DOES A DEDICATED SPINE DEFORMITY TEAM IMPROVE THE EFFICIENCY AND PERIOPERATIVE OUTCOME IN ADOLESCENT IDIOPATHIC SCOLIOSIS (AIS) SURGERY?

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INTRODUCTION:

Despite growing advances in the adolescent idiopathic surgery, complications become an inevitable challenge.

The concept of a dedicated team has been described and recommended with growing evidence in order to offer standardised high-level care and improve cost effectiveness.¹⁻³

METHODS:

We retrospectively analysed the data of 100 AIS patients treated by a dedicated spine deformity team between September 2019 until June 2020. Throughout this period our institution utilised a dedicated team.

RESULTS:

All patients had undergone deformity correction and posterior spinal fusion surgery. The mean number of fusion levels was 11.4 ± 2.1 . The mean major Cobb angle from 63.5 was corrected ± 17.2° preoperatively to $24.0 \pm 10.9^{\circ}$ with a mean correction rate of $63.2 \pm 10.6\%$. The mean surgery time was 105.6 ± 24.8 mins, the mean intraoperative blood loss was $686.3 \pm$ 359.6 mL, and the mean length of hospital stay was 3.9 ± 0.7 days. One patient (1.0%) had allogenic blood transfusion. Perioperative complications occurred in 1 patient (1.0%) with superficial surgical site infection as a minor complication.

DISCUSSIONS

The results of this study have shown that a dedicated spine deformity team leads to improved intraoperative efficiency and posterior perioperative outcomes of AIS. correction surgery The for implementation of a dedicated deformity team in our center has enhanced

communication and increased the team familiarity to this complex surgery.

CONCLUSION:

The usage of a dedicated team for AIS corrective surgery resulted in acceptable correction of scoliosis with a short surgery time, short total time in operation theatre, low intra operative blood loss, short length of hospital stays and low complication rate. The long-term safety and efficiency of a dedicated team should be evaluated with further follow up and a larger cohort.

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