

Fractures and Child Abuse
Ann S. Botash, M.D.
April 21, 2011

References for Fractures

1. American Academy of Pediatrics; Section on Radiology. Diagnostic imaging of child abuse. *Pediatrics*. 2009 May;123(5):1430-5.
2. Arnholz D, Hymel KP, Hay TC, Jenny C. Bilateral pediatric skull fractures: accident or abuse? *J Trauma*. 1998 Jul;45(1):172-4.
3. Bulloch B, Schubert CJ, Brophy PD, Johnson N, Reed MH, Shapiro RA. Cause and clinical characteristics of rib fractures in infants. *Pediatrics*. 2000 105 No. 4 April, p. e48.
4. Chiaviello CT, Christoph RA, Bond GR. Stairway-related injuries in children. *Pediatrics*. 1994;94:679-681.
5. Duffy SO, Squires J, Fromkin JB, Berger RP. Use of skeletal surveys to evaluate for physical abuse: Analysis of 703 consecutive skeletal surveys. *Pediatrics*. 127 (1) January 2011, e47-e52.
6. Hymel, KP, Jenny C. Abusive spiral fractures of the humerus: A videotaped exception. *Archives of Pediatrics and Adolescent Medicine*. 1996;150:226-228.
7. Jenny C. Multiple unexplained fractures in infants-the need for clear thinking. *Acta Paediatr*. 2010 Apr;99(4):491-3.
8. Jenny C; Committee on Child Abuse and Neglect. Evaluating infants and young children with multiple fractures. *Pediatrics*. 2006 Sep;118(3):1299-303.
9. Kemp AM, Dunstan F, Harrison S, Morris S, Mann M, Rolfe K, Datta S, Thomas DP, Sibert JR, Maguire S. Patterns of skeletal fractures in child abuse: systematic review. *BMJ*. 2008 Oct 2; 337:a1518 doi:10.1136/bmj.a1518.
10. Kemp AM, Butler A, Morris S, Mann M, Kemp KW, Rolfe K, Sibert JR, Maguire S. Which radiological investigations should be performed to identify fractures in suspected child abuse? *Clin Radiol*. 2006 Sep; 61(9):723-36.
11. Kleinman PK, ed. *Diagnostic imaging of child abuse*, 2nd ed. St Louis, MO: Mosby, 1998 and shared electronic version.
12. Kleinman PK. Diagnostic imaging in infant abuse. *Am J Roentgenol*. 1990 Oct;155(4):703-12. Review.
13. Loder RT, O'Donnell PW, Feinberg JR. Epidemiology and mechanisms of femur fractures in children. *J Pediatr Orthop*. 2006 Sep-Oct;26(5):561-6.
14. Miller AJ, Kim U, Carrasco E. Differentiating a mendosal suture from a skull fracture. *J Pediatr*. 2010 Oct;157(4):691.
15. Oral R, Blum KL, Johnson C. Fractures in young children: are physicians in the emergency department and orthopedic clinics adequately screening for possible abuse? *Pediatr Emerg Care*. 2003 Jun;19(3):148-53.
16. Peters ML, Starling SP, Barnes-Eley ML, Heisler KW. The presence of bruising associated with fractures. *Arch Pediatr Adolesc Med*. 2008 Sep;162(9):877-81.
17. Pierce MC, Kaczor K, Aldridge S, O'Flynn J, Lorenz DJ. Bruising characteristics discriminating physical child abuse from accidental trauma. *Pediatrics*. 2010 125(1):64-71.
18. Prosser I, Maguire S, Harrison SK, Mann M, Sibert JR, Kemp AM. How old is this fracture? Radiologic dating of fractures in children: a systematic review. *Am J Roentgenol*. 2005 Apr;184(4):1282-6.

19. Ravichandiran N, Schuh S, Bejuk M, Al-Harthy N, Shouldice M, Au H, Boutis K. Delayed identification of pediatric abuse-related fractures. *Pediatrics*. 2010 Jan;125(1):60-6. Epub 2009 Nov 30.
20. Sawyer JR, Flynn JM, Dormans JP, Catalano J, Drummond DS. Fracture patterns in children and young adults who fall from significant heights. *J Pediatric Ortho*. 2000;197-202.
21. Weir P, Suttner NJ, Flynn P, McAuley D. Normal skull suture variant mimicking intentional injury. *BMJ*. 2006 Apr 29;332(7548):1020-1.

