

## Editorial

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# Additional benefit of minimally invasive surgery to improve functional outcomes after radical hysterectomy

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 See the article "Minimally invasive surgery improves short-term outcomes of nerve-sparing radical hysterectomy in patients with cervical cancer: a propensity-matched analysis with open abdominal surgery" in volume 30, e27.

The pelvic floor dysfunction including voiding difficulty and colorectal dysfunction is well-known, inevitable complications of radical hysterectomy (RH). This is due to surgical injury to autonomic nerves which innervate the bladder and rectum, and is associated with decreased quality of life after surgery. The survival outcomes after RH for early cervical cancer is very excellent. So, the treatment outcomes of RH should be evaluated not only in oncologic outcomes but also in quality of life of patients. Nowadays, quality of life outcome is regarded as important as survival outcome especially in highly curable disease like early cervical cancer. To improve the functional outcomes after RH, nerve-sparing (NS) procedure has been developed [1] and evaluated in several studies [2,3]. However, only few study outcomes are available and the results of NS RH is inconsistent across the studies [2,3]. NS RH has been performed via open surgery because of the difficulty of the procedure. But, some advanced laparoscopic oncologic surgeons have performed minimally invasive (MIS) NS RH [4]. The outcomes of MIS NS RH compared with open NS RH has always been puzzling.

Bogani et al. [5] reported the outcomes of MIS NS RH compared with open NS RH in this issue. The immediate surgical outcomes of MIS NS RH were better compared with open NS RH like many previous studies comparing MIS and open surgery in gynecologic cancers [6-8]. MIS has better surgical outcomes with respect to estimated blood loss, transfusion requirement, and postoperative hospital stay compared with open surgery in gynecologic cancer treatment [6-8]. Operating time is inconsistent across the studies. Usually, operating time was longer for MIS. But, with the accumulation of experiences over hundreds of MIS cases, the operating time became similar with or even shorter than open surgery [6,7]. Importantly, this study showed one additional benefit of MIS RH upholding open RH which has never been reported in the literature [5]. This is an improved functional outcomes originated from the innate merits of MIS including better visualization and magnified views which enables more meticulous surgical procedure to nervous system. Decreased blood loss and clearer operative field of it also made the surgical procedure better. Because this study was a small, retrospective, matched comparison, this result should be confirmed by future randomized controlled trial [5]. To achieve the best outcomes using MIS, moreover, the surgeon should be skillful at the advanced laparoscopic surgical procedures.

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#### **Conflict of Interest**

No potential conflict of interest relevant to this article was reported.



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