

## **Outcomes of Surgery for Adolescent Idiopathic Scoliosis (AIS)**

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**Background:** The majority of adolescent idiopathic scoliosis (AIS) cases can be treated conservatively. Surgical correction is an essential treatment for major structural curves or patients with risk of progression. Despite the evolution of different instrumentation systems, surgery for the AIS remains a major intervention.

**Objective:** To evaluate the outcome of surgery for idiopathic adolescent scoliosis.

**Design:** A Retrospective Study of Case Series.

**Setting:** Salmaniya Medical Complex, Orthopedics Department, Kingdom of Bahrain.

**Method:** Radiographic, surgical and clinical outcome of 39 patients with AIS between 2014 and 2018 were documented. Radiographic curve type, pre- and postoperative major Cobb angle were documented. In addition, a self-perceived outcome questionnaire was administered to the patients at 1-year follow-up.

**Result:** Thirty-three (85%) patients were females. The mean age was 15 years. More than 50% of the patients had Lenke type 1 or type 5 curve; 10 (25.6%) had type 1 and 11 (28.2%) had type 5. The average correction percentage was  $60\% \pm 11$ . Thirty-seven (95%) patients reported good to excellent satisfaction rate postoperatively using the SRS-24 questionnaire. The average hospital stay was 6.6 days. All the patients had posterior fusion only. One (2.6%) patient had fusion to the sacrum. The average number of levels fused was 11.

**Conclusion:** Results of surgery had been comparable to the international outcomes. We believe our findings largely reflect international trends and results.