

Colorectal Cancer 2018 & World Cancer 2018: Current situation and development of natural orifice specimen extraction surgery in colorectal cancer - Shan Muhammad - The 2nd Affiliated Hospital of Harbin Medical University, China

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Statement of the Problem: With the rapid development of economy and culture, patients' demand for the quality of life and post-surgical cosmetic effects are increasing. With the advancement of progress in science and technology as well as doctors' professional concept development, surgeons should maximize the quality of life of the patients when pursuing radical resection of the tumor(S).

Methodology & Theoretical Orientation: Natural orifice transluminal endoscopic operation or natural orifice transluminal endoscopic surgery (NOTES) is a new surgical technique for conducting procedures, such as, biopsy, organ resection and other curative procedures. NOTES is performed using soft endoscopic probe, which is the highest state of minimally invasive technique, and getting access through the natural orifice such as oral, gastrointestinal tract, vagina, bladder and so on, into the body cavity. However, NOTES currently face many challenging technical problems yet to be solved, such as, the complex surgical procedures, selection of proper operative approaches, lack of suitable instruments and devices, unclear exposure of surgical field and closure of the natural orifice incision and difficulties to generalize. These shortcomings of NOTES led to formulate the idea of NOSES (natural orifice

specimen extraction surgery) where laparoscopic instruments, TEM or endoscopy are used to perform intra-abdominal surgical procedures following specimen extraction through natural orifice (vagina or rectum). This technique has been categorized into ten sub-types.

Findings: In 2010, two cases were carried out using NOTES, one for carcinoma of the sigmoid and the other one for the upper rectal carcinoma. In both of those cases, all the surgical procedures were carried out transvaginal. Fortunately, both of the patients were disease free and the vaginal functions remained intact. However, more promising outcomes were found in favor of NOSES such as light postoperative pain, shorter postoperative exhaust time and hospital stay, when compared with NOTES. Moreover, there were only five small, port-scars on patient's abdomen, which underwent NOSES.

Conclusion & Significance: This report describes both curative and cosmetic benefits of one of the kinds of NOSES for colorectal tumor surgery conducted at the Second Affiliated Hospital of Harbin Medical University of China.