

# SELF SLIDING GROWTH GUIDANCE FOR EARLY-ONSET SCOLIOSIS: CLINICAL AND RADIOLOGICAL RESULTS AFTER A MINIMUM OF FIVE YEARS (5-13) OF FOLLOW-UP

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# INTRODUCTION

**Self Sliding Growth Guidance (SSGG) technique was developed to allow growth during treatment of EOS and obviate the need for repeated lengthening procedures**

# PURPOSE

The aim of this study is to evaluate the clinical, radiologic results of SSGG both in pts who underwent final fusion and those who did not, with min 5 yrs f/up

# MATERIAL & METHODS

- 17 (10f, 7m) patients with EOS treated with SSGG were evaluated.
- The etiology of patients was idiopathic in 10, syndromic in 4 and NF in 3.
- Preop, early post-op and f/up radiographs were compared for coronal and sagittal cobb and lengthening of the trunk.
- All complication data were retrieved from hospital charts.
- SRS22 scores were used

# RESULTS

- Average age at the index surgery was 6.5 years (3-10)
- Mean f/up was 92 months (61-154)

	Preop		F/up
▪ MT	57°	→	21°
▪ TL/L	47°	→	16°
▪ TK	31°	→	35°
▪ LL	55°	→	57°

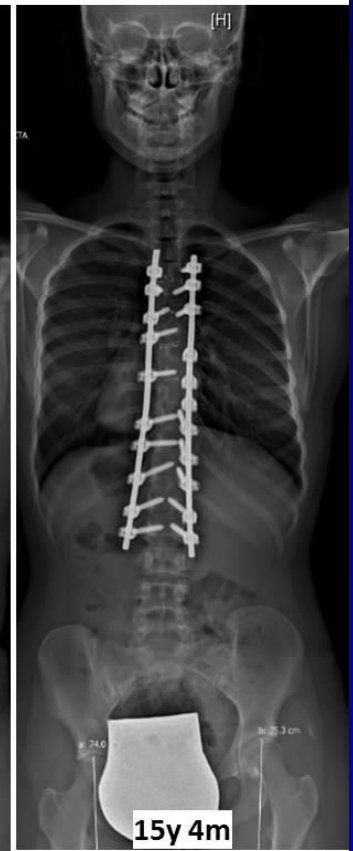
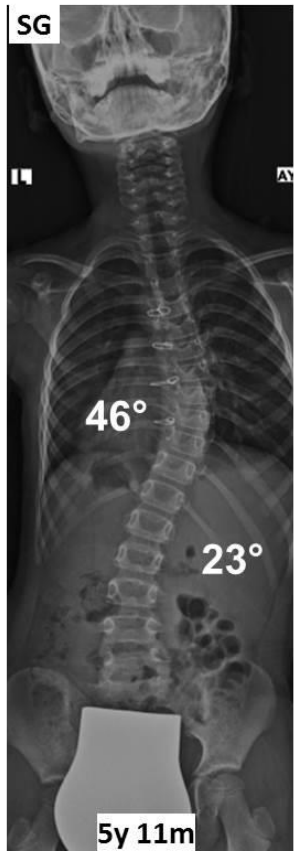
- Mean increase in T1-T12 length was 0.77mm and 1.04mm per month in T1-S1 height.

# RESULTS

- There were no rod breakages, PJK, neurologic impairment or infection.
- 1 syndromic patient had skin ulcer and autofusion.
- Among all the patients 2 screws were revised for loosening.
- Set screw dislodgement was found in 15(88%) of the patients during the sliding period.

# RESULTS

- In the last 6 years with use of special type pedicle screws there was no new set screw dislodgements.
- In 4 patients (23%) distal sliding foundation was converted to proximal due to correction loss during f/up.
- In 11 patients (64%) final fusion was performed after achieving ultimate spinal growth.
- SSGG prevented 98 planned lengthenings.
- Mean SRS22 scores were 4.07.





# CONCLUSION

**SSGG technique is a method of early-onset kyphoscoliosis treatment that can control the coronal, sagittal, and axial plane deformities due to multiple fixation points.**

# CONCLUSION

It enables a lesser number of scheduled repeated surgical procedures compared with the TGR technique. SSGG demonstrated low complication rates, avoided spontaneous fusion, prevented PJK and DJK since it is not a distraction based system

## P83- SELF SLIDING GROWTH GUIDANCE FOR EARLY-ONSET SCOLIOSIS ...

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