

# Locally advanced cervical cancer in a transgender man

Adam Beswick MSc, Mark Corkum MD MSc, David D'Souza MD

■ Cite as: *CMAJ* 2019 January 21;191:E76-8. doi: 10.1503/cmaj.181047

See related article at [www.cmaj.ca/lookup/doi/10.1503/cmaj.190011](http://www.cmaj.ca/lookup/doi/10.1503/cmaj.190011)

**A** 45-year-old transgender man presented to a gynecologist with a 2-year history of dysfunctional uterine bleeding. Vaginal bleeding had been occurring daily, small to moderate in volume, with periods of heavier irregular bleeding occurring without precipitating or alleviating factors. Additional symptoms included suprapubic discomfort managed with acetaminophen. The patient had attributed the cause of the persistent bleed to previous exogenous testosterone used for his hormonal gender confirmation, which he had stopped 18 months before presentation. Constitutional symptoms included a weight loss of 4.5 kg in the 4 months before initial assessment. The patient had been told that he did not require screening for cervical cancer because he had never had penetrative sexual intercourse with a male. He had never been pregnant.

Pertinent medical history included a surgery for a double mastectomy. A hysterectomy had been planned 1 year before presentation because of a uterine fibroid (3 cm in diameter) that was identified on ultrasonography; however, the patient decided not to undergo the procedure.

A speculum examination showed an abnormal mass located at the cervix that easily bled. A Papanicolaou smear confirmed a high-grade squamous intraepithelial lesion suspicious for invasion. A mass in the bladder ( $2.2 \times 2.1 \times 2.1$  cm<sup>3</sup> in size) was identified on ultrasonography. Examination under anesthesia with cystoscopy showed an abnormal mass in the bladder at the trigone that was obstructing the right ureter. Gynecologic examination showed a friable mass (4 cm in diameter) in maximal dimension that had entirely replaced the normal cervical tissue. Biopsies of the bladder mass, endometrium and cervix confirmed squamous cell cervical carcinoma. The patient was referred to a regional cancer centre for further management.

Staging investigations included a computed tomography scan of the chest, abdomen and pelvis, which did not identify regional adenopathy or metastatic disease. There was severe right-sided hydronephrosis secondary to ureteric obstruction. Magnetic resonance imaging of the pelvis confirmed a cervical mass ( $3.4 \times 3.3 \times 2.4$  cm<sup>3</sup> in size) with indistinct margins, parametrial involvement and invasion into the right posterior wall of the bladder (Figures 1 and 2). The mass abutted but did not invade the anterior rectal wall. Final disease staging was International Federation of Gynecology and Obstetrics stage IVA cervical cancer.

## KEY POINTS

- Transgender patients regularly experience discrimination and discomfort in the health care setting.
- Providers should be aware of the experience of transgender patients who consent to speculum examinations; use of gender-sensitive language and attention to special technical considerations during sensitive genital examinations need to be a part of best practices.
- Patients who are female-to-male transgender should be considered for cervical cancer screening if they have a cervix, including those who have undergone subtotal hysterectomy or hormonal gender confirmation.

We started curative intent treatment with external beam radiotherapy and concurrent weekly radiosensitizing cisplatin chemotherapy, followed by high-dose-rate intracavitary brachytherapy. After chemoradiotherapy, there was an excellent local response with no evidence of residual tumour. Our patient remains disease-free 6 months posttreatment with five years of surveillance planned.

## Discussion

Pap smears represent a major public health advancement for the detection of gynecologic neoplasia; increased participation in screening has resulted in a drastic decline in the incidence of and mortality from cervical cancer in the developed world.<sup>1</sup> Despite these improvements, cervical cancer remains a leading cause of morbidity and mortality. In Canada, the mortality from cervical cancer is projected to decline over the next 20 years; this prediction is predicated on the expectation of continued adoption of HPV vaccination programs as well as ongoing participation in screening practices for cervical cancer.<sup>2</sup>

