

Scoliosis Research Society Morbidity and Mortality Committee Summary Report for 2005

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2006 SRS Morbidity and Mortality Committee:

Jeffrey D. Coe, MD, Chair
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Vincent Arlet, MD
William F. Donaldson, MD
Reinhard Zeller, MD
Ram Mudiya, MD
Joseph H. Perra, MD
Jeffrey H. Owen, Ph.D.

12 Year history of SRS Morbidity and Mortality Data Submission:

Year	SRS Membership	Number Submitting Data	Percent Submitting Data	Cases Submitted
1994	289	178	61.6%	?
1995	409	191	46.7%	~10,000
1996	418	209	50.0%	~16,000
1997	423	209	49.4%	15189
1998	444	153	34.5%	12664
1999	459	222	48.4%	16035
2000	601	422	70.2%	?
2001	626	310?/145?	?	7003
2002	627	408	65.1%	30847
2003	621	362	58.3%	20316
2004	734	296	40.3%	20776
2005	795	349	43.9%	28578
2006	876	149	17.0%	6091
Note: 2006 data as of 8/2006				

Summary of 2005 Compiled Data:

2005 Data by Diagnosis (Compared to 2003 & 2004):

Case Distribution by Diagnosis	Number	% - 2005	% - 2004	% - 2003
Degenerative Spinal Disorders	13121	45.9%	47.8%	42.4%
Fracture	1902	6.7%	6.2%	6.7%
Kyphosis	884	3.1%	3.2%	3.3%
Other	3382	11.8%	9.9%	12.3%
Scoliosis	6256	21.9%	23.7%	24.5%
Spondylolisthesis	3033	10.6%	9.2%	10.8%
Total	28578			

2005 Data by Cause of Death:

2004 Fatal Complication by Cause	Number
Respiratory	23
Cardiac	15
Other	15
Sepsis	11
Pulmonary embolism	10
Intraoperative blood loss	3
Anesthetic	1
Air embolism	0
Total Deaths - 2004	78
Overall Mortality Rate - 2005	0.27%
Overall Mortality Rate - 2004	0.21%
Overall Mortality Rate - 2003	0.18%

2005 Non Fatal Complications by Diagnosis:

Non Fatal Complication by Diagnosis	Number of Complications	Rate 2006	Rate 2005	Rate 2004
Degenerative Spinal Disorders	681	5.2%	5.6%	5.0%
Fracture	107	5.6%	4.5%	3.8%
Kyphosis	157	17.8%	15.1%	16.4%
Other	267	7.9%	6.9%	7.5%
Scoliosis	597	9.5%	8.9%	10.8%
Spondylolisthesis	259	8.5%	7.9%	6.3%
Total/Overall	2068	7.2%	7.0%	7.0%

2005 Non Fatal Complications by Type:

Non-Fatal Complications by Type	Number	Incidence
Infection	600	2.1%
Deep	365	1.3%
Superficial	235	0.8%
Dural tear	465	1.6%
Neurologic	174	0.6%
Spinal	105	0.4%
Brachial Plexus	13	0.0%
Peripheral	56	0.2%
Implant Related	172	0.6%
Malposition	71	0.2%
Migration	101	0.4%
Other Pulmonary	127	0.4%
Epidural hematoma	61	0.2%
Non fatal hematological	53	0.2%
Pulmonary embolism	25	0.1%
SIADH	19	0.1%
Visual Acuity Loss	8	0.03%
Air Embolism	1	0.00%
Other	526	1.8%
Total/Overall - 2005	2231	--
Total/Overall - 2004	1463	--

2005 Reported Infections by Diagnosis (Compared to 2003 & 2004):

Infections per Diagnosis	Rate - 2005	Rate - 2004	Rate - 2003
Degenerative Spinal Disorders	1.3%	1.6%	1.0%
Fracture	1.6%	1.9%	1.0%
Kyphosis	5.7%	4.4%	4.3%
Other	2.7%	2.1%	2.7%
Scoliosis	2.8%	2.5%	2.1%
Spondylolisthesis	2.4%	1.7%	1.6%
Overall Infection Rate	2.1%	2.0%	1.6%

2005 Reported Neurologic deficits by Type (Compared to 2003 & 2004):

Neurological Deficit	Number	Rate - 2005	Rate - 2004	Rate - 2003
Complete cord	20	0.07%	0.04%	0.1%
Incomplete cord	66	0.2%	0.2%	0.2%
Nerve root	171	0.6%	0.6%	0.8%
Cauda equina	17	0.1%	0.1%	--
Total/Overall	274	1.0%	0.9%	1.1%

2005 Neurological deficits by Diagnosis (Compared to 2003 & 2004):

Neurological Deficit by Diagnosis	Number	Rate - 2005	Rate - 2004	Rate - 2003
Degenerative Spinal Disorders	69	0.5%	0.5%	0.7%
Fracture	19	1.0%	0.3%	0.5%
Kyphosis	24	2.7%	4.0%	4.4%
Other	37	1.1%	0.7%	0.9%
Scoliosis	78	1.2%	1.2%	1.4%
Spondylolisthesis	47	1.5%	1.4%	1.3%
Total	274	1.0%	0.9%	1.1%

2005 Neurological Deficits with Scoliosis as Diagnosis (Compared to 2003 & 2004):

Neurological Deficit with Scoliosis as Dx	Number	Rate - 2005	Rate- 2004	Rate - 2003
Complete cord	7	0.1%	0.1%	0.1%
Incomplete cord	28	0.4%	0.3%	0.5%
Nerve root	42	0.7%	0.8%	0.8%
Cauda Equina	1	0.0%	0.0%	--
Total/Overall	78	1.2%	1.2%	1.4%

2005 Neurological Deficits by Scoliosis Type (Compared to 2003 & 2004):

Diagnosis	Complete Cord	Incomplete Cord	Nerve Root	Cauda Equina	Total	2005 Neuro Comp Rate	2004 Neuro Comp Rate	2003 Neuro Comp Rate
Congenital	1	4	5	0	10	2.1%	2.6%	2.3%
Degenerative	0	2	12	0	14	2.1%	2.8%	1.2%
Idiopathic	3	12	16	0	31	0.9%	1.0%	1.1%
Neuromuscular	3	7	6	1	17	1.4%	0.8%	2.0%
Other	0	3	3	0	6	1.2%	0.6%	2.0%
Total/Overall	7	28	42	1	78	1.2%	1.2%	1.4%