

36th World Cancer Conference & 3rd Edition of International Conference on **Colorectal Cancer**

October 11-13, 2018 Zurich, Switzerland

Robotic total meso-rectal excision for rectal cancer: A systematic review following the publication of ROLARR trial

Bhatti M I, Sokker A, Jones K, Baig M K, Sains P and Sajid M S
Queen Elizabeth Hospital, UK

Aim: The objective of this article is to compare outcomes in patients undergoing rectal resection by robotic surgery (RS) versus conventional laparoscopic surgery (CLS).

Methods: The data retrieved from published all types of comparative trials in patients undergoing rectal resection by RS or CLS was analysed using the principles of meta-analysis. The summated outcome of continuous variables was expressed as standardized mean difference (SMD) and dichotomous data was presented in odds ratio (OR).

Results: One RCT (ROLARR trial) and 10 other comparative studies measuring the non-oncological and oncological outcomes following RS versus CLS were included in this review. In the random effects model analysis using the statistical software Review Manager 5.3, the RS was associated with longer operation time (SMD, 0.46; 95% CI, 0.25, 0.67; $z=4.33$; $P=0.0001$), early passage of first flatus ($P=0.002$), lower risk of conversion ($P=0.0001$) and shorter hospitalization ($P=0.004$). The statistical equivalence was seen between RS and CLS for non-oncological variables like blood loss, morbidity, mortality and re-operation risk. The oncological variables such as recurrence ($P=0.96$), number of harvested nodes ($P=0.84$) and positive circumferential resection margin risk ($P=0.84$) were also comparable in both groups. The length of distal resection margins was also similar in both groups.

Conclusion: RS for rectal resection is feasible and oncologically safe but failed to demonstrate any superiority over CLS. These findings are consistent with findings of ROLARR trial except the reduced conversion rate in RS group.

mibdoc@aol.com