

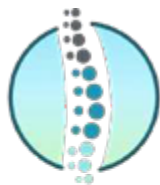
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CERVICAL SPINE INSTITUTE

DIRECT COMPARISON OF OUTCOMES AFTER ANTERIOR CERVICAL DECOMPRESSION, INSTRUMENTATION AND FUSION

(An "apples-to-apples" comparison)

	<u>Pooled Literature</u>	<u>Wascher</u>
Hematoma	0.8-1.0%	0.32%
Any infection	0.3-1.2%	0.16%
CSF leak	0.5-0.8%	0.05%
Transient/new neurologic deficit	0.5%	0.05%
Graft or hardware failure	2.1-2.2%	0.3%
Transient dysphagia	5.3-7.9%	0.4%
Chronic dysphagia	Up to 10.1%	0.3%
Hoarseness (RLN injury)	1.3-3.4%	0.5%
Horner's syndrome	0.4-0.5%	0%
Vascular injury	0.4%	0%
Esophageal injury/perforation	0.2-0.5%	0%
Stroke within 30 days	0.1-0.13%	0.05%
Symptomatic pseudoarthrosis	2.0-5.8%	0.3%
<u>OVERALL COMPLICATION RATE</u>	<u>13.2-19.3%</u>	<u>2.43%</u>

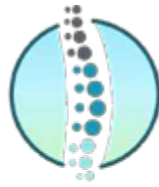


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1. Yee TJ, et al. Complications of anterior cervical spine surgery: a systemic review. *J Spine Surg* 2020; Mar; 6 (1): 302-22.
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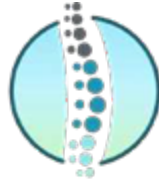
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DIRECT COMPARISON OF OUTCOMES AFTER POSTERIOR CERVICAL DECOMPRESSION, INSTRUMENTATION AND FUSION

(An "apples-to-apples" comparison)

	<u>Pooled Literature</u>	<u>Wascher</u>
Surgical site infection	2-10%	0.6%
Hematoma/ seroma	1-2%	0.8%
CSF leak	0.8-3.9%	0.1%
Pseudoarthrosis	1-21%	0.7%
Junctional failure	6-14%	0.4%
Death	<1%	0%
Temporary weakness	2-7 %	1.2%
Permanent weakness	0.2-2%	0%
Prolonged incisional pain (> 3 months)	5-20%	0.1%
Paralysis	<1%	0%
Perioperative stroke	0.5%	0.1%
Pulmonary embolism	0.3-1.0%	0.2%
Pneumonia	1-3%	0.3%
Hardware failure	4-25%	0.7 %
Hardware failure requiring revision	1-6%	0.2%
OVERALL COMPLICATION RATE	15-25%	5.4 %

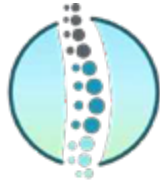


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References:

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2. Youssef JA, et al. Outcomes of posterior cervical fusion and decompression. *Spine J* 2019;19: 1714-1719.
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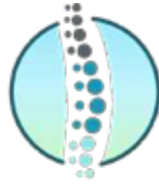


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**DIRECT COMPARISON OF OUTCOMES AFTER ANTERIOR CERVICAL CORPECTOMY(IES),
INSTRUMENTATION AND FUSION**
(An "apples-to-apples" comparison)

	<u>Pooled Literature</u>	<u>Wascher</u>
Hematoma	1%	0.3%
Superficial infection	0.5-1.0%	0.1%
Deep infection requiring drainage	0.5%	0%
CSF leak	0.5-1.0%	0.3%
Weakness; new neurologic deficit	0.5-3.0%	0%
Temporary dysphagia	5-15%	0.9%
Permanent dysphagia	1-3%	0.1%
Transient hoarseness (RLN palsy)	1-3.5%	1.2%
Permanent hoarseness (RLN palsy)	1%	0%
Vascular injury	0.4%	0%
Esophageal injury	0.2-0.5%	0%
Tracheal injury	0.1%	0%
Symptomatic pseudoarthrosis	2-10%	0.3%
Hardware failure requiring revision	1-4%	0.5%
OVERALL COMPLICATION RATE	11-21%	3.7%



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1. Yee TJ, et al. Complications of anterior cervical spine surgery: a systemic review. *J Spine Surg* 2020; Mar; 6 (1): 302-322.
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