

## Radical vaginal trachelectomy in a patient with HIV infection

Moodley M

Gynaecological Oncology, Nelson R Mandela School of Medicine, University of KwaZulu-Natal, Durban

Correspondence to: Manivasan Moodley, e-mail: moodley29@ukzn.ac.za

### Abstract

Radical trachelectomy is a well-described procedure for the preservation of fertility in women with early-stage cervical cancer. Experience of this procedure in an HIV (human immunodeficiency virus) -infected patient has not been reported. In this case, radical vaginal trachelectomy was performed in an HIV-infected patient with CD4 count of 350 cells/ $\mu$ l, after frozen section of the pelvic lymph nodes was performed. Frozen section of the pelvic lymph nodes was negative. Apart from a vaginal infection, the patient made good recovery with good oncological outcome. It seems, from this case, that radical vaginal trachelectomy in a patient with HIV infection is a feasible option when the immunity is reasonable.

© Peer reviewed. (Submitted: 2011-03-02, Accepted: 2011-04-11) © SASGO

South Afr J Gynaecol Oncol 2011;3(2):74-75

### Introduction

Cervical cancer is the second most common cancer worldwide and accounts for about 500 000 cases per annum. Most women in the developing world present in late-stage disease (60–80%), because of absent or deficient screening programmes. As such, conservative management of these patients is not an option. The incidence of human immunodeficiency (HIV) infection in women with cervical cancer in our environment has been described (20%).<sup>1</sup> Radical trachelectomy is now a well-described surgical option for the patient with early stage cervical cancer who wishes to retain fertility. A case of radical vaginal trachelectomy in a patient with HIV infection is presented.

### Case report

A 29-year-old primiparous HIV-infected patient presented with early-stage squamous cell cervical cancer (FIGO IB1). Her CD4 count was 350 cells/ $\mu$ l. She was not receiving antiretroviral therapy. The cervical lesion measured 1.5 cm in diameter and was confined to the cervix. Computed tomography scan of the pelvis revealed no evidence of extrauterine disease.

After counselling, the patient underwent pelvic lymph node dissection with frozen section, by laparotomy

through an intraperitoneal approach. Frozen section of the lymph nodes (iliac and obturator) was negative and a radical vaginal trachelectomy was performed. Frozen section of the margins of the specimen was negative.

After an uneventful postoperative period, the patient returned two weeks later with profuse vaginal infection of the uterine stump. She was treated with broad-spectrum antibiotics and vaginal saline baths. She subsequently made a good recovery and was discharged. After she requested it, she was prescribed injectable contraception.

Careful follow-up over the last four years has revealed no clinical, radiological or cytological evidence of disease recurrence. Her last CD4 count was 361 cells/ $\mu$ l.

### Discussion

Radical vaginal trachelectomy is now an accepted modality of treatment for women with cervical cancer who desire fertility, and is considered safe and feasible.<sup>2</sup> The technique is well described.<sup>3</sup> Oncological outcomes are also well described, with recurrence of less than 5%.<sup>4-6</sup> Patients with tumours larger than 2 cm have a greater risk of recurrence,<sup>4</sup> and therefore trachelectomy is not recommended in these patients. Although most reports on the subject of radical trachelectomy include

patients with squamous cell carcinoma of the cervix, the use of neoadjuvant chemotherapy and other cell types such as clear cell carcinoma of the cervix has been described.<sup>7</sup> Risk factors for cancer recurrence include tumour size, lymphovascular space invasion and unfavourable histology.<sup>3</sup> Common complications of radical trachelectomy include chronic vaginal discharge, irregular vaginal bleeding, dysmenorrhoea, amenorrhoea and cervical stenosis.<sup>8</sup> Although abdominal trachelectomy is also described, most reports deal with vaginal trachelectomy, since there seems to be more experience with the vaginal route.

The obstetrical outcomes are likewise good, with second and third trimester miscarriage rates of 20% and 3%, respectively.<sup>9</sup> About 75% of pregnancies reach the third trimester, of which 75% will deliver at term.<sup>9</sup> To date, over 250 pregnancies have been reported.<sup>5</sup>

In the developing parts of the world where cervical cancer and HIV infection is common, it has been reported that about 20% of patients with cervical cancer will test positive for HIV.<sup>10</sup> Nonetheless, most of these patients will present in late-stage disease, and the chances of encountering cervical cancer suitable for conservative surgical procedures with or without HIV infection are low.

This report is the first, according to the author's literature search, concerning radical trachelectomy in an HIV-infected patient and, although the patient opted for contraception and chose not to conceive as yet, the oncological outcome is encouraging.

## References

1. Moodley M, Moodley J, Kleinschmidt I. Invasive cervical cancer and human immunodeficiency virus (HIV) infection: a South African perspective. *Int J Gynecol Cancer*. 2001;11(3):194-197.
2. Plante M, Renaud MC, Hoskins IA, Roy M. Vaginal radical trachelectomy: a valuable fertility- preserving option in the management of early- stage cervical cancer. A series of 50 pregnancies and review of the literature. *Gynecol Oncol*. 2005;98:3-5.
3. Glen LT, Covens A. Fertility-sparing options for early stage cervical cancer. *Gynecol Oncol*. 2010;117:350-357.
4. Dursun P, Leblanc E, Nogueira MC. Radical vaginal trachelectomy (Dargent's operation): a critical review of the literature. *Eur J Surg Oncol*. 2007;33:933-935.
5. Plante M. Vaginal radical trachelectomy: An update. *Gynecol Oncol*. 2008;111:S105-S110.
6. Plante M, Renaud MC, Francois H, Roy M. Vaginal radical trachelectomy: an oncologically safe fertility-preserving surgery. An updated series of 72 cases and review of the literature. *Gynecol Oncol*. 2004;94:614-623.
7. Singh P, Nicklin J, Hassal T. Neoadjuvant chemotherapy followed by radical vaginal trachelectomy and adjuvant chemotherapy for clear cell cancer of the cervix: A feasible approach and review. *Int J Gynecol Cancer*. 2011;21:137-140.
8. Zarchi MK, Mousavi A, Malekzadeh M, et al. Conservative treatment in young patients with cervical cancer: a review. *Asian Pac J Cancer Prev*. 2010;11:589-594.
9. Plante M. The vaginal radical trachelectomy: an update of a series of 125 cases and 106 pregnancies. *Gynecol Oncol*. 2011;doi:10.1016/j.ygyno.2010.12.345.
10. Moodley M, Kleinschmidt I. Invasive cervical cancer and human immunodeficiency virus (HIV) infection: a South African perspective. *Int J Gynecol Cancer*. 2001;11:194-197.