## Gender confirmation

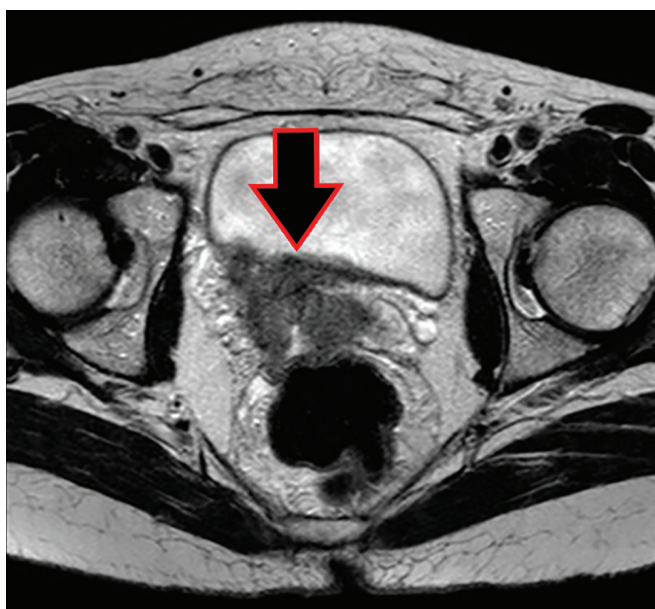
Current population estimates report that 1 in 250 adults in the United States identify as transgender.<sup>3</sup> During a female-to-male (FTM) gender confirmation procedure (also known as sex reassignment surgery) the uterus, cervix and ovaries are surgically removed. A sampling survey conducted in Ontario found that

43% of men who were FTM transgender reported having had a mastectomy, 21% a hysterectomy and 6% genital surgery of any kind.<sup>4</sup> These types of surgeries are less common in the US according to a large American survey, which reported that among men who are FTM transgender, 21% had received chest reconstruction surgery and 8% had undergone a hysterectomy.<sup>5</sup> This survey also reported that hormone therapy was used more commonly for gender confirmation (in 49% of individuals).<sup>5</sup>

Irrespective of the extent or means of gender confirmation, most patients who are FTM transgender still have some degree of residual risk of malignant disease related to their sex assigned at



**Figure 1:** Magnetic resonance image ( $T_2$ -weighted) showing a sagittal view of the pelvis of a 45-year-old man who is female-to-male transgender (arrow indicates cervical cancer).



**Figure 2:** Magnetic resonance image ( $T_2$ -weighted, axial view) of the pelvis showing cervical cancer (arrow indicates bladder invasion).

birth. The decision to undergo cervical cancer screening in patients who are FTM transgender should be based on individual risk and should be encouraged for most, if not all, patients who have a cervix. The effect of exogenous hormone therapy on risk of malignant disease is unclear.

### Cervical cancer screening

Canadian guidelines for cervical cancer screening currently recommend routine cervical screening every 3 years for women between the ages of 25 and 69 years.<sup>1</sup> At present, there are no specific Canadian consensus guidelines regarding cervical cancer screening in people who are FTM transgender. However, the opinion statement from the American College of Obstetricians and Gynecologists indicates that current recommendations for testing for sexually transmitted infections and cervical cancer screening should be extended to people who are transgender.<sup>6</sup> Cervical cancer screening is not recommended in women who have had their cervix removed (total hysterectomy) for benign causes and have no history of cervical dysplasia or human papillomavirus (HPV) infection but should be continued in women who undergo a subtotal hysterectomy and still have an intact cervix.<sup>7</sup> These recommendations should also apply to patients who are FTM transgender.

Only 27% of Americans who are FTM transgender reported receiving a Pap smear in the past year, compared with 43% of women who are cisgender.<sup>5</sup> A literature review of cervical cancer screening among people who are FTM transgender also reported that they were less likely to be up to date on Pap test screening; among those who did receive screening, they were more likely to have abnormal or inadequate results compared with women who were cisgender.<sup>8</sup>

There are many factors that may precipitate this disparity. Patients who are FTM transgender and health care providers may misperceive sexual history risk. Cancer Care Ontario defines sexual activity as “intercourse, as well as digital or oral sexual activity involving the genital areas with a partner of either gender.” HPV transmission can occur through use of shared sex toys and is a plausible cause in our patient’s case.<sup>7</sup> Sharing of sex toys should be discussed in risk stratification.