References for Bone Diseases and Vitamin D

1. Ayoub D, Plunkett J, Keller KA, Barnes PD. Are Paterson's critics too biased to recognize rickets? *Acta Paediatr*. 2010 Sep;99(9):1282-3. Epub 2010 Jul 19.
2. Barnes, P. The radiologic clinics of North America: Imaging of nonaccidental injury and the mimics: issues and controversies in the era of evidence-based medicine. 2011.
3. Basel D, Steiner RD. Osteogenesis imperfecta: recent findings shed new light on this once well-understood condition. *Genetics in Medicine*. 2009;11(6):375-385.
4. Bilariki K, Anagnostou E, Masse V, Elie C, Grill J, Valteau-Couanet D, Kalifa C, Doz F, Sainte-Rose C, Zerah M, Mascard E, Mosser F, Ruiz JC, Souberbielle JC, Eladari D, Brugières L, Polak M. Low bone mineral density and high incidences of fractures and vitamin D deficiency in 52 pediatric cancer survivors. *Horm Res Paediatr*. 2010;74(5):319-27. Epub 2010 Apr 15.
5. Carroll DM, Doria AS, Paul BS. Clinical-radiological features of fractures in premature infants-a review. *J Perinat Med*. 2007;35(5):366-75.
6. Chapman T, Sugar N, Done S, Marasigan J, Wambold N, Feldman K. Fractures in infants and toddlers with rickets. *Pediatr Radiol*. 2010 Jul;40(7):1184-9. Epub 2009 Dec 9. Erratum in: *Pediatr Radiol*. 2010 Jul;40(7):1308.
7. Chesney RW. Rickets or abuse, or both? *Pediatr Radiol*. 2008 Nov;38(11):1217-8. Epub 2008 Sep 23.
8. Feldman KW, Done S. Vitamin D deficiency rickets and allegations of non-accidental injury. *Acta Paediatr*. 2010 Apr; 99(4):486-7.
9. Feldman K. Commentary on "congenital rickets" article. *Pediatr Radiol*. 2009 Oct;39(10):1127-9; author reply 1130-2. Epub 2009 May 5.
10. Garcia VF, Gotschall CS, Eichelberger MR, Bowman LM. Rib fractures in children: a marker of severe trauma. *J Trauma*. 1990 Jun;30(6):695-700.
11. Jenny C. Multiple unexplained fractures in infants-the need for clear thinking. *Acta Paediatr*. 2010 Apr;99(4):491-3.
12. Keller KA, Barnes PD. Rickets vs. abuse: a national and international epidemic. *Pediatr Radiol*. 2008 Nov;38(11):1210-6. Epub 2008 Sep 23.
13. Leet AI, Mesfin A, Pichard C, Launay F, Brintzenhofeszoc K, Levey EB, D Sponseller P. Fractures in children with cerebral palsy. *J Pediatric Orthop*. 2006 Sep-Oct;26(5):624-7.
14. Mäyränpää MK, Tamminen IS, Kröger H, Mäkitie O. Bone biopsy findings and correlation with clinical, radiological and biochemical parameters in children with fractures. *J Bone Miner Res*. 2011 Feb 23. doi: 10.1002/jbmr.373.
15. Olney RC, Mazur JM, Pike LM, Froyen MK, Ramirez-Garnica G, Loveless EA, Mandel DM, Hahn GA, Neal KM, Cummings RJ. Healthy children with frequent fractures: how much evaluation is needed? *Pediatrics*. 2008 May;121(5):890-7.

16. Pandya NK, Baldwin K, Kamath AF, Wenger DR, Hosalkar HS. Unexplained fractures: Child abuse or bone disease; A systematic review. *Clin Orthop Relat Res.* 2011;469:805–812. Epub 2010 Sep 29.
17. Paterson CR, Burns J, McAllion SJ. Osteogenesis imperfecta: the distinction from child abuse and the recognition of a variant form. *Am J Med Genet.* 1993 Jan 15;45(2):187-92.
18. Paterson CR. Temporary brittle bone disease: fractures in medical care. *Acta Paediatr.* 2009 Dec;98(12):1935-8. Epub 2009 Jun 25.
19. Paterson CR, McAllion SJ. Classical osteogenesis imperfecta and allegations of nonaccidental injury. *Clin Orthop Relat Res.* 2006 Nov;452:260-4.
20. Patterson CR. Vitamin D deficiency rickets and allegations of non-accidental injury. *Acta Paediatr.* 2009;98:2008–12.
21. Paterson CR. Bone disorders that cause fractures and mimic non-accidental injury. *Acta Paediatr.* 2010 Sep;99(9):1281-2.
22. Ryan LM, Brandoli C, Freishtat RJ, Wright JL, Tosi L, Chamberlain JM. Prevalence of vitamin D insufficiency in African American children with forearm fractures: A preliminary study. *J Pediatr Orthop.* 2010 Mar;30(2):106-9.
23. Ryan LM. Forearm fractures in children and bone health. *Curr Opin Endocrinol Diabetes Obes.* 2010 Dec;17(6):530-4.
24. Schilling S, Wood JN, Levine MA, Langdon D, Christian CW. Vitamin D status in abused and nonabused children younger than 2 years old with fractures. *Pediatrics.* Epub 2011 April 11.
25. Slovis TL, Chapman S. Evaluating the data concerning vitamin D insufficiency/deficiency and child abuse. *Pediatric Radiology Volume 38, Number 11, 1221-1224.*
26. Strouse PJ. Vitamin D deficiency vs. child abuse: What do we know now and where do we go? *Pediatr Radiol.* 2009 Oct;39(10):1033.
27. Vanheer P, van Rhijn J, Boel M, Lagae L, Molenaers G, Adam A, Ceulemans B. Supracondylar femur fracture complicating epileptic insult: A specific and under diagnosed complication? *Acta Neurol Belg.* 2008 Mar;108(1):17-20.