



## Invited Commentary

## Commentary on “Short-term efficacy of transvaginal specimen extraction for right colon cancer based on propensity score matching: A retrospective cohort study”



Whether the first transvaginal colon extraction was defined in 1996 [1], an increase in application of natural orifice specimen extraction surgery (NOSES) have been shown popularity in the last decade. NOSES provides excellent results for patient satisfaction without a reduction in quality of life as Li et al. mentioned [2]. Although the laparoscopy has great advantages such as avoiding large open incisions with decreasing blood loss, discomfort and pain [3], removing the specimen through the abdominal wall could cause similar complications which reduces the advantages of laparoscopy. Therefore NOSES is an option for extracting the specimen at intra-abdominal procedures, with higher patient satisfaction and more aesthetic appearance of the wall. The procedure may also be helpful for reduced post-operative pain and shorter hospital stay following surgery. However the method should be used by the surgeons having advanced laparoscopic skills for selected patient population who has low grade tumors.

The authors in the study were compared NOSES with conventional abdominal wall specimen extraction by propensity score matching 1:1, which is usually used for increasing the precision of the estimates with reducing bias [4] at retrospective studies. The gastrointestinal function recovery time and postoperative hospital stay were lower with patient satisfaction in the cosmetic point of view in the study. Statistically no significant difference between the groups was detected at disease free survival and overall survival. But using propensity score could have effect on the results in terms of non-matched cases. The authors have not given the details of non-matched group. That's why knowing the conditions of all patients can answer questions that come to mind including the effect without propensity score matching. Nevertheless study has a few recommendations about the issue that shouldn't be

ignored. Although the study was retrospective, the authors showed that the results of the technique were not different from the other procedure. An other one, the authors mentioned the critical and important points of this procedure as aseptic and tumor-free operation step by step. Also, as the procedure improves the quality of life, it should be considered in suitable patients.

In conclusion, this is a retrospective study with limited data for the promising surgical procedure that experienced laparoscopic surgeons could perform. It provides supportive evidence for larger prospective studies. It should be noted that oncological principles should never be avoided when planning these studies.

## References

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