INTRODUCTION
Cervical carcinoma is one of the most common malignant tumours in women. The clinical presentation may include vaginal bleeding, vaginal drainage, increased urinary frequency, urgency, constipation or a pelvic mass. Cervical carcinoma generally spreads upward to the parametrial tissue and infiltrates the uterine wall through the lymphatic vessels. Ovarian metastasis from cervical carcinoma is very rare except in the late stage of cancer, when it occurs frequently.

We present a rare case of cervical squamous cell carcinoma (SCC) involving the ovaries, fallopian tubes, uterine serosa, vesicouterine excavation, mesoappendix, mesentery, omentum, and paracolic sulcus mimicking a primary high-grade serous ovarian carcinoma.

CASE REPORT
A 66-year woman with a history of high-grade squamous intraepithelial lesions presented to our hospital for a loop electrosurgical excision procedure with positive margins. A cervical examination revealed no obvious mass in the cervix. Serum levels of cancer antigen 125 and carcinoembryonic antigen were elevated at 480.3 IU/L and 19.3 ng/ml, respectively. Ultrasound showed a 4 × 3 × 2 cm hypoechoic solid mass on the left uterine adnexa, a 4-5 cm mass in the right adnexa, a 4 cm mass in the vesicouterine excavation and a 4-5 cm mass in the omentum. Finally, debulking surgery with tumour resection was performed. The bilateral ovarian tumours showed an infiltrative pattern of stromal invasion. Lymphovascular tumour emboli were present in bilateral ovaries. A careful histological examination revealed an eosinophilic cytoplasm that focally formed pear-like structures in the local area of the left ovary. Immunochemical analysis aided in the diagnosis of cervical squamous cell carcinoma involving the ovaries, fallopian tubes, uterine serosa, vesicouterine excavation, mesoappendix, mesentery, omentum, and paracolic sulcus. She was treated with surgery followed by cisplatin-based combination chemotherapy.

Metastatic Squamous Cell Carcinoma versus Primary High Grade Serous Carcinoma of the Ovary
Feng Zhou¹, Wen Wang² and Lili Huang²

ABSTRACT
We report an extremely rare case of abnormal vaginal bleeding in a 66-year postmenopausal woman. A sterile speculum examination revealed no obvious tumour mass in the cervix. Serum levels of cancer antigen 125 and carcinoembryonic antigen were elevated at 480.3 IU/L and 19.3 ng/ml, respectively. Ultrasound showed a 4 × 3 × 2 cm hypoechoic solid mass on the left uterine adnexa, a 4-5 cm mass in the right adnexa, a 4 cm mass in the vesicouterine excavation and a 4-5 cm mass in the omentum. Finally, debulking surgery with tumour resection was performed. The bilateral ovarian tumours showed an infiltrative pattern of stromal invasion. Lymphovascular tumour emboli were present in bilateral ovaries. A careful histological examination revealed an eosinophilic cytoplasm that focally formed pear-like structures in the local area of the left ovary. Immunochemical analysis aided in the diagnosis of cervical squamous cell carcinoma involving the ovaries, fallopian tubes, uterine serosa, vesicouterine excavation, mesoappendix, mesentery, omentum, and paracolic sulcus. She was treated with surgery followed by cisplatin-based combination chemotherapy.

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ovarian metastatic tumour. Additionally, primary SCC can be distinguished by their characteristic microscopic can occur as a teratoma, endometriosis or Brenner's tumour, but no evidence of these was found. Cervical SCC was confirmed and was considered to be the origin of the ovarian metastatic tumour.

However, the ovarian tumour described here bore some resemblance to serous carcinomas, as illustrated by its solid low differentiated morphology, rounded nuclei, and distinct nucleoli with many mitotic figures. Ovarian serous carcinoma is much more common than primary ovarian SCC. Thus, immunohistochemical markers, including p16, p63, PAX8, WT1, p53, ER and PR were used to distinguish the primary ovarian serous carcinomas from ovarian metastatic SCC.

Both Herpes virus (HPV)-related and non-HPV-related cancers can be strongly positive for p16. Notably, p16 over-expression is more frequently seen in serous carcinomas. PAX8 is a conserved transcription factor with essential roles in Mullerian duct development. Its expression is necessary for maintenance of epithelial cells of the uterus, fallopian tubes and ovaries, p53, which is a tumour suppressor gene, is typically overexpressed in serous carcinomas, and is considered a very useful marker for serous carcinomas of the ovary (OSC). WT1 has an essential role in the normal development of the kidneys and gonads and has frequently been used as a surrogate marker for OSC. Although the ER is widely found in the upper genital tract, it is frequently expressed in OSC, but not in most cervical carcinomas. p63 is a homologue of the tumour suppressor gene p53 that is preferentially expressed in human basal squamous epithelium and can be distinguished by its morphological features of squamous or glandular differentiation.

Numerous mitotic figures were present. The bilateral ovarian tumours showed the typical infiltrative pattern of stromal invasion. Lymphovascular tumour emboli were present in bilateral ovaries. Careful histological examination revealed eosinophilic cytoplasm focally forming pear-like structures in the local area of the left ovary. The appendix and pelvic lymph nodes were normal. No components of endometriosis or mature cystic teratoma were found (Figure 1).

The left ovarian mass was strongly positive for p16 and negative for PAX8, p53, Wilms tumour 1 (WT1), oestrogen receptor (ER) and progesterone receptor (PR), with a high Ki67 index. Pear-like structures seen in the left ovary were positive for p63 (Figure 2).

Taking into account the above features, the diagnosis was made as cervical SCC involving the ovaries, fallopian tubes, uterine serosa, vesicouterine excavation, mesoappendix, mesentery, omentum and paracolic sulcus. Subsequently, she was treated with cisplatin-based combination chemotherapy.

**DISCUSSION**

Primary ovarian and metastatic tumours of the ovaries can be distinguished by their characteristic microscopic and general morphology. In this case, bilaterality, a normal-sized ovary, ovarian surface involvement and the presence of a tumour thrombus characterised the ovarian metastatic tumour. Additionally, primary SCC
Based on the clinicopathological and immuno-histochemical data, a diagnosis of ovarian metastasis from cervical carcinoma was confirmed. Management of SCC depends on the histological features and FIGO stage. Most patients can be treated by comprehensive surgery. Adjuvant chemotherapy was subsequently required in this case.

REFERENCES