Forensic pediatric radiology: studies in living and deceased children
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Citation for published version (APA):

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Forensic pediatric radiology

Studies in living and deceased children

Tessa Sieswerda-Hoogendoorn
The front cover shows one image of a CT scan of the brain of one of the children described in chapter 4 and 5. The flyleaves show part of the skeletal survey of the same child. These images relate to the following case: An 8-week-old girl is brought to the pediatric outpatient clinic by her mother because of swelling of her right leg. She has not been using the leg for two days. Furthermore she has been crying and vomiting excessively.

Medical history at that age includes six contacts with the healthcare system, because of not using one of her arms, crying and vomiting. No diagnosis has been established, except for a candida infection of the mouth. A x-ray of her swollen leg is made and shows three fractures. The parents do not remember a trauma. She is admitted to the hospital because of concerns for her safety. A skeletal survey is performed and shows 28 fractures in different stages of healing throughout the body: a skull fracture, a spinal fracture, 13 rib fractures, a fracture of the right arm, 2 fractures of the right hand, a fracture of the left arm, 2 fractures of the left hand, 5 fractures of the right leg and 2 fractures of the left leg. An ultrasound and CT scan of the brain are performed and initially no abnormalities are seen. The case is sent to specialists in two academic centers for a second and third opinion, both come to the conclusion that trauma, probably child abuse, is the most likely cause of the fractures. More so, because when reevaluating the CT scan of the brain, a subdural hematoma and contusion are seen. There are no signs of underlying bone disease, e.g. osteogenesis imperfecta. This combination of findings at this age can only be explained by inflicted injury. The pediatrician reports the family to the Advies-en Meldpunt Kindermishandeling (Advice and Reporting Center for Child Abuse, the Dutch Child Protection Services) and an investigation is started. As the forensic physician evaluating the case for the AMK does not have personal contact with the family, no further information is available about how the girl develops and whether a perpetrator is identified.

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Cover design: Tessa Sieswerda-Hoogendoorn
Lay-out: Jouke Sieswerda
Printed by: Ipskamp Drukkers, Enschede

The research described in this thesis was financially supported by the Netherlands Forensic Institute (NFI).

The printing of this thesis was financially supported by the Department of Radiology of the Academic Medical Center, Amsterdam, the Netherlands and the Academic Medical Center, University of Amsterdam, the Netherlands.
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ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad van doctor
aan de Universiteit van Amsterdam
op gezag van de Rector Magnificus
prof. dr. D.C. van den Boom
ten overstaan van een door het college voor promoties ingestelde commissie, in het openbaar te verdedigen in de Agnietenkapel
op vrijdag 9 mei 2014, te 12.00 uur

door Tessa Hoogendoorn

geboren te ’s Gravenhage
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