

Home vs Rehab: Factors That Influence Disposition After MIS Adult Spinal Deformity Surgery?

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Introduction

MIS correction for ASD may reduce the need the need for postoperative skilled nursing (SNF) or rehabilitation facility placement following surgery. The likelihood of requiring placement in a facility, rather than home disposition, may be influenced by a variety of factors. Additionally, the association of discharge location on outcomes and complication rates has not been elucidated in these patients. In this study, we aimed to define factors predicting disposition to SNF/rehab, and the rates of complications occurring in patients sent home vs. a facility.

Methods

Inclusion criteria: >18 yrs old, MIS as part of index surgery, location of discharge, and at least one of the following: PT>20, SVA>5cm, PI-LL>10, or lumbar scoliosis>20. Patients with 2 yr follow-up were included. Preoperative demographic and radiographic data, postop (<30 day) complications and HRQL were analyzed.

Table 1.

	OR	Upper	Lower	p
MIS	0.54	0.18	1.62	0.274
Age				0.043
<50	1.00			
50-70	1.95	0.61	6.26	0.26
>70	5.99	1.40	25.70	0.016
Stage	3.24	1.11	9.46	0.032
Total Levels Instrumented	0.93	0.81	1.06	0.28
Total LOS	1.08	0.97	1.21	0.151
Total OR Time (Hr)	1.11	0.96	1.29	0.163
Total EBL (50ccs)	1.01	0.99	1.03	0.575
Total Osteotomies	0.99	0.82	1.19	0.902
Preop Back Pain	1.05	0.86	1.29	0.616
Preop PT	1.11	1.03	1.19	0.007
Preop PI-LL	0.95	0.90	1.00	0.059
Preop SVA	1.01	1.00	1.02	0.09
Preop SS	0.98	0.94	1.03	0.421

Results

182 patients met inclusion criteria. 113 were discharged home (HOM) vs 69 to SNF/rehab (REH). Older patients (>50) were more likely to go to REH (p=0.043). Those >70 yrs were 6 times more likely to go to REH. No association was identified among radiographic parameters except preop pelvic tilt (OR = 1.11 to SNF/Rehab, p=0.009). Staged cases were more likely to d/c to REH (OR 3.24; CI:1.11, 9.46; p=0.032) otherwise there was no difference for levels treated, OR time, EBL, osteotomy or length of stay. Patients requiring REH had more complications (58% v 39.8%, p=0.017) including Major (19.5 v 42%; p=0.001), perioperative (14.2 v 31.9%; p=0,004) and infections (3.5 v 13%; p=0.016). REH patients had higher revision rates (19.5% v 33%; p=0.035). (Table 1) HRQOL measures were similar regardless of disposition.

Conclusions

Older patients and those undergoing staged MIS deformity correction, have a higher likelihood of postoperative disposition to rehab/SNF. Complications occurred more commonly in those patients requiring SNF/rehab after hospitalization.

Learning Objectives

By the conclusion of this session, participants should be able to 1) Describe the different patient populations that are discharged at different dispositions. 2) Discuss what preoperative and surgical factors that can affect discharge dispositions. 3) Identify preoperative and surgical factors that may increase likelihood of not being discharged home after ASD surgery.