

# Does shorter operating time improve length of stay in patients undergoing laparoscopic sleeve gastrectomy?

Authors: Hock Ping Cheah, Kenneth Wong

Institution: Gosford Private Hospital, NSW Australia

## Introduction

Length of stay (LOS) after laparoscopic sleeve gastrectomy (LSG) can be influenced by many factors including age, body mass index (BMI) and gender. The aim of this study is to analyse the correlation between operating times (OT) and length of stay after LSG

## Materials and methods

Data from a prospectively collected database of patients undergoing LSG under a single surgeon from January 2013 to June 2023 was analysed. Patients who underwent concurrent operations (cholecystectomy, adhesiolysis, hiatus hernia repair) were excluded. Patients were divided into 2 groups: OT under 60 minutes and OT over 60 minutes. Patient demographics, LOS, 30-day readmission, unplanned return to theatres, complications and mortality were further analysed.

## Results

Results Of the 3090 patients included in this study, 1812 had OT 60 minutes or under and 1278 had OT >60 minutes. LOS was significantly lower in the OT < 60 minutes group (1.21 vs 1.55 days.  $p = 0.0001$ ). Patients requiring LOS >1 day were also higher in the OT >60 minutes group (47.81% vs 18.88%.  $p = 0.0001$ ). The 30-day readmission rate and complications were equal in both groups.

Group	N	Average LOS	% LOS >1
<60 minutes	1812	1.21	18.88
>60 minutes	1278	1.55	47.81
	3090	1.35	30.93

## Discussion / Conclusion

Shorter OT can reduce exposure of patients to nausea-inducing anaesthetic agents and reduce the average LOS in patients undergoing LSG. This can have significant implications for the hospital and patients.