

Rare and unusual spindle cell tumour

Harumi Nakamura ¹, Masanori Kitamura, ¹ Hiroko Murata, ² Shuhei Kida, ³ Jun Ishikawa, ³ Shoji Kamiura, ² Shin-ichi Nakatsuka ¹

¹Department of Diagnostic Pathology and Cytology, Osaka International Cancer Institute, Osaka, Japan

²Department of Gynecology, Osaka International Cancer Institute, Osaka, Japan

³Department of Hematology, Osaka International Cancer Institute, Osaka, Japan

Correspondence to

Dr Harumi Nakamura, Diagnostic Pathology and Cytology, Osaka International Cancer Institute, Osaka 541-8567, Japan; nakamura-ha@mc.pref.osaka.jp

Received 5 August 2019

Accepted 17 September 2019

Published Online First

4 December 2019

CLINICAL QUESTION

A 50-year-old woman presented with a very hard goose-egg size bulky mass of the uterine cervix, involving the uterine corpus and vaginal wall. Histology specimens were obtained via needle biopsies of the cervix. Review the high-quality, interactive digital Aperio slides at http://virtualacp.com/JCPCases/jclinpath-2019-206144_A and http://virtualacp.com/JCPCases/jclinpath-2019-206144_B and consider your diagnosis.

WHAT IS YOUR DIAGNOSIS?

- A. Chronic cervicitis
- B. Soft tissue sarcoma
- C. Spindle cell carcinoma
- D. A spindle cell variant of diffuse large B-cell lymphoma (DLBCL)
- E. Spindle cell melanoma

The correct answer is after the discussion.

DISCUSSION

The adnexa was the most common site (56%) of primary genital tract lymphoma, followed by the corpus (15%) then the cervix (11%).¹ DLBCL evidently accounts for most primary lymphomas of the cervix (63%).¹ Spindle cell variant (sarcomatoid variant) DLBCL of the genital tract is extremely rare. There are a few case reports in the literature.²⁻⁴ Spindle cell lymphoma is associated with somatic immunoglobulin and *BCL6* gene mutations as well as *BCL6* protein expression, and thus neoplastic spindle cells closely reflect B cells residing in the germinal centre.⁵ This indicates that spindle cell lymphoma is a good responder to chemotherapy and has a good prognosis.

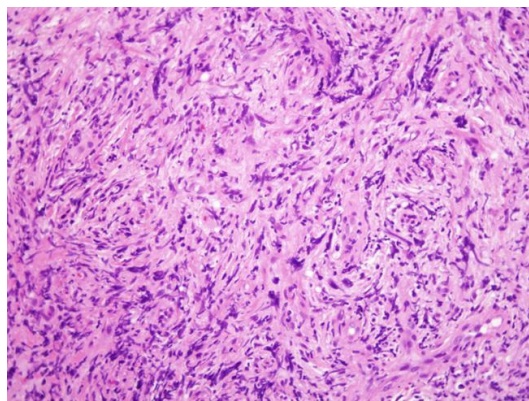


Figure 1 Spindle cells proliferate showing vague storiform pattern with fibrosis and small lymphocytes infiltration in the background.

Take home messages

- ▶ Diffuse large B-cell lymphoma (DLBCL) with an unusual prominent spindle cell morphology with marked sclerosing of genital tract often leads to misdiagnosis.
- ▶ On clinical presentation, most patients with genital lymphoma exhibit abnormal genital bleeding and have a large bulky mass of the cervix resulting in what is known as a 'barrel-shaped' cervix.
- ▶ Spindle cell variant DLBCL presented as a subepithelial mass without obvious ulceration or epithelial abnormality; therefore, the diagnosis may require deep cervical needle biopsy.
- ▶ Immunohistochemical analysis can efficiently distinguish spindle cell variant DLBCL from other spindle cell neoplasms.

On clinical presentation, most patients with genital lymphoma exhibit abnormal bleeding and have a large bulky mass of the cervix resulting in what is known as a 'barrel-shaped' cervix on pelvic examination.

Spindle cells with a vague storiform pattern of DLBCL are not familiar to pathologists. The diagnosis of this condition may be challenging. The differential diagnosis of spindle cell lymphoma of the uterine cervix includes chronic cervicitis, soft tissue sarcoma, spindle cell carcinoma, spindle cell melanoma and dendritic cell tumour. However, morphological observations and immunohistochemical analysis can efficiently distinguish malignant lymphoma from these other lesions.

The diagnosis of this variant of cervical lymphoma may require deep needle biopsy. The most important point is that it is a lymphoma with an unusual morphology, composed of spindle cells. A prompt and accurate diagnosis can lead to immediate treatment without requiring surgery.

CORRECT ANSWER

D. A spindle cell variant of diffuse large B-cell lymphoma (DLBCL)

Handling editor Iskander Chaudhry.

Contributors HN wrote the manuscript with support from HM, MK and SK. JJ, SK and S-iN helped supervise the project.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Obtained.



© Author(s) (or their employer(s)) 2020. No commercial re-use. See rights and permissions. Published by BMJ.

To cite: Nakamura H, Kitamura M, Murata H, et al. *J Clin Pathol* 2020;**73**:526–527.

Provenance and peer review Not commissioned; internally peer reviewed.

ORCID iD

Harumi Nakamura <http://orcid.org/0000-0003-4476-8794>

REFERENCES

- 1 Kosari F, Daneshbod Y, Parwaresch R, *et al.* Lymphomas of the female genital tract. A study of 186 cases and review of the literature. *Am J Surg Pathol* 2005;29:1512–20.
- 2 Kahlifa M, Buckstein R, Perez-Ordóñez B. Sarcomatoid variant of B-cell lymphoma of the uterine cervix. *Int J Gynecol Pathol* 2003;22:289–93.
- 3 Fratoni S, Abruzzese E, Trawinska MM, *et al.* Primitive "spindle cell variant" (sarcomatoid variant) diffuse large B-cell lymphoma of the uterine cervix: description and outcome of a rare case. *Int J Gynecol Pathol* 2016;35:593–7.
- 4 Li Y, Cui W, Woodroof JM, *et al.* Extranodal B cell lymphoma with prominent spindle cell features arising in uterus and in maxillary sinus: report of two cases and literature review. *Ann Clin Lab Sci* 2016;46:213–8.
- 5 Carbone A, Gloghini A, Libra M, *et al.* A spindle cell variant of diffuse large B-cell lymphoma possesses genotypic and phenotypic markers characteristic of a germinal center B-cell origin. *Mod Pathol* 2006;19:299–306.