



Memorial Sloan-Kettering  
Cancer Center

# Update

## IN GYNECOLOGIC ONCOLOGY

PROGRESS IN MINIMALLY INVASIVE SURGERY

## Trachelectomy Update

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**P**reservation of fertility in patients with cancer has garnered much attention recently. Many young patients diagnosed with cancer are now inquiring about fertility-preserving options. Recently, the American Society of Clinical Oncology recommended that oncologists address the possibility of infertility with reproductive-age patients and encouraged that this be done at the earliest possible opportunity. There are now several acceptable treatment options for reproductive-age women diagnosed with gynecologic malignancies who wish to maintain their fertility. None has drawn more attention than radical trachelectomy for cervical cancer.

Since 2001, the MSKCC Gynecology Service has offered patients diagnosed with early-stage cervical cancer fertility-preserving surgery with radical trachelectomy. The concept of trachelectomy was first described in the 1950s and expanded to its current use beginning in the 1980s by the French surgeon Dargent. He introduced a minimally invasive procedure termed “laproscopic radical vaginal trachelectomy” that combines a laparoscopic lymphadenectomy with a radical vaginal approach. When using specific selection criteria, this procedure can be offered to nearly half the reproductive-age women who present with early-stage cervical cancer.

Given that a large randomized trial comparing radical trachelectomy with radical hysterectomy will likely never be

performed, the oncologic credibility of the procedure will be based on case series reported in the literature. Recently, we published our initial experience with the laparoscopic radical vaginal trachelectomy [1]. Conception rates approached 80% in the 14 women who were trying to conceive. The recurrence rate was 3% in the first 36 patients. Similar low recurrence rates have been reported by other high-volume trachelectomy centers [1].

Unfortunately, the safety of the aforementioned vaginal procedure seems to be limited to patients with cervical cancers less than 2 cm in size. Using an abdominal approach, a larger resection is feasible and may allow fertility preservation for patients with larger cancers [2]. Although we now triage patients with larger cancers to an abdominal approach, in a recent comparison of radical trachelectomy to radical hysterectomy for IB1 cervical cancer, depth of invasion and lymphovascular space involvement – not tumor size – appeared to be the significant predictors of outcome [3].

As we have followed patients who have undergone this procedure, it has become apparent that there are issues other than oncologic and fertility outcomes. Studies of the postoperative physical and emotional concerns of patients who have undergone trachelectomies showed that fear of sexual activity and postoperative dyspareunia were two issues that seemed to improve over time in the postoperative

period [4]. Additionally, some form of cervical stenosis does occur in a large number of these patients; however, most are amenable to office management. Preventive strategies such as the use of vaginal dilators, vaginal lubricants, and moisturizers, are currently being employed.

In conclusion, radical trachelectomy has become an acceptable treatment option for patients with early cervical cancer who wish to maintain their fertility. Although the oncologic and fertility outcomes have been reported, there are many other aspects of the procedure requiring further study so that we may better treat and counsel these patients.

### REFERENCES

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