ANTERIOR CERVICAL DECOMPRESSION
+ FUSION, + – INSTRUMENTATION
09/1992 – 12/2021

1 level, no instrumentation	140
1 level, ACD anterior plate	703
2 level, ACD anterior plate	464
3 level, ACD anterior plate	197
4 level, ACD anterior plate	15
2 separate levels and anterior plate	1
Revision ACD and anterior plate	120
	1640

1 level corpectomy	278
2 level corpectomy	84
3 level corpectomy	7
4 level corpectomy	2
Hybrid (corpectomy + 1 or 2 level ACD)	127
Hybrid (2 level corpectomy + level ACD)	9
Anterior-Posterior (includes ACDs and corpectomies)	263
Noncontiguous 2 level	1
	771

Total anterior patients: 1640 + 771 = 2411

	Literature Summary [1]	**NeuroSpine Center (Dr. Wascher 1640 cases)**	
seroma requiring drainage		0.1%	1
hematoma	0.2 - 0.9%	0.4 %	6
superficial infection, reaction to Steri-Strips	0.1 - 2%	0.1 %	2
deep infection	<1%	0.1 %	1
CSF leak		0.1 %	1
incidental durotomy		0.1 %	1
transient UE weakness		0 %	0
permanent UE/LE weakness		0 %	0
graft extrusion	0.4 - 4.6 %	0 %	0
transient dysphagia (>6 weeks)		0.4 %	7
permanent dysphagia (>12 weeks)		0.2 %	3 (mild)
transient hoarseness	11%	2.4%	39
permanent hoarseness (>12 weeks)	4 %	0.4 %	7
vascular injury	0 %		0
esophageal or tracheal injury		0 %	0
stroke within 30 days	<1%	0.1%	1
symptomatic pseudoarthrosis (mild)		0.3 %	5
symptomatic pseudoarthrosis req. revision	2 - 20%	0.3 %	4
asymptomatic hardware failure (broken screw)		0.4%	6
improvement		99.9%	1561
permanent complication rate requiring repeat surgery	at least 7.7%	0.7%	12

[1] Tew, J M, Mayfield F H: Complications of Surgery of the Anterior Cervical Spine. Clinical Neurosurgery 23: 424-34, 1976.

ANTERIOR CERVICAL CORPECTOMIES
09/1992 – 12/2021

	Mayr et al[1] (5 surgeons)		NeuroSpine Center (Dr. Wascher)	
Single level (one body + 2 discs)	133		278	
Two level	96		84	
Three level	31		7	
Four level	1		2	
Hybrid (corpectomy +disc)			127	
Hybrid (2-level corpectomy + discectomy)			9	
Anterior-posterior			147	
Noncontiguous 2-level corpectomy			1	
	261		655	
Hematoma	0	0%	3	0.5%
Superficial infection (no drainage)	0	0%	1	0.1%
Deep infection requiring surgery	0	0%	0	0%
CSF leak	0	0%	0	0%
Incidental durotomy	0	0%	2	0.3%
Transient upper extremity weakness	2	0.8%	3	0.5%
Permanent upper extremity/lower extremity weakness	0	0%	0	0%
Transient dysphagia (> 6 weeks)	35	13.4%	6	0.9%
Respiratory failure requiring tracheostomy	?	?	1	0.1%
Permanent dysphagia (> 12 weeks)	7	2.7%	1	0.1%
Transient hoarseness	35	13.4%	8	1.2%
Permanent hoarseness	2	0.8%	0	0%
Vascular injury	0	0%	0	0%
Esophageal or tracheal injury	0	0%	0	0%
Asymptomatic pseudoarthrosis	33	12.6%	12	1.8%
Symptomatic pseudarthrosis	?	?	2	0.3%
Asymptomatic hardware failure	14	5.4%	12	1.8%
Symptomatic hardware failure requiring revision	2	0.8%	3	0.5%
Permanent complication rate	11	4.2%	5	0.8%
Improvement	259	99.2%	653	99.7%

Number of patients with previous anterior cervical surgery: 16 (2.5%)

[1]Mayr, Matthew T.; Subach, Brian R.; Corey, Christopher H.; Rodts, Gerald E.: and Hald, Regis W.; "Cervical spine stenosis: outcomes after anterior corpectomy, allograft reconstruction and instrumentation." J Neurosurg (Spine 1) 96: 10-16, 2002

CERVICAL LAMINECTOMIES
WITH OR WITHOUT POSTERIOR FUSION/INSTRUMENTATION
09/1992 – 12/2021

TOTAL 834

Cervical Foraminotomy			26
Cervical Laminectomies + Foraminotomies			108
1 LEVEL	1		
2 LEVEL	12		
3 LEVEL	43		
4 LEVEL	35		
5 LEVEL	15		
6 LEVEL	2		
	108		
Cervical Laminectomies, Fusion, Instrumentation			700
1 LEVEL	68		
2 LEVEL	168		
3 LEVEL	228		
4 LEVEL	211		
5 LEVEL	18		
6- 6+ LEVEL	7		
	700	Total:	834

Complications (640 cases)

		NeuroSpine Center
1) Infection requiring revision	6	0.7%
2) Hematoma	0	0%
3) CSF Leak/Pseudomeningocele	0	0%
4) Glacial instability	0	0%
5) Death	0	0%
6) Temporary weakness or numbness	11	1.3%
7) Permanent nerve root injury	0	0%
8) Seroma	6	0.7%
9) Wound dehiscence	4	0.5%
10) Pain > 3 months	1	0.1%
11) Perioperative ischemic stroke	1	0.1%
12) Pulmonary embolism	2	0.2%
13) Pneumonia	3	0.4%
14) Asymptomatic broken hardware	5	0.6%
Complication rate requiring repeat surgery	14	1.7%