .	220
8.3 Clinical Features of Human Bitemarks . . . . .	221
8.3.1 Severity and Forensic Significance of Bitemarks . . . . .	221
8.3.2 Appearance of Bitemarks in Human Biting . . . . .	222