

# Radical hysterectomy for cervical carcinoma in pregnant women - a case of decidua mimicking metastatic carcinoma in pelvic lymph nodes

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## Summary

Intraoperative histology is commonly used to guide the treatment of women with carcinoma of the cervix. We present a case where frozen section of the pelvic lymph nodes from a pregnant woman was suggestive of metastatic cervical carcinoma but final histology showed only decidual change.

*Key words:* Cervical cancer; Pregnancy; Ectopic; Decidua; Frozen section.

## Introduction

Intraoperative histology of paraaortic or pelvic lymph nodes from women with cervical cancer is commonly used to determine the type or radicality of treatment employed. Detection of metastases in paraaortic lymph nodes at laparotomy or laparoscopy usually results in abandonment of surgery as the primary treatment in favour of chemoradiation. In our institution, where tumour is identified intraoperatively in parametrial or pelvic lymph nodes, the lateral extent of the parametrial resection is extended to the true pelvic side wall on the side of the affected nodes, the so-called laterally extended parametrectomy [1, 2] (LEP). Other centres change the preoperative plan for radical hysterectomy to chemoradiation. Accurate intraoperative histology is therefore important in guiding treatment of these cancers. In pregnant women, decidua present within lymph nodes may have a similar appearance to metastatic squamous carcinoma when examined with frozen pathological section. While this has been documented in the past, it is an uncommon problem which to our knowledge has not been mentioned in the literature in the past 15 years. We present a case where the intraoperative histology was suggestive of metastases to the pelvic lymph nodes but final histology showed decidual change.

## Patients and Methods

A 40-year-old woman was diagnosed with a 4.5 cm diameter (FIGO clinical Stage Ib2) carcinoma of the cervix in the 27th week of her first pregnancy. A large loop excision of the transformation zone (LLETZ) biopsy of the cervix, performed after an abnormal routine antenatal Pap smear, confirmed grade 2 squamous cell carcinoma with lymphovascular space invasion. The tumour infiltrated the full depth of the biopsy. The previous Papanicolaou smear had been performed ten years previously

when pregnant with her last child and was normal. Clinical examination and subsequent magnetic resonance imaging (MRI) revealed an exophytic tumour expanding the cervix but without detectable parametrial involvement. The diagnosis and options for treatment were discussed with the woman and her husband and a decision for caesarean section combined with radical hysterectomy at 32 weeks of gestation was made. Corticosteroids were administered to promote foetal lung maturity.

A healthy 1800 g baby was delivered via a high transverse incision before a thorough bilateral pelvic lymphadenectomy was performed. Intraoperative histology was suggestive of metastatic tumour in the left obturator fossa. The procedure was converted to a LEP on the left side with a Piver type III radical hysterectomy on the right. A paraaortic lymphadenectomy completed the surgery. Postoperatively, the woman made an uncomplicated recovery. She remained in hospital following the postoperative recovery for assistance with care of her baby and was discharged home on day 15 with a suprapubic catheter in situ, as her residual urine volumes after micturition were 20-200 ml. The residual volumes improved thereafter and the catheter was removed one week later. Final histology revealed a 4.5 cm tumour expanding the cervix and extending onto the vagina (surgical Stage IIa). The closest surgical margin was 1.5 cm. Ectopic decidua was identified in the left parametrium, the left uterine channel, three of eight left obturator lymph nodes, bilaterally in the uterosacral ligaments and in one of 13 paraaortic lymph nodes. In accordance with the policy of our department, as she underwent a laterally extended radical hysterectomy and complete pelvic and paraaortic lymphadenectomy, she would not receive adjuvant radiotherapy.

## Discussion

Ectopic decidual reaction in hypogastric lymph nodes was first described in 1913 by Guipel [3]. His autopsy study involved women who had died of sepsis, haemorrhage or uraemia, with no apparent malignancy. He subsequently described ectopic decidua in the mesentery, appendix, omentum and visceral serosa [4]. Several authors have subsequently described ectopic decidua in lymph nodes from pregnant women with squamous cell

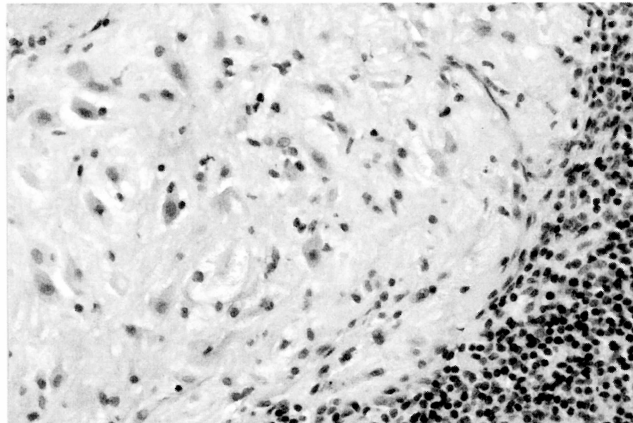
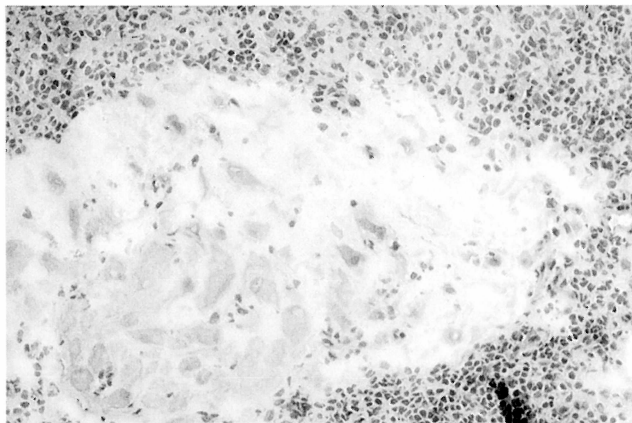


Figure 1. — Frozen section from the left obturator fossa lymph node showing clusters of decidual cells mimicking metastatic squamous cell carcinoma.

Figure 2. — Paraffin section of obturator fossa lymph node demonstrating a circumscribed cluster of decidual cells.

carcinoma of the cervix [5-8]. The use of frozen section of lymph nodes to guide surgical radicality or the substitution of chemoradiation for radical hysterectomy has placed increased reliance on intraoperative histology to guide the extent of surgery. This indication is additional to that where tumour-positive paraaortic nodes lead to substitution of chemoradiotherapy for radical pelvic surgery.

Ectopic decidua may be confused with metastatic carcinoma at frozen section because of the cytological similarity when stained with haematoxylin and eosin. Decidual cells may be present in circumscribed clusters within the subcapsular sinuses of lymph nodes, similar to metastatic carcinoma. The large mildly eosinophilic cells resemble poorly differentiated carcinoma and may be interpreted as such if the appropriate clinical information is not provided to the pathologist. Careful examination of the frozen sections for keratinization, nuclear pleomorphism and mitotic figures assist in differentiation of carcinoma from decidua but the use of the cytokeratin stains with the rapid immunoperoxidase technique [9] may be necessary. A reminder of this diagnostic pitfall is valuable for both pathologist and gynaecological oncologist when treating pregnant women for cervical carcinoma.

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