

Appendix 1

Patient groups profile on admission (according to literature data)

Study	Groups	Patients, n	Indicator on admission			Indicators after surgery		Surgical complications
			Cobb angle, degrees	AVBCR, %	Spinal canal stenosis, %	Cobb angle, degrees	AVBCR, %	
Wild et al. [19]	MIS group	10	–	–	–	–	–	0
	Open group	11	–	–	–	–	–	0
Hwang et al. [20]	Non-fusion group	39	20.8 ± 6.4	–	39.2 ± 19.3	8.2 ± 4.8	–	Screw migration – 7, screw breakage – 4
Lakshmanan et al. [21]	–	26	19.6 ± 8.3	–	–	6.3 ± 8.9	–	–
Lee et al. [22]	Group 1–2	26	19.0 ± 7.3	35.7 ± 11.9	–	12.5 ± 8.0	10.6 ± 8	Screw breakage – 1
Liao et al. [23]	–	14	22.6 ± 5.9	50.4 ± 14.0	51.4 ± 13.3	3.1 ± 3.2	13.1 ± 5.4	–
Ni et al. [24]	–	36	18.7 ± 7.1	42.2 ± 5.8	–	3.6 ± 6.5	8.3 ± 4.2	Superficial suppuration – 1, screw migration – 1
Blondel et al. [25]	Group 1	22	13.0	–	–	3.2	–	0
	Group 2	7	12.1	–	–	2.6	–	0
Jiang et al. [26]	Percutaneous group	31	8.3 ± 5.2	33.4 ± 12.4	–	-1.7 ± 4.0	15.8 ± 9.5	0

Kim et al. [27]	–	9	–	45.6 ± 6.8	55.0 ± 12.0	–	–	0
Li et al. [28]	SSPI group	30	16.5 ± 9.1	–	–	7.1 ± 6.9	–	Screw breakage – 1
Wang et al. [29]	–	26	15.0	–	–	–	–	0
Zhang et al. [30]	–	25	17.1 ± 7.1	38.0 ± 10.5	25.0 ± 5.8	4.2 ± 3.0	2.9 ± 4.3	0
Chou et al. [31]	Non-fusion group	22	16.4 ± 6.6	–	–	1.5 ± 5.3	–	Screw breakage – 3
Proietti et al. [32]	–	60	–	–	–	–	–	Superficial suppuration – 1, implant suppuration – 1, screw breakage – 1
Takami et al. [33]	–	21	8.5	–	–	-4.2	–	Screw migration – 1
Vanek et al. [34]	MIS group	18	9.3 ± 10.1	–	–	0.3 ± 9.7	–	0
Zhao et al. [35]	PFFV group	32	19.8 ± 7.3	37.3 ± 10.8	–	7.1 ± 3.3	6.3 ± 6.8	0
	TSSF group	35	20.5 ± 6.1	39.4 ± 10.1	–	8.0 ± 3.6	8.0 ± 8.3	Superficial suppuration – 1, screw breakage – 2
Fu et al. [36]	OPSF-4 group	14	9.2 ± 5.9	31.2 ± 11.3	–	–	–	0
	OPSF-6 group	41	12.1 ± 6.3	33.9 ± 13.6	–	–	–	0
	PPSF-4 group	16	14.3 ± 6.9	32.7 ± 10.8	–	–	–	0

	PPSF-6 group	13	9.9 ± 4.0	31.0 ± 10.9	–	–	–	Screw migration – 1
Lin et al. [37]	Group A	20	22.3 ± 6.6	53.4 ± 12.5	52.7 ± 12.5	5.6 ± 4.8	14.3 ± 9.4	0
	Group B	31	20.9 ± 9.2	49.1 ± 11.2	48.1 ± 16.5	3.7 ± 7.8	13.1 ± 9.5	Fixation system failure without specification – 1
	Group C	20	21.7 ± 6.7	49.7 ± 14.8	53.5 ± 14.0	2.4 ± 5.1	13.4 ± 7.5	Fixation system failure without specification – 2
Fan et al. [38]	PPSF group	63	20.1 ± 8.3	–	–	6.4 ± 7.1	–	Superficial suppuration – 1
Mayer et al. [39]	POST-I group	22	11.1 ± 6.5	–	–	–	–	0
Zhao et al. [40]	–	38	18.7 ± 8.6	62.0 ± 6.0	–	5.8 ± 6.8	5.0 ± 2.0	Superficial suppuration – 1
Oh and Seo. [41]	–	30	9.1 ± 11.9	28.1 ± 11.2	–	0.8 ± 14.7	8.3 ± 7.6	Screw breakage – 2
Trungu et al. [42]	ISG group	73	5.6	–	–	1.8	–	Rod dislocation – 1
	Nisg group	71	4.3	–	–	0.7	–	Superficial suppuration – 1
Yang et al. [43]	Group A	30	24.0 ± 7.1	37.7 ± 8.3	–	–	–	0
	Group B	30	26.2 ± 6.2	32.8 ± 8.4	–	–	–	0
Yang et al. [44]	MIS group	36	15.7 ± 7.4	36.4 ± 14.3	–	6.0 ± 2.5	13.5 ± 16.8	0

	OPPF group	36	16.5 ± 6.5	37.5 ± 12.9	–	5.4 ± 2.6	11.4 ± 10.7	0
Alkosha et al. [45]	TLICS 3 PSF group	12	22.0 ± 3.0	–	–	17.0 ± 2.0	–	0
	TLICS 4 PSF group	18	21.0 ± 3.0	–	–	17.0 ± 2.0	–	0
	TLICS 5 PSF group	12	25.0 ± 2.0	–	–	18.0 ± 2.0	–	0
Collinet et al. [46]	–	29	8.5 ± 4.0	23.0 ± 10.0	–	5.4 ± 4.8	14.0 ± 10.0	0
Kocis et al. [47]	OPSF group	23	12.1	–	–	-3.8	–	0
	PPSF group	23	10.9	–	–	-4.5	–	0
Shao et al. [48]	–	22	16.3	40.5 ± 7.8	–	3.7	13.1 ± 6.0	Superficial suppuration – 1, screw migration – 1
Zou et al. [49]	PPS group	29	–	–	–	–	–	0
Cheng et al. [50]	–	12	14.4 ± 6.7	27.6 ± 9.4	–	6.5 ± 4.3	0.5 ± 8.1	Implant suppuration – 1, rod breakage – 1
Hoffman et al. [51]	CG group	44	–	–	–	–	–	–
	IG group	33	–	–	–	–	–	–

Perna et al. [52]	Group A	81	11.7 ± 5.6	–	–	8.1 ± 4.4	–	Superficial suppuration – 1, screw migration – 5, screw breakage – 3
Zhu et al. [53]	MIS-F group	39	–	32.2 ± 9.8	–	–	3.1 ± 6.6	0
	MIS-O group	43	–	29.2 ± 11.5	–	–	3.9 ± 6.6	0
	Open-C group	48	–	31.9 ± 10.3	–	–	2.9 ± 6.2	0