ORTHOPAEDICS

FOR PRIMARY HEALTH CARE

LION

LEARNING INNOVATION VIA ORTHOPAEDIC NETWORKS

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Non-accidental injuries in children

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Learning objectives

1. Recognise and document signs of child abuse on clinical examination and X-Ray.
2. Examine for occult injuries associated with non-accidental injuries.
3. Do not discharge a child with suspected non-accidental injuries.
4. Notify relevant authorities (i.e. social worker, police service, support service).

Approach to children with suspected non-accidental injury

Intentional trauma to a child or neglect with subsequent trauma. Below is an approach to children with suspected non-accidental injuries.

Risk factors

Parents

- Age
- Low level of education
- History of sexual abuse/NAI as a child
- Absent father
- History of psychiatric illness
- Divorce/separation of parents
- Mother separated from parents
- Drug/alcohol abuse

Fracture pattern

The following fracture patterns are suspicious of NAI:

- Any fracture in a baby <6 months (60% chance of NAI)
- Femur fracture in <1 year old (50% chance of NAI)
- Old and new injuries are highly suspicious (Caffey's syndrome)
- Rib fractures (posteromedial fractures are highly suspicious)
- Metaphyseal injuries

Injury pattern

- Fractures associated with a head injury
- Suspicious bruising
- Unusual burns (cigarette, perineal)
- Facial trauma

Investigations

- Detailed history (including collateral history)
- Consider skeletal survey in the non-verbal child (generally <3 years)
- CT brain
- Ophthalmology for retinal haemorrhages
- Social worker investigation

Duty of care

- All NAI suspected by a medical practitioner have to be reported
- Usually, this is via the Department of Social Services
- Documentation of findings is essential and will be necessary for court proceedings
- The medical practitioner acts as an advocate of the child's rights rather than the parents'

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ABOUT THE BOOK

Informed by experts: Most patients with orthopaedic pathology in low to middle-income countries are treated by non-specialists. This book was based on a modified Delphi consensus study* with experts from Africa, Europe, and North America to provide guidance to these health care workers. Knowledge topics, skills, and cases concerning orthopaedic trauma and infection were prioritised. Acute primary care for fractures and dislocations ranked high.

Furthermore, the diagnosis and the treatment of conditions not requiring specialist referral were prioritised.

* Held et al. Topics, Skills, and Cases for an Undergraduate Musculoskeletal Curriculum in Southern Africa: A Consensus from Local and International Experts. JBJS. 2020 Feb 5;102(3):e10.

THE LION

The Learning Innovation via Orthopaedic Network (LION) aims to improve learning and teaching in orthopaedics in Southern Africa and around the world. These authors have contributed the individual chapters and are mostly orthopaedic surgeons and trainees in Southern Africa who have experience with local orthopaedic pathology and treatment modalities but also in medical education of undergraduate students and primary care physicians. To centre this book around our students, iterative rounds of revising and updating the individual chapters are ongoing, to eliminate expert blind spots and create transformation of knowledge.

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This textbook is not intended as a substitute for the medical advice of physicians. The reader should regularly consult a physician in matters relating to his/her health and particularly with respect to any symptoms that may require diagnosis or medical attention.

The information in this book is meant to supplement, not replace, Orthopaedic primary care training. The authors, editor and publisher advise readers to take full responsibility for their safety and know their limits. Before practicing the skills described in this book, be sure that your equipment is well maintained, and do not take risks beyond your level of experience, aptitude, training, and comfort level.

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