

표 237. 근골격 핵심질문1 근거표

핵심질문 1

문헌정보	연구유형	대상자 수	문헌 질 KCIG
American College of Radiology. ACR Appropriateness Criteria®: Suspected Spine Trauma. Available at: https://acsearch.acr.org/docs/69359/Narrative/ . Accessed September 30, 2015.	Review/Other-Dx	N/A	4
Davis SJ, Khangure MS. A review of magnetic resonance imaging in spinal trauma. <i>Australas Radiol.</i> 1994;38(4):241-253.	Review/Other-Dx	167 patients	4
O'Beirne J, Cassidy N, Raza K, Walsh M, Stack J, Murray P. Role of magnetic resonance imaging in the assessment of spinal injuries. <i>Injury.</i> 1993;24(3):149-154.	Review/Other-Dx	44 patients	4
Mancini DJ, Burchard KW, Pekala JS. Optimal thoracic and lumbar spine imaging for trauma: are thoracic and lumbar spine reformats always indicated? <i>J Trauma.</i> 2010;69(1):119-121.	Observational-Dx	“fracture” group (n=35) and a “no fracture” group (n=57)	3
Smith MW, Reed JD, Facco R, et al. The reliability of nonreconstructed computerized tomographic scans of the abdomen and pelvis in detecting thoracolumbar spine injuries in blunt trauma patients with altered mental status. <i>J Bone Joint Surg Am.</i> 2009;91(10):2342-2349.	Observational-Dx	59 consecutive patients	2
Brown CV, Antevil JL, Sise MJ, Sack DI. Spiral computed tomography for the diagnosis of cervical, thoracic, and lumbar spine fractures: its time has come. <i>J Trauma.</i> 2005;58(5):890-895; discussion 895-896.	Observational-Dx	3,537 patients	3
Berry GE, Adams S, Harris MB, et al. Are plain radiographs of the spine necessary during evaluation after blunt trauma? Accuracy of screening torso computed tomography in thoracic/lumbar spine fracture diagnosis. <i>J Trauma.</i> 2005;59(6):1410-1413; discussion 1413.	Observational-Dx	103 patients	3
Brandt MM, Wahl WL, Yeom K, Kazerooni E, Wang SC. Computed tomographic scanning reduces cost and time of complete spine evaluation. <i>J Trauma.</i> 2004;56(5):1022-1026; discussion 1026-1028.	Review/Other-Dx	55 patients reviewed radiographs 50 patients timed radiologic work up	4
Herzog C, Ahle H, Mack MG, et al. Traumatic injuries of th	Observational-Dx	70 patients	2

e pelvis and thoracic and lumbar spine: does thin slice multi detector-row CT increase diagnostic accuracy? Eur Radiol. 2004;14(10):1751-1760.			
Hsu JM, Joseph T, Ellis AM. Thoracolumbar fracture in blunt trauma patients: guidelines for diagnosis and imaging. Injury. 2003;34(6):426-433.	Review/Other-Dx	200 patients	4
Lucey BC, Stuhlfaut JW, Hochberg AR, Varghese JC, Soto JA. Evaluation of blunt abdominal trauma using PACS-based 2D and 3D MDCT reformations of the lumbar spine and pelvis. AJR Am J Roentgenol. 2005;185(6):1435-1440.	Observational-Dx	156 consecutive patients	2
Sheridan R, Peralta R, Rhea J, Ptak T, Novelline R. Reformatted visceral protocol helical computed tomographic scanning allows conventional radiographs of the thoracic and lumbar spine to be eliminated in the evaluation of blunt trauma patients. J Trauma. 2003;55(4):665-669.	Observational-Dx	1915 patients	2
van Beek EJ, Been HD, Ponsen KK, Maas M. Upper thoracic spinal fractures in trauma patients - a diagnostic pitfall. Injury. 2000;31(4):219-223.	Review/Other-Dx	23 patients; 2 observers	4
Wintermark M, Mouhsine E, Theumann N, et al. Thoracolumbar spine fractures in patients who have sustained severe trauma: depiction with multi-detector row CT. Radiology. 2003;227(3):681-689.	Observational-Dx	100 patients: radiographs, 5 observers; CT, 3 observers	1
Chang CH, Holmes JF, Mower WR, Panacek EA. Distracting injuries in patients with vertebral injuries. J Emerg Med. 2005;28(2):147-152.	Review/Other-Dx	336 with distracting injuries among	4
Dai LY, Yao WF, Cui YM, Zhou Q. Thoracolumbar fractures in patients with multiple injuries: diagnosis and treatment - a review of 147 cases. J Trauma. 2004;56(2):348-355.	Observational-Dx	147 patients	4
Gestring ML, Gracias VH, Feliciano MA, et al. Evaluation of the lower spine after blunt trauma using abdominal computed tomographic scanning supplemented with lateral scanograms. J Trauma. 2002;53(1):9-14.	Observational-Dx	71 patients	2
Hauser CJ, Visvikis G, Hinrichs C, et al. Prospective validation of computed tomographic screening of the thoracolumbar spine in trauma. J Trauma. 2003;55(2):228-234; discussion 234-225.	Observational-Dx	222 patients 215 patients fully evaluated	3

