Does the Number of Surgeons in Spine Surgery Matter? A Meta-Analysis

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INTRODUCTION:

In complex surgeries such as spine surgery, focusing on immediate outcomes is vital. The inclusion of two surgeons is considered beneficial. In fact, studies indicate advantages such as reduced operation time and blood loss. Another observed decreased patient morbidity with a dual-surgeon approach, attributed to shorter operative times and reduced intra-operative blood losses. Therefore, this meta-analysis will assess the benefits of a having two surgeons compared to one surgeon during spine surgeries.

METHODS:

PubMed, Cochrane, and Google Scholar (page 1-20) were searched till January 2024. The clinical outcomes evaluated were the incidence of adverse events, the rate of transfusion, reoperation, and surgery-related parameters such as operative room time, length of stay (LOS), and estimated blood loss (EBL). RESULTS:

A greater rate of complications was seen in patients operated upon by one surgeon (p=0.05). Furthermore, operative room time, and LOS were reduced in the dual surgeon scenario (p<0.0001). No statistically significant difference was shown in the remaining analyzed outcomes.

DISCUSSION AND CONCLUSION:

The presence of two surgeons in the OR was shown to reduce complications, operative room time, and LOS. Therefore, it is recommended to shift more towards a dual-surgeon approach in order to improve the outcomes of spine surgery.

