Natural Orifice specimen extraction for laparoscopic colorectal surgery: first step towards scarless surgery

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INTRODUCTION

With improvements in laparoscopic techniques, the procedure of Natural Orifice Specimen Extraction (NOSE) has been applied in colorectal surgery to minimise the length of abdominal scar and maximise the benefits of minimal access technique.

METHODS

Between May 2008 and March 2014, in 35 patients undergoing laparoscopic colorectal resections, the specimen was retrieved through natural orifice utilising two different extraction approaches: transvaginal or transanal. The anastomoses were fashioned using an intracorporeal purse string or a hand sewn coloanal technique. Prospective database was maintained to evaluate the outcomes related to the specimen extraction, such as operative time, length of hospital stay (LOS) and complications.

RESULTS

The approach of NOSE during laparoscopic colorectal surgery was used in 35 patients in both benign and malignant pathologies through 6 transvaginal and 29 transanal extractions. There were 13 male, median BMI was 26, with mean age of 59 years and the median LOS of 6 days. Two patients were re-operated in 30 days for small bowel injury and stomal prolapse.

CONCLUSION

NOSE for laparoscopic colorectal surgery can avoid the abdominal incision with good clinical outcomes and may be the first step toward scarless surgery (NOTES).