

General Information for Skeletal Survey in Suspected Non-Accidental Injury



The skeletal survey remains the gold standard for evaluating occult skeletal trauma in cases of suspected child abuse.

The following points are referenced in the October 2015 BC Medical Journal article, [The role of diagnostic imaging in the evaluation of child abuse](#):

- Bony injuries can provide compelling evidence for the presence of child abuse, in particular, characteristic injury patterns such as classic metaphyseal lesions and/or rib fractures. The presence of multiple occult fractures or unexplained healing fractures may also suggest a diagnosis of physical abuse.
- The skeletal survey is considered mandatory in suspected physical abuse when the child is under the age of 2 years or in older children with developmental delay or poor verbal skills, when detection of fractures by clinical exam alone may not be reliable (in children aged 2 to 5 years, the decision to perform a skeletal survey should be made on a case-by-case basis).
- The skeletal survey protocol for non-accidental injury strictly requires each anatomic region to be imaged separately (there is no role for a “babygram”), whereas, skeletal survey examinations for medical conditions such as skeletal dysplasias or metabolic disorders may allow for a greater portion of the skeleton to be imaged on one radiograph.
- A limited follow-up skeletal survey (minus higher radiation dose radiographs of skull, pelvis and lateral spine) is recommended 2 weeks later in cases where there is high clinical suspicion, or when the initial skeletal survey has abnormal or equivocal findings.
- The skeletal survey may be helpful in dating of bony injuries, although this must be approached with caution.
- Occasionally, additional imaging modalities such as CT may be required. Consultation with a pediatric radiologist is of great value in understanding the nature of injuries seen and in providing guidance regarding further studies.

Physicians and radiologists wishing to review challenging cases can do so with their local Suspected Child Abuse and Neglect (SCAN) team, or the Child Protection Service Unit (604-875-3270) and pediatric radiologists (604-875-2797) at BC Children’s Hospital.

Provincial SCAN Teams		
BC Children’s Hospital:	Child & Family Clinic	604-875-3270
	24 hr ON-CALL pediatrician	604-875-2161
Fraser Valley:	HEAL Clinic	604-585-5634
Interior:	Kamloops	250-314-2775
Island:	Nanaimo	250-755-7945
North:	Prince George	250-565-2120