A recent survey of obstetrics and gynecology providers found that fewer than 30% of providers felt comfortable caring for patients who are FTM transgender.<sup>9</sup> From the patient perspective, there are unique social, physiologic and clinical barriers that often preclude patients who are transgender from accessing appropriate screening.<sup>10</sup> This disparity is likely further exacerbated by the fact that patients who are transgender regularly experience stigmatization and discrimination in the health care setting.<sup>5,8</sup>

Primary care providers should consider how to improve the experience of and access to screening for malignant disease in patients who are transgender. To this effect, a recent publication reporting on best practices based on qualitative interviews with patients who are transgender and clinicians experienced in caring for this patient population is an excellent resource for health care providers.<sup>10</sup> Some of these best practices include improving the inclusivity of the clinical environment by asking the patient

for their preferred pronouns before examination, training staff on trans-inclusive language in patient communication and having gender-neutral restrooms in the office.<sup>10</sup> During the speculum exam itself, providers should use a small speculum with water-based lubricant and/or topical lidocaine, communicate using gender-neutral language when referring to anatomy (e.g., “genital opening” rather than “vagina”), allow patients to insert the speculum themselves and consider offering anxiolytic medication.<sup>10</sup> In addition, comprehensive screening for malignant disease in the patient who is FTM transgender should include screening for breast cancer with routine mammography.

## Conclusion

The discrimination experienced by patients who are transgender in health care settings contributes to ongoing disparities in screening and health outcomes. Primary care physicians should be aware of the persistent barriers to health access, as well as the importance of screening for malignant disease in patients who are FTM transgender. Cancer diagnoses and treatment may be delayed if patients and providers are not aware of the risks of malignant disease.

## References

- Murphy KJ, Joan Murphy K. Screening for cervical cancer. *J Obstet Gynaecol Can* 2007;29:S27-36.
- Xie L, Semenciw R, Mery L. Cancer incidence in Canada: trends and projections (1983–2032). *Health Promot Chronic Dis Prev Can* 2015;35(Suppl 1):2-186.
- Meerwijk EL, Sevelius JM. Transgender population size in the United States: a meta-regression of population-based probability samples. *Am J Public Health* 2017;107:e1-8.
- Scheim AI, Bauer GR. Sex and gender diversity among transgender persons in Ontario, Canada: results from a respondent-driven sampling survey. *J Sex Res* 2015;52:1-14.
- James SE, Herman J, Rankin S, et al. *The report of the 2015 U.S. Transgender Survey: Executive Summary*. Washington (DC): National Center for Transgender Equality; 2017:15.
- Committee on Health Care for Underserved Women. Committee opinion no. 512: health care for transgender individuals. *Obstet Gynecol* 2011;118:1454-8.
- McLaughlin CM, Mai V, Murphy J, Fung Kee Fung M, et al.; Cervical Screening Guidelines Development Committee of the Ontario Cervical Screening Program, Gynecology Cancer Disease Site Group of Cancer Care Ontario. *Cervical screening: a clinical practice guideline. Program in Evidence-based Care Special Report Evidence-based Series*. Toronto: Cancer Care Ontario; 2005 May.
- Gatos KC. A literature review of cervical cancer screening in transgender men. *Nurs Womens Health* 2018;22:52-62.
- Unger CA. Care of the transgender patient: the role of the gynecologist. *Am J Obstet Gynecol* 2014;210:16-26.
- Potter J, Peitzmeier SM, Bernstein I, et al. Cervical cancer screening for patients on the female-to-male spectrum: a narrative review and guide for clinicians. *J Gen Intern Med* 2015;30:1857-64.

**Competing interests:** None declared.

This article has been peer reviewed.

The authors have obtained patient consent.

**Affiliations:** Schulich School of Medicine & Dentistry (Beswick), Western University; Department of Radiation Oncology (Corkum, D'Souza), London Regional Cancer Program, London Health Sciences Centre, London, Ont.

**Contributors:** All of the authors were involved in the conception and drafting of the manuscript, revised it critically for important intellectual content, gave final approval of the version to be published and agreed to be accountable for all aspects of the work.

**Correspondence to:** David D'Souza, david.dsouza@lhsc.on.ca

The section Cases presents brief case reports that convey clear, practical lessons. Preference is given to common presentations of important rare conditions, and important unusual presentations of common problems. Articles start with a case presentation (500 words maximum), and a discussion of the underlying condition follows (1000 words maximum). Visual elements (e.g., tables of the differential diagnosis, clinical features or diagnostic approach) are encouraged. Consent from patients for publication of their story is a necessity. See information for authors at [www.cmaj.ca](http://www.cmaj.ca).