

6. Bölüm

ÇOCUK OMURGA TRAVMALARI

Sezai ÖZKAN¹
Tülin TÜRKÖZÜ²

Giriş

Çocuklarda travmatik torako-lomber omurga yaralanmaları nadirdir ancak yaşamı tehdit eden ciddi potansiyel yaralanmalara sebep olabilir. Pediatrik hastalarda torakolomber omurilik yaralanmaları, sık karşılaşılan küçük kompresyon kırıklarından nadir görülen tam omurilik yaralanması ile ilişkili vertebra kırıklı çıkışlarına kadar değişir. Torakolomber omurgada çok çeşitli yaralama tipleri göz önüne alındığında, uygun tedavi, pediyatrik spinal anatominin iyi bilinmesi, biyomekanik, iyileşme ve büyümeye potansiyelinin yanısıra psikososyal faktörlerin de bilinmesi gereklidir. Torakolomber kırıkların dikkatli takibi, omonganın kalan büyümeye potansiyeli, instabilite, nörolojik yaralanma geç deformite riski nedeniyle önemlidir. Çocuklardaki kafatası çapının bedene oranla daha büyük olması ve boyun bölgesini destekleyen yumuşak dokuların daha zayıf olması nedeniyle çocuklardaki omurga yaralanmalarının en sık görüldüğü yer servikal bölgedir⁽¹⁾.

¹ Dr. Öğr. Üyesi, Van Yüzüncü Yıl Üniversitesi, Tıp Fakültesi Ortopedi ve Travmatoloji AD, doktorsezai@hotmail.com

² Dr. Öğr. Üyesi, Van Yüzüncü Yıl Üniversitesi, Tıp Fakültesi, Ortopedi ve Travmatoloji AD, dktrtulin@gmail.com

KAYNAKÇA

1. Hofbauer M, Jaindl M, Hochtl LL, Ostermann RC, Kdolsky R, Aldrian S. Spineinjuries in poly traumatized pediatric patients: characteristics and experience from a Level I trauma center over two decades. *J Trauma Acute Care Surg* 2012;73(1):156–61.
2. Cirak B, Ziegfeld S, Knight VM, Chang D, Avellino AM, Paidas CN. Spinalinjuries in children. *J Pediatr Surg* 2004;39(4):607– 12.
3. DoganS, Safavi-Abbası S, Theodore N, et al: Thoracolumbar and sacral spinal injuries in children and adolescents: A review of 89 cases. *J Neurosurg* 2007; 106(6 suppl):426-433.
4. Carreon LY, Glassman SD, Campbell MJ: Pediatric spine fractures: A review of 137 hospital admissions. *J Spinal Disord Tech* 2004;17(6):477-482.
5. Junkins EP Jr, Stotts A, Santiago R, GuentherE: The clinical presentation of pediatric thoracolumbar fractures: A prospective study. *J Trauma* 2008;65(5):1066-1071.
6. Garland S: 2010 Annual report of ATV related deaths and injuries. Consumer Product Safety Commission, December 2011.
7. Rennie L, Court-Brown CM, Mok JY, Beattie TF: The epidemiology of fractures in children. *Injury* 2007;38(8): 913-922.
8. Durbin DR; Committee on Injury, Violence, and Poison Prevention: Child passenger safety. *Pediatrics* 2011;127(4): 788-793.
9. Akbarnia BA. Pediatric spine fractures. *Orthop Clin North Am* 1999;30(3):521–36
10. Herzenberg JE, Hensinger RN, Dedrick DK, Phillips WA. Emergency transport and positioning of young children who have an injury of the cervical spine. The standard backboard may be hazardous. *J Bone Joint Surg Am* 1989;71(1):15–22.
11. Santiago R, Guenther E, Carroll K, Junkins EP Jr. The clinical presentation of pediatric thoracolumbar fractures. *J Trauma* 2006;60(1):187–92.
12. Louman-Gardiner K, Mulpuri K, Perdios A, Tredwell S, Cripton PA. Pediatric lumbar Chance fractures in British Columbia: chart review and analysis of the use of shoulder restraints in MVAs. *Accid Anal Prev* 2008;40(4):1424–9.
13. Sledge JB, Allred D, Hyman J: Use of magnetic resonance imaging in evaluating injuries to the pediatric thoracolumbar spine. *J Pediatr Orthop* 2001;21(3):288-293.
14. Muchow RD, Egan KR, Peppler WW, Anderson PA: Theoretical increase of thyroid cancer induction from cervical spine multi dete-

- ctor computed tomography in pediatric trauma patients. *J Trauma Acute Care Surg* 2012;72(2): 403-409.
- 15. Dare AO, Dias MS, Li V: Magnetic resonance imaging correlation in pediatric spinal cord injury without radiographic abnormality. *J Neurosurg* 2002;97(1 suppl):33-39.
 - 16. Saul D, Dresing K. Epidemiology of vertebral fractures in pediatric and adolescent patients. *Pediatr Rep* 2018;10(1). Crossref
 - 17. Mahan ST, Mooney DP, Karlin LI, Hresko MT. Multiple level injuries in pediatric spinal trauma. *J Trauma* 2009;67(3):537– 42.
 - 18. Reilly CW: Pediatric spine trauma. *J Bone Joint Surg Am* 2007;89(suppl 1):98-107.
 - 19. Vander Have KL, Caird MS, GrossS,et al: Burst fractures of the thoracic and lumbar spine in children and adolescents. *J Pediatr Orthop* 2009;29(7):713-719.
 - 20. Vaccaro AR, Lehman RA Jr, Hurlbert RJ, et al: A new classification of thoracolumbar injuries: The importance of injury morphology, the integrity of the posterior ligamentous complex, and neurologic status. *Spine (Phila Pa 1976)* 2005;30(20):2325-2333.
 - 21. Ni WF, Huang YX, Chi YL, et al: Percutaneous pedicle screw fixation for neurologic intact thoracolumbar burst fractures. *J Spinal DisordTech* 2010; 23(8):530-537.
 - 22. Agran PF, Dunkle DE, Winn DG. Injuries to a sample of seatbelted children evaluated and treated in a hospital emergency room. *J Trauma* 1987;27(1):58–64. Crossref
 - 23. Rumball K, Jarvis J. Seat-belt injuries of the spine in young children. *J Bone Joint Surg Br* 1992;74-B(4):571-4. Crossref
 - 24. Bradley LH, Paullus WC, HoweJ, Litofsky NS: Isolated transverse process fractures: Spine service management not needed. *J Trauma* 2008;65(4):832-836, discussion 836.
 - 25. Mayfield JK, Erkkila JC, Winter RB: Spine deformity subsequent to acquired childhood spinal cord injury. *J Bone Joint Surg Am* 1981;63(9):1401-1411.
 - 26. Dearolf WW III, Betz RR, Vogel LC, Levin J, Clancy M, Steel HH: Scoliosis in pediatric spinal cord-injured patients. *J Pediatr Orthop* 1990;10(2):214-218.
 - 27. Mehta S, Betz RR, Mulcahey MJ, McDonald C, Vogel LC, Anderson C: Effect of bracing on paralytic scoliosis secondary to spinal cord injury. *J Spinal Cord Med* 2004;27(suppl 1):S88-S92.