

11 ( )  
11

\*

( )  
CT

Case- Series

(0-4 )

(% / )

% % (P< / )  
% %

*CT Scan*

( )

( )

( )

( )

:0 :  
 mm : I ( )  
 mm : II ( )  
 mm : III  
 . : IV

%

Case-Series

(Confidence Interval=C.I)

Chi-square

Odd's ratio

Osteoinduction

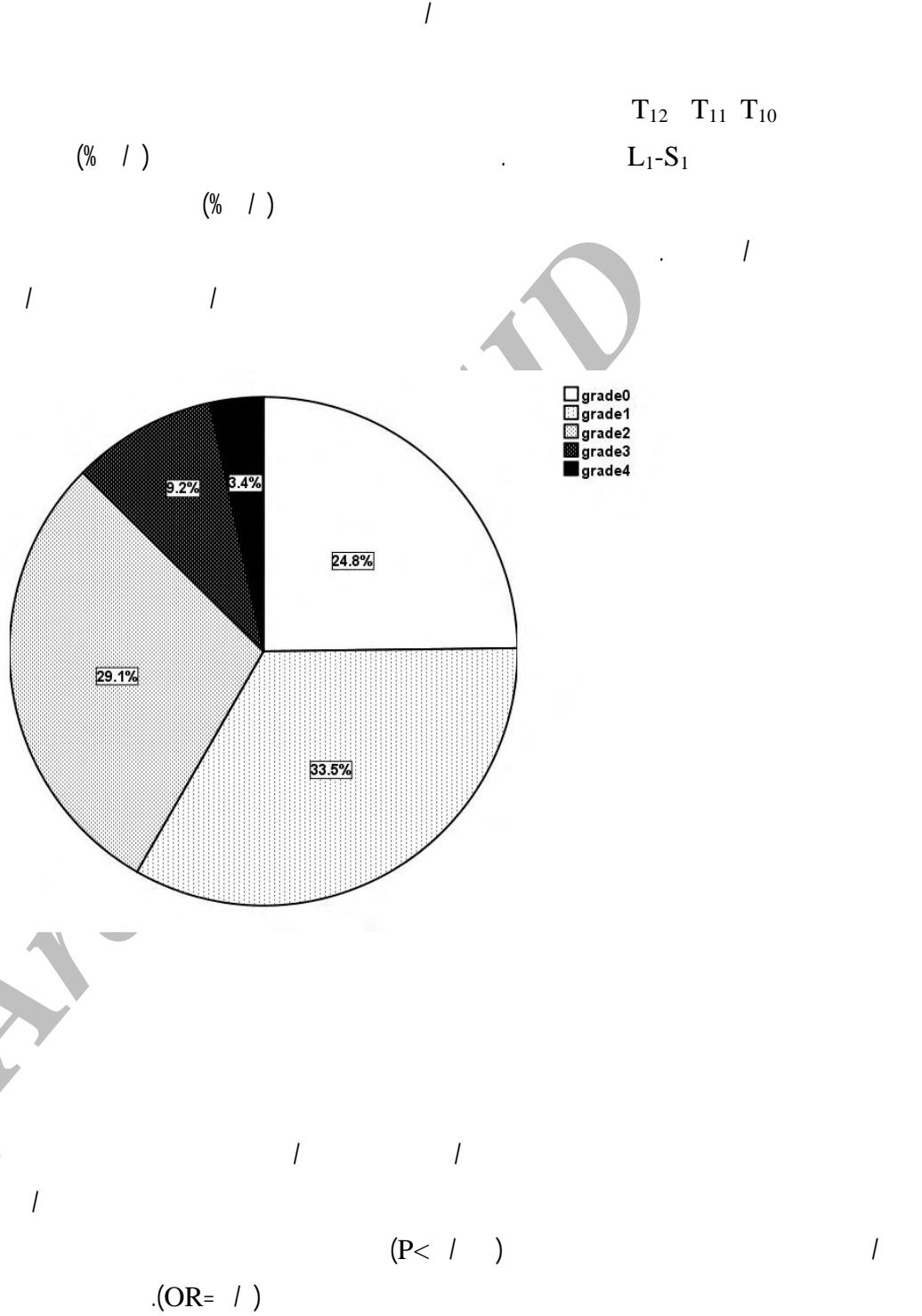
(% / ) ( % / )

/

C Arm

(% / )

(% / )



(P< / ) (OR= / )

**O.R**

		(%)	(%)
		( / )	( / )
P<	/	( / )	( / )
/	P</	( / )	( / )
		( / )	( / )
	P</	( / )	( / )

( % )

% /

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(%)	(%)	(%)	(%)
( )	( )	( )	( )

( % / )

/ ± /

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## **REFERENCES**

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1. Youkilis AS, Quin DJ, McGillicuddy JE, Papadopoulos SM. Stereotactic Navigation for Placement of Pedicle Screws in the Thoracic Spine. *Neurosurgery* 2001; 48(4): 771-9.
2. Davne SH, Myers DL. Complications of lumbar spinal fusion with transpedicular instrumentation. *Spine* 1992; 17(Suppl6): S184-9.
3. West JL 3rd, Ogilvie JW, Bradford DS. Complications of the variable screw plate pedicle screw fixation. *Spine* 1991; 16: 576-9.
4. Lonstein JE, Denis F, Perra JH, Pinto MR, Smith MD, Winter RB. Complications associated with pedicle screws. *J Bone Joint Surg Am* 1999; 81: 1519-28.
5. Vanichkachorn JS, Vaccaro AR, Cohen MJ, Cotler JM. Potential large vessel injury during thoracolumbar pedicle screw removal. A case report. *Spine* 1997; 22: 110-3.
6. Bransford R, Bellabarba C, Thompson JH, Henley MB, Mirza SK, Chapman JR. The safety of fluoroscopically-assisted thoracic pedicle screw instrumentation for spine trauma. *J Trauma* 2006; 60(5): 1047-52.
7. Choma TJ, Denis F, Lonstein JE, Perra JH, Schwender JD, Garvey TA, et al. Stepwise methodology for plain radiographic assessment of pedicle screw placement: a comparison with computed tomography. *Spinal Disord Tech* 2006; 19(8): 547-53.
8. Liau KM, Yusof MI, Abdullah MS, Abdullah S, Yusof AH. Computed tomographic morphometry of thoracic pedicles: safety margin of transpedicular screw fixation in malaysian malay population. *Spine* 2006; 31(16): 545-50.
9. Fisher CG, Sahajpal V, Keynan O, Boyd M, Graeb D, Bailey C, et al. Accuracy and safety of pedicle screw fixation in thoracic spine trauma. *J Neurosurg Spine* 2006; 5(6): 520-6.

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10. Karim A, Mukherjee D, Gonzalez-Cruz J, Ogden A, Smith D, Nanda A. Accuracy of pedicle screw placement for lumbar fusion using anatomic landmarks versus open laminectomy: a comparison of two surgical techniques in cadaveric specimens. Neurosurgery 2006;59 (Suppl 1): ONS 13-9.

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