Inaba K, Munera F, McKenney M, et al. Visceral torso computed tomography for clearance of the thoracolumbar spine in trauma: a review of the literature. <i>J Trauma</i> . 2006;60(4):915–920.	Review/Other–Dx	N/A	4
Rhee PM, Bridgeman A, Acosta JA, et al. Lumbar fractures in adult blunt trauma: axial and single–slice helical abdominal and pelvic computed tomographic scans versus portable plain films. <i>J Trauma</i> . 2002;53(4):663–667; discussion 667.	Observational–Dx	7,216 patients reviewed 115 with lumbar fracture	3
Rhea JT, Sheridan RL, Mullins ME, Novelline RA. Can chest and abdominal trauma CT eliminate the need for plain films of the spine? – Experience with 329 multiple trauma patients. <i>Emergency Radiology</i> . 2001;8(2):99–104.	Observational–Dx	329 patients; 38 patients chest CT plus thoracic spine radiographs; 87 patients abdominal CT plus lumbar spine radiographs	3
Salim A, Sangthong B, Martin M, Brown C, Plurad D, Deme triades D. Whole body imaging in blunt multisystem trauma patients without obvious signs of injury: results of a prospective study. <i>Arch Surg</i> . 2006;141(5):468–473; discussion 473–465.	Observational–Dx	1,000 underwent pan scan of whom 592 were evaluable	3
Ballock RT, Mackersie R, Abitbol JJ, Cervilla V, Resnick D, Garfin SR. Can burst fractures be predicted from plain radiographs? <i>Journal of Bone and Joint Surgery – Series B</i> . 1992; 74(1):147–150	Observational–Dx	25	2
Berry GE, Adams S, Harris MB, Boles CA, McKernan MG, Collinson F et al. Are plain radiographs of the spine necessary during evaluation after blunt trauma? Accuracy of screening torso computed tomography in thoracic/lumbar spine fracture diagnosis. <i>Journal of Trauma</i> . 2005; 59(6):1410–1413	Observational–Dx	103	2
Brown CVR, Antevil JL, Sise MJ, Sack DI. Spiral computed tomography for the diagnosis of cervical, thoracic, and lumbar spine fractures: its time has come. <i>Journal of Trauma</i> . 2005; 58(5):890–896	Observational–Dx	178	2
Campbell SE, Phillips CD, Dubovsky E, Cail WS, Omary RA. The value of CT in determining potential instability of simple wedge–compression fractures of the lumbar spine. <i>American Journal of Neuroradiology</i> . 1995; 16(7):1385–1392	Observational–Dx	53	3

Dai LY, Wang XY, Jiang LS, Jiang SD, Xu HZ. Plain radiography versus computed tomography scans in the diagnosis and management of thoracolumbar burst fractures. <i>Spine</i> . 2008; 33(16):E548–E552	Observational–Dx	73	2
Hauser CJ, Visvikis G, Hinrichs C, Eber CD, Cho K, Lavery RF et al. Prospective validation of computed tomographic screening of the thoracolumbar spine in trauma. <i>Journal of Trauma</i> . 2003; 55(2):228–5		215	1
Ito Z, Harada A, Matsui Y, Takemura M, Wakao N, Suzuki T et al. Can you diagnose for vertebral fracture correctly by plain X–ray? <i>Osteoporosis International</i> . 2006; 17(11):1584–1591	Observational–Dx	120	2
Karul M, Bannas P, Schoennagel BP, Hoffmann A, Wedegartner U, Adam G et al. Fractures of the thoracic spine in patients with minor trauma: comparison of diagnostic accuracy and dose of biplane radiography and MDCT. <i>European Journal of Radiology</i> . 2013; 82(8):1273–1277	Observational–Dx	107	2
Krueger MA, Green DA, Hoyt D, Garfin SR. Overlooked spine injuries associated with lumbar transverse process fractures. <i>Clinical Orthopaedics and Related Research</i> . 1996;(327):191–195	Observational–Dx	28	2
Pizones J, Sanchez–Mariscal F, Zuniga L, Alvarez P, Izquierdo E. Prospective analysis of magnetic resonance imaging accuracy in diagnosing traumatic injuries of the posterior ligamentous complex of the thoracolumbar spine. <i>Spine</i> . 2013; 38(9):745–751	Observational–Dx	58	3
Rhea JT, Sheridan RL, Mullins ME, Novelline RA. Can chest and abdominal trauma CT eliminate the need for plain films of the spine? – Experience with 329 multiple trauma patients. <i>Emergency Radiology</i> . 2001; 8(2):99–104	Observational–Dx	125	2
Rhee PM, Bridgeman A, Acosta JA, Kennedy S, Wang DSY, Sarveswaran J et al. Lumbar fractures in adult blunt trauma: axial and single–slice helical abdominal and pelvic computed tomographic scans versus portable plain films. <i>Journal of Trauma</i> . 2002; 53(4):663–667	Observational–Dx	115	2
Sheridan R, Peralta R, Rhea J, Ptak T, Novelline R. Reformatted visceral protocol helical computed tomographic scanning allows conventional radiographs of the thoracic and lumbar spine to be eliminated in the evaluation of blunt trauma patients. <i>Journal of Trauma</i> . 2003; 55(4):665–669	Observational–Dx	78	2

Silberstein M, Tress BM, Hennessy O. A comparison between M.R.I. and C.T. in acute spinal trauma. Australasian Radiology. 1992; 36(3):192-197	Observational-Dx	34	3
Tarr RW, Drolshagen LF, Kerner TC, Allen JH, Partain CL, James AEJ. MR imaging of recent spinal trauma. Journal of Computer Assisted Tomography. 1987; 11(3):412-417		14	2
Tracy PT, Wright RM, Hanigan WC. Magnetic resonance imaging of spinal injury. Spine. 1989; 14(3):292-301	Observational-Dx	13	3
Wintermark M, Mouhsine E, Theumann N, Mordasini P, van Melle G, Leyvraz PF et al. Thoracolumbar spine fractures in patients who have sustained severe trauma: depiction with multi-detector row CT. Radiology. 2003; 227(3):681-689	Observational-Dx	100	3