

Cause of vaginal spotting in an older woman

A 77-year-old Chinese woman with a past medical history of Sjogren's syndrome, nodular goitre and right-sided neck lymphadenopathy, presented to the gynaecological service for per-vaginal spotting. On clinical examination, she was noted to have a cervical polyp. A polypectomy was performed and the specimen was sent for histological examination.

The specimen consisted of multiple small fragments of pale tissue measuring 1.2cm in maximum dimension.

The polypoid pieces of tissue contained a dense infiltrate in the submucosal stroma (Figs. 1A and 1B). The stroma is composed of sheets of cells of uniform appearance with a moderate amount of cytoplasm, slightly eccentrically placed round and ovoid nuclei—many with small nucleoli—and occasional nuclear pseudoinclusions (Fig. 1B). Small lymphocytes were interspersed. The infiltrate percolated around residual endocervical glands and the surface endocervical mucosa that was focally attenuated. No gland formation, keratin, pigment or mucin production was seen. Immunohistochemical stains for HMB-45, MNF-116 and CD20 were negative.

Which is the most likely diagnosis?

- A. Invasive squamous carcinoma of the cervix
- B. Invasive adenocarcinoma of the cervix
- C. Florid cervicitis
- D. Marginal zone B cell lymphoma
- E. Spread from an endometrioid endometrial carcinoma

Additional immunohistochemical staining subsequently performed showed positivity for CD38, CD138 and lambda light chain restriction (Fig. 3). CD3 confirms scattered interspersed small lymphocytes.

Results of the previous neck lymph node biopsy were not known at the time of the cervical biopsy, but subsequent information revealed that a nodal marginal zone B cell lymphoma with plasmacytic differentiation had been previously diagnosed, with tumour cells immunopositive for CD38 and CD138, and which demonstrated lambda light chain restriction.

Discussion. The commonest primary tumours of the cervix are squamous cell carcinoma with its variants, and adenocarcinoma.¹⁻³ The most common haematopoietic

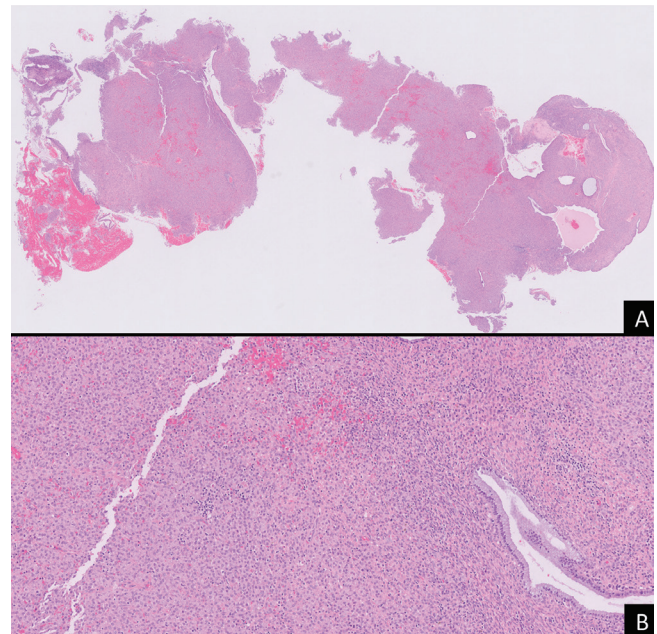


Fig. 1. (A) Polypoid pieces of tissue with residual endocervical glands (haematoxylin and eosin [H&E], 2x magnification). (B) The infiltrate composed of sheets of cells in the submucosal stroma (H&E, 10x magnification).

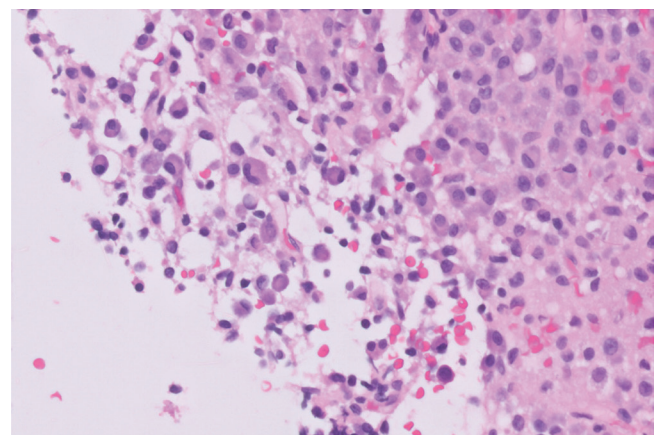


Fig. 2. The cells show a uniform appearance with a moderate amount of cytoplasm, slightly eccentrically placed round and ovoid nuclei, and occasional nuclear pseudoinclusions (H&E, magnification 40x).

neoplasm involving the cervix, whether primary or secondary, is diffuse large B-cell lymphoma.⁴

Secondary involvement of the cervix represents less than 0.3% of all cervical malignancies.¹ The most

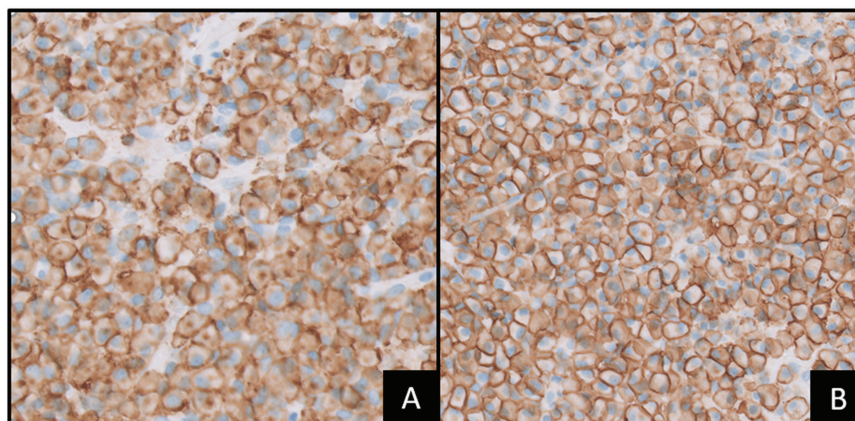


Fig. 3. (A) CD38 and (B) CD138 immunohistochemical stains showing diffuse positivity (40x magnification).

common secondary tumour is endometrial carcinoma by direct contiguous spread, followed by metastases from carcinomas of ovarian (42.1%), gastrointestinal tract (19.8%) and breast (4.5%) origins.^{2,3}

Only 6% of cervical metastases are of haematopoietic origin, of which 75% are diffuse large-cell B cell lymphoma, followed by non-Hodgkin lymphoma (10%) and chronic lymphocytic leukaemia (3%).⁴ Cervical involvement in multiorgan disease is more common than a primary lymphoma of the cervix, and hence one should consider the possibility of metastasis when encountering a lymphoproliferative neoplasm in the cervix. The cervix is also the most common location in the female genital tract in which lymphoma may arise.⁵

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