


Case Report

An alternative approach to hymen conserving vaginal surgical techniques

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Introduction

The vaginal approach remains one of the easiest, safest and most convenient ways for surgical procedures in many gynaecological pathologies including polyps, cervical fibroids or pedunculated submucosal fibroids [1,2].

However, classical procedures are hindered by the disruption of the integrity of the hymen, an issue which remains controversial if not unfavorable in certain conservative geographical areas and societies. For such societies, virginity portrayed by an intact hymen is regarded as a symbol of sexual purity.

Surgical interventions requiring the use of medical instruments through the vaginal route are largely rejected in these countries, despite a lower risk of disrupting hymenal integrity. This creates a barrier to gynaecologists trying to offer optimal approaches for the diagnosis and treatment of several illnesses.

Alternative techniques that take into consideration patients' desires should be adequately tailored to the specific condition. Vaginal myomectomy is the treatment of choice for prolapsed, pedunculated submucosal fibroids. Vaginal myomectomy causes minimal associated morbidity but may disrupt hymenal integrity.

Possible techniques include hysteroscopic resection of peduncle, non-hysteroscopic cutting/twisting of peduncle, morcellation /vaporization of myomatous nodule and open/laparoscopic colpotomy [1,3].

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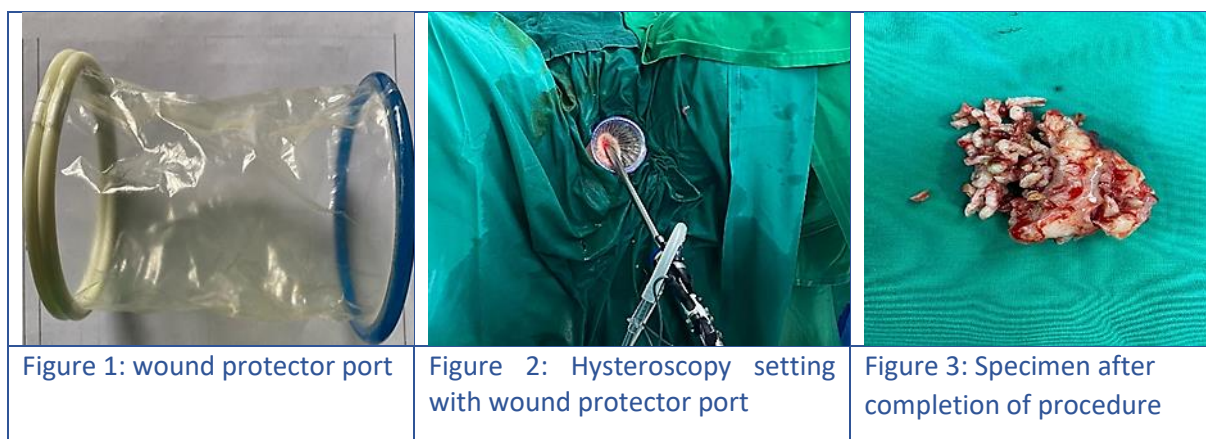
We report a case where an alternative novel approach was applied for hysteroscopic myomectomy in virgo intacta.

A 39-year-old lady with an intact hymen presented with recurrent episodes of abnormal uterine bleeding with intermenstrual bleeding. Preliminary investigations suggest mild iron deficiency anemia with unremarkable findings in trans-abdominal ultrasound scan (USS). However, trans-rectal sonography revealed a 4*4cm solid mass presenting as a pedunculated cervico-vaginal fibroid.

A hysteroscopic resection was considered as the optimum treatment method but the patient requested preservation of hymenal integrity. After patient counselling and optimization, trans-hymenal 3.5 mm rigid hysteroscopy was performed, and the diagnosis was confirmed as a pedunculated fibroid with a stalk attached to the endocervix.

The main challenge was preservation of hymenal integrity. Insertion of a 5.5mm hysteroscope and resectoscope with operating fluid pressure can traumatize an intact hymen. Fluid leaks through the introitus will reduce hysteroscopic vision during surgery in addition to a greater risk of hymenal injury when attempting specimen retrieval after the procedure.

To overcome these challenges, a wound protector port (Figure 1) was used which is a flexible, elastic membrane with malleable internal and external rings that causes minimal interference to tissue planes through which the insertion is performed. This is a complete self-restraining device widely used when retrieving specimens through a mini laparotomy. Once inserted, this creates adequate space to insert and operate while providing a sealing effect for fluids (Figure 2). Need for surgical assistance is also less.



Following completion of the procedure, retrieval of the internal ring is crucial as it can lead to hymenal tears. But making an incision to divide the internal ring eases this step without injuring the hymen.

Discussion

Preservation of hymenal integrity has an undeniable social value in certain circumstances in the vaginal surgical approach. In the management of cervico-vaginal fibroids, the hysteroscopic approach is optimal. Although many other alternative techniques exist, in the presence of skilled minimal-access surgeons hysteroscopic resections are safe and associated with shorter hospital stay and better clinical outcomes [2]. However, we encourage the adoption of these techniques in larger series to validate and reproduce the outcomes obtained.

References

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