

internal cerclage using a nylon suture was inserted into the lower segment of the uterus simultaneously. Histopathology revealed no residual tumour and pelvic lymph nodes were negative. Follow-up cytology and MRI at 6, 8 and 12 months, did not reveal any recurrence or residual disease.

Three years later, she conceived spontaneously and a 12-week dating ultrasound scan showed monochorionic diamniotic twins. A trans-vaginal ultrasound at 16 weeks' gestation showed the cerclage suture at the internal cervical os. The 'neo-cervical' length on a snapshot scan was ~1.5 cm. Ultrasound at 19 weeks' gestation showed no evidence of twin-twin transfusion syndrome. At 21 weeks' gestation, she presented with intermittent uterine activity and abdominal pains. She declined speculum/fibronectin evaluation and also high vaginal swabs. The patient was admitted for psychological and social comfort, strict bed rest, prescribed thromboprophylaxis and received corticosteroid therapy at 26 weeks' gestation. Serial scans at 28, 30 and 32 weeks' gestation showed normal growth for both fetuses. The patient was discharged at 30 weeks' gestation with a plan for elective caesarean section at 34 weeks. This was performed at 34 + 3 weeks' gestation and two female infants weighing 2,360 g and 1,720 g were delivered in good health. The patient is currently under outpatient review with no evidence of recurrence.

Discussion

We report a successful outcome of a twin pregnancy at 34 + 3 weeks' gestation after radical trachelectomy, without the use of a second trans-abdominal cervicoisthmic cerclage or Saling procedure.

There are no standard recommendations for the management of pregnancy after cervical surgery (Jolley and Wing 2008). Trachelectomy is associated with cervical insufficiency and pre-term delivery. In the six largest published studies, there were three sets of twins in a total of 149 pregnancies. All delivered at between 24 and 28 weeks (Plante et al. 2005). Multiple pregnancy is an independent risk factor for pre-term birth (Bernardini et al. 2003). To the best of our knowledge, this is the first report of twins delivered at 34 weeks' gestation after a radical vaginal trachelectomy.

The use of the vaginal occlusion procedure does not prolong gestation when compared with those women who did not have the procedure (Jolley et al. 2007). Although the placement of another cerclage might be helpful, this is technically difficult because the 'neo-cervix' after trachelectomy is fibrotic and markedly shortened and does not prolong gestation (Berghella et al. 2005). In fact, the use of cerclage in multiple gestations has been shown to worsen outcome (Berghella et al. 2005). The purpose of the Saling procedure is to reduce the risk of chorioamnionitis by closing the vaginal mucosa over the cervical os after the 1st trimester.

In our case, we did not perform the Saling procedure or place another trans-abdominal cervicoisthmic cerclage. The good outcome achieved in our case may have been due to the non-operative management plan. A viable pregnancy resulting in a live healthy birth is the ultimate goal when choosing trachelectomy, which was successfully achieved in this case, with only the conservative approach of bed rest.

Declaration of interest: The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

References

- Berghella V, Odibo AO, To MS et al. 2005. Cerclage for short cervix on ultrasonography: meta-analysis of trials using individual patient-level data. *Obstetrics and Gynecology* 106:181–189.
- Bernardini M, Barrett J, Seaward G et al. 2003. Pregnancy outcomes in patients after radical trachelectomy. *American Journal of Obstetrics and Gynecology* 189:1378–1382.
- Jolley JA, Battista L, Wing DA. 2007. Management of pregnancy after radical trachelectomy: case reports and systematic review of the literature. *American Journal of Perinatology* 24:531–539.
- Jolley JA, Wing DA. 2008. Pregnancy management after cervical surgery. *Current Opinion in Obstetrics and Gynecology* 20:528–533.
- Plante M, Renaud MC, Hoskins IA et al. 2005. 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. *Gynecologic Oncology* 98:3–10.

Successful twin delivery after a radical trachelectomy

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DOI: 10.3109/01443615.2013.822481

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Case report

A 36-year-old nulliparous woman was referred with severe dyskaryosis, for colposcopy. Colposcopic biopsy suggested cervical intraepithelial neoplasia (CIN) 3. A large loop excision of the transformation zone (LLETZ) was performed and histology showed moderately differentiated squamous cell carcinoma. Cone biopsy confirmed stage 1B cervical carcinoma with the lesion size of ~16 mm.

The patient was counselled as to the options for management of cervical carcinoma (FIGO stage 1 B1). She wished to preserve her fertility if possible and a staging procedure was done, including examination under anaesthesia, hysteroscopy, cystoscopy and sigmoidoscopy for clinical staging, to establish whether trachelectomy was an option. Subsequently, a laparoscopic pelvic lymphadenectomy and vaginal radical trachelectomy was done, during which the cervical branch of the uterine artery was ligated. A prophylactic