

# Laparoscopic Radical Trachelectomy

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## ABSTRACT

**Introduction:** The standard treatment for patients with early-stage cervical cancer has been radical hysterectomy. However, for women interested in future fertility, radical trachelectomy is now considered a safe and feasible option. The use of minimally invasive surgical techniques to perform this procedure has recently been reported.

**Case Description:** We report the first case of a laparoscopic radical trachelectomy performed in a developing country. The patient is a nulligravid, 30-y-old female with stage IB1 adenocarcinoma of the cervix who desired future fertility. She underwent a laparoscopic radical trachelectomy and bilateral pelvic lymph node dissection. The operative time was 340 min, and the estimated blood loss was 100mL. There were no intraoperative or postoperative complications. The final pathology showed no evidence of residual disease, and all pelvic lymph nodes were negative. At 20 mo of follow-up, the patient is having regular menses but has not yet attempted to become pregnant. There is no evidence of recurrence.

**Conclusion:** Laparoscopic radical trachelectomy with pelvic lymphadenectomy in a young woman who desires future fertility may also be an alternative technique in the treatment of early cervical cancer in developing countries.

**Key Words:** Laparoscopic radical trachelectomy, Cervical cancer, Fertility sparing procedure.

## INTRODUCTION

The standard treatment for patients with early-stage cervical cancer (IA2 and IB1) has been radical hysterectomy. However, for women interested in future fertility, a radical trachelectomy is now considered a safe and feasible option. The abdominal radical trachelectomy was introduced by Smith and colleagues in 1997.<sup>1</sup> The procedure can be performed using a vaginal or an abdominal approach, with comparable oncologic outcomes. The abdominal approach allows surgeons who have not had extensive training in radical vaginal surgery to perform this procedure. Our group previously showed that the abdominal radical trachelectomy is also a safe and feasible procedure in the setting of a developing country.<sup>2</sup>

The first laparoscopic abdominal radical trachelectomy was performed by Lee and colleagues.<sup>3</sup> Since that time, other investigators have published their experience with this approach.<sup>4–8</sup> In this article, we report the case of a patient who underwent a laparoscopic radical trachelectomy and review the results of similar procedures published in the literature.

## CASE REPORT

A 30-y-old woman Gravida 0, presented to the Gynecology Oncology Unit, Instituto de Cancerología – Clínica Las Américas in May 2009 with a papanicolaou test showing an ASCUS result. On physical examination, the cervix showed no gross lesions. Colposcopy was performed and biopsy showed grade 2 endocervical adenocarcinoma with 6mm of invasion. No conization was performed given the results of invasive adenocarcinoma in the biopsy. On palpation, the vaginal fornices and parametria did not have any evidence of disease. A diagnosis of a stage IB1 endocervical adenocarcinoma was made. The patient was offered a radical hysterectomy, and was also given the option of a radical trachelectomy given her age and nulliparity. The patient was also given the option of a laparoscopic approach to perform this procedure. The patient did not undergo a preoperative MRI due to limited access to this technology for some patients in Colombia. However, when possible, we consider that MRI should remain the modality of choice to evaluate upper cervical

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