



# Beyond the Incision: Vaginal Surgery Revisited Through vNOTES

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For decades, the vaginal approach to hysterectomy and adnexal surgery has been championed as the ultimate minimally invasive route, carrying the lowest risk of complications and the fastest recovery times. However, anatomical challenges, limited operative space, and poor visualization have often led surgeons to adopt conventional laparoscopy or robotic-assisted techniques (1). Today, we are witnessing a paradigm shift with the advent of vaginal Natural Orifice Transluminal Endoscopic Surgery (vNOTES). This innovative hybrid technique marries the cosmetic and recovery benefits of traditional vaginal surgery with the superior illumination, magnification, and precision of modern endoscopy (2).

The literature increasingly supports vNOTES as a highly effective and transformative modality in gynecology. Utilizing the vagina as the sole surgical corridor eliminates abdominal incisions. This translates directly into significantly reduced postoperative pain, shorter hospital stays, and an absolute absence of abdominal wound complications such as incisional hernias or surgical site infections (3). Furthermore, for patient populations where transabdominal laparoscopy poses significant risks and ergonomic challenges—such as those with a high body mass index (BMI)—vNOTES offers a safer, more accessible, and physiologically less demanding alternative (4).

Despite its undeniable clinical advantages, the widespread adoption of vNOTES is not without hurdles. The procedure demands a unique surgical skill set, requiring practitioners to adapt to an altered spatial orientation, a bottom-up anatomical perspective, and restricted instrument triangulation (5). Furthermore, complex cases involving severe endometriosis, dense pelvic adhesions, or significantly enlarged uteri still test the limits of this approach. To safely and effectively integrate vNOTES into routine clinical practice, structured training programs, advanced simulation models, and dedicated mentorship are paramount for the next generation of gynecologic surgeons.

vNOTES is not merely a surgical novelty; it represents

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the natural evolution of minimally invasive gynecology. As we continue to refine our endoscopic instruments and surgical techniques, embracing natural orifice surgery will allow us to push the boundaries of patient care, offering a truly scarless recovery. It is time for the gynecologic community to look beyond the abdominal wall and fully realize the potential of the pathways the body provided.

#### Competing Interests

None declared.

#### Ethical Issues

Not applicable.

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