

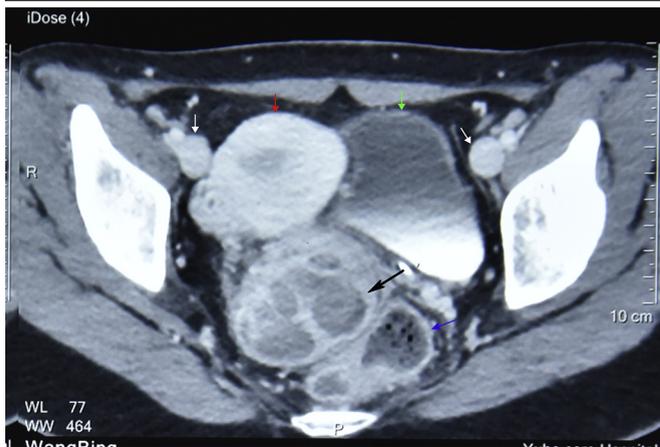
# Rare lesion in the uterine cervix with irregular vaginal bleeding



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**FIGURE 1**

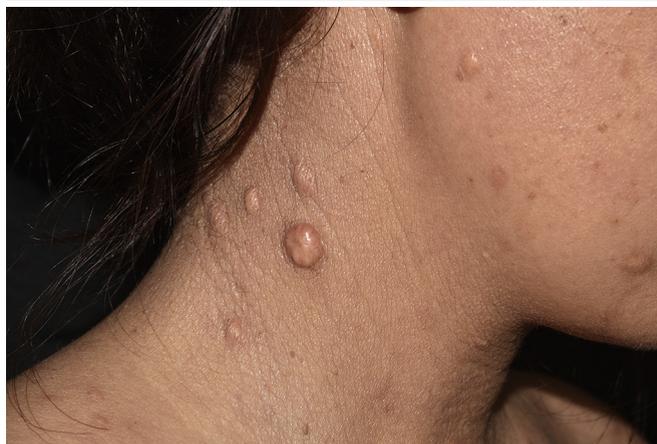
**Magnetic resonance image demonstrating a cystic and solid occupying lesion (black arrow) on the posterior lip of the uterine cervix. (Red arrow, uterus; green arrow, urinary bladder; white arrows, external iliac arteries and veins; blue arrow, rectum)**



Jia Q-N. Rare lesion in the uterine cervix with irregular vaginal bleeding. *Am J Obstet Gynecol* 2019.

**FIGURE 2**

**Skin nodules**



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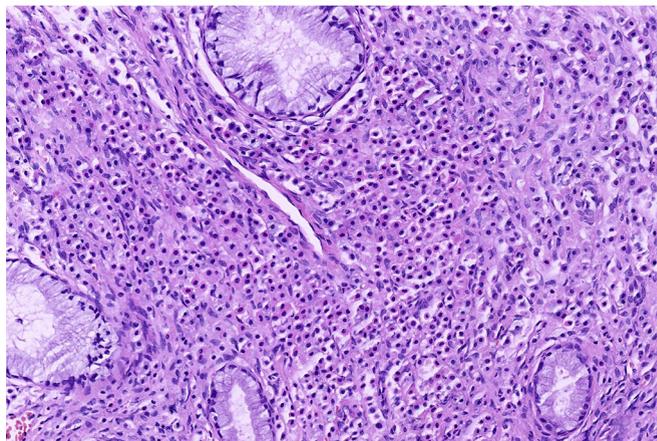
## Case notes

A 27-year-old woman presented with irregular vaginal bleeding for 2 months. Gynecological examination and magnetic resonance imaging demonstrated a 5.8 × 4.2 × 6.0-cm cystic and solid occupying lesion on the posterior lip of uterine cervix (Figure 1, black arrow). Physical examination revealed brown to reddish nodules measuring 0.5–1.5 cm on the face, neck, trunk, and extremities (Figure 2). Histopathological examination of uterine tumor (Figure 3), skin nodule, and bone marrow revealed an

abnormal neoplasm composed of numerous mast cells, which were positive for CD117 (Figure 4), CD2, CD25, and mast cell tryptase. A bone marrow aspirate smear showed 23.5% infiltration of mature mast cells. Cytogenetic analysis revealed rare K509I mutation in the *KIT* gene. The diagnosis of systemic mastocytosis with uterine mastocytoma was

**FIGURE 3**

**Histopathological examination of uterine tumor (hematoxylin – eosin stain, ×20)**



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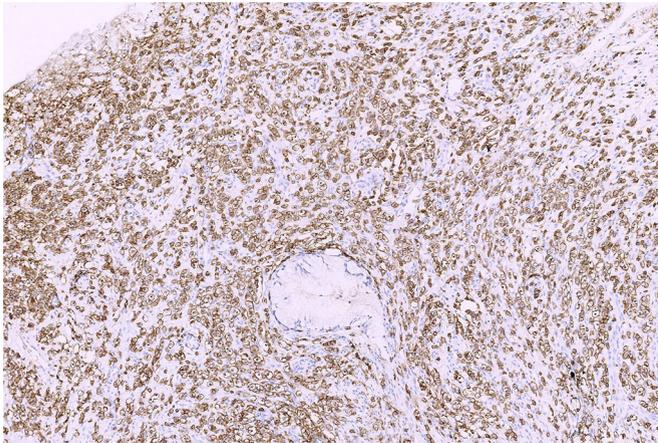
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**FIGURE 4**  
**CD117-positive cells in the uterine tumor**  
**(SP-stain, ×10)**



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**FIGURE 5**  
**At 6-month follow-up**



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established, suggesting the uterus as an involvement organ. Systemic mastocytosis comprises a heterogeneous group of neoplastic disorders characterized by abnormal expansion and accumulation of mast cells in multiple organs. The most commonly involved organs in systemic mastocytosis are bone marrow, skin, liver, spleen and lymph nodes. The patient underwent transvaginal surgical resection of uterine

tumor and was in relatively good condition without evidence of bleeding after 6-month treatment with imatinib (Figure 5). The *KIT* gene encodes a type III tyrosine kinase receptor, which is highly related to the growth, maturation, and survival of mast cells, and thus can be affected by imatinib, a *KIT*-targeting tyrosine kinase inhibitor. ■