

Pushing the limits of minimally invasive colorectal surgery: Laparoscopic procedures with natural orifice specimen extraction (NOSE) and pure NOTES procedures - An illustrated review

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The feasibility, safety and advantages of laparoscopic colorectal procedures have been well documented and include shorter hospital stays, quicker return of bowel function, faster return to normal activity and better cosmesis. Currently even less invasive procedures for patients requiring colectomy are being reported in an attempt to reduce the size of abdominal wall incisions. Transvaginal and transanal natural orifice specimen extraction procedures or "NOSE procedures" are increasingly reported. The concept of NOSE goes back to the early nineties when Franklin et al. who described a fully laparoscopic colectomy with transanal specimen extraction and transanal anvil introduction. In this session, a review of current literature on will be given. Furthermore videos of NOSE procedures for right hemicolectomies using transvaginal specimen extraction and videos of sigmoid resections using transanal specimen extraction will be shown focussing on technical aspects of these procedures. Transanal and transvaginal NOSE-techniques may be considered as a bridge to natural orifice transluminal endoscopic surgery or "NOTES". However, the goal of pure NOTES is to perform intra-peritoneal operations without any abdominal incisions, avoiding wound related complications. Reports of NOTES and hybrid NOTES are being increasingly published. An overview of currently published data in colorectal surgery will be given. Only a few cases of colonic resections have been reported using a hybrid NOTES procedure. To our knowledge, a purely NOTES approach to colorectal resection, using transvaginal access in humans, has not been reported. A video is shown of a transvaginally pure NOTES sigmoid resection using a single port device.

Biography

Mathieu D'Hondt has completed his studies in general medicine at the Catholic University of Leuven, Belgium. At the age of 25 he started his residency in general surgery. He did an additional fellowship in digestive surgery and a fellowship in hepatobiliary and pancreatic surgery. He currently is member of staff at the department of digestive and HPB surgery at the Groeninge hospital Kortrijk, Belgium. He is author and co-author of more than 25 papers in reputed journals.

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