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14. ABSTRACT Extraosseous plasmacytoma is rare within the female genital tract. Here, we report the case of a 55 year-old female with a history of multiple myeloma who presented with a six month history of postmenopausal vaginal bleeding. Speculum exam revealed a mass protruding through the cervical canal highly suggestive of a prolapsed leiomyoma. After surgical resection, gross examination of the presumptive myomectomy specimen revealed a 4cm white, whorled mass with no areas of necrosis or hemorrhage. Microscopically, the mass was comprised of a well-circumscribed proliferation of smooth muscle diffusely effaced and expanded by a population of CD138+, lambda light chain-restricted plasma cells. We hypothesize that a preexisting submucosal leiomyoma became colonized by neoplastic plasma cells with resultant expansion and protrusion of the leiomyoma through the cervical canal. This case highlights a rare presentation of an extraosseous plasmacytoma within the female genital tract and to our knowledge is the first reported case of a plasmacytoma involving a leiomyoma.					
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Plasmacytoma Infiltrating Leiomyoma in Multiple Myeloma

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Abstract

Extrasosseous plasmacytoma is rare within the female genital tract. Here, we report the case of a 55 year-old female with a history of multiple myeloma who presented with a six month history of postmenopausal vaginal bleeding. Speculum exam revealed a mass protruding through the cervical canal highly suggestive of a prolapsed leiomyoma. After surgical resection, gross examination of the presumptive myomectomy specimen revealed a 4cm white, whorled mass with no areas of necrosis or hemorrhage. Microscopically, the mass was comprised of a well-circumscribed proliferation of smooth muscle diffusely effaced and expanded by a population of CD138+, lambda light chain-restricted plasma cells. We hypothesize that a preexisting submucosal leiomyoma became colonized by neoplastic plasma cells with resultant expansion and protrusion of the leiomyoma through the cervical canal. This case highlights a rare presentation of an extrasosseous plasmacytoma within the female genital tract and to our knowledge is the first reported case of a plasmacytoma involving a leiomyoma.

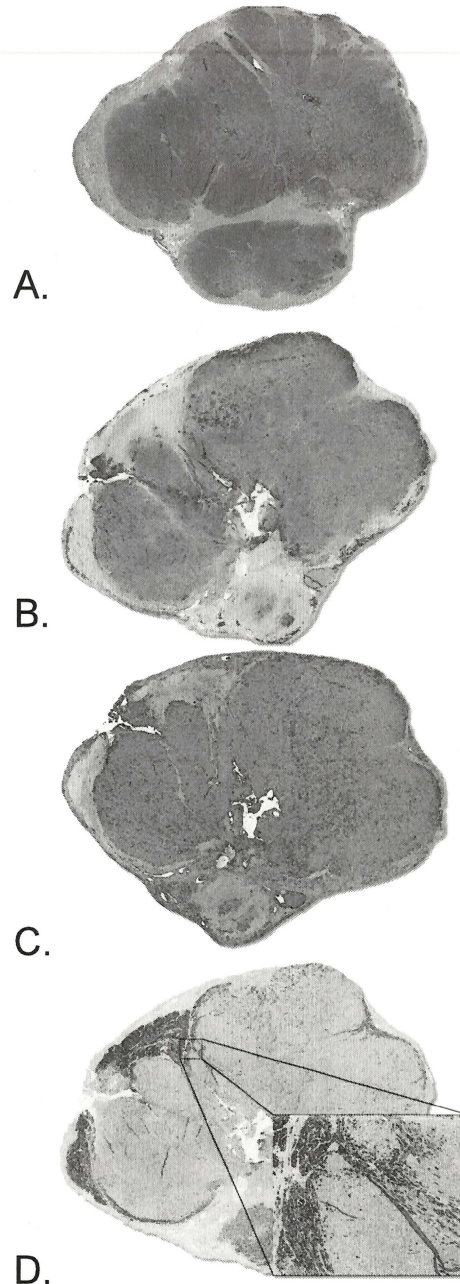
Case Report

56 year-old postmenopausal female with recent history of relapsing multiple myeloma presented to the emergency department with worsening vaginal bleeding. On speculum exam, a smooth 4 cm mass with a 0.5cm stalk attached to the uterine cervix was observed. The physical exam was consistent with a prolapsing leiomyoma. The mass was removed under anesthesia and submitted to pathology for exam.

Gross Examination: White-tan, firm well-circumscribed mass measuring 4 x 2.5 x 2.5 cm with homogenous white-tan whorled cut surface with few punctate hemorrhages and negative for necrosis.

Histologic Examination: Tissue demonstrated atypical, diffuse population of plasma cells that were positive for CD138 and lambda light chain immunohistochemical stains. The background tissue showed a desmin positive fascicular smooth muscle population without atypia, consistent with a leiomyoma and clinical history of fibroid uterus.

Follow-up: Patient refused hysterectomy and was not reevaluated by gynecology-oncology. The patient's multiple myeloma became refractory to chemotherapy and the patient was placed on hospice 7 months after the uterine plasmacytoma was removed.



Pathology

Figure A. Diffuse plasmacytic infiltrate expanding a smooth muscle mass, H & E stain (4x).

Figure B. CD 138 immunohistochemical stain demonstrating plasma cell distribution (4x).

Figure C. Lambda light chain immunohistochemistry stain demonstrating the lambda restricted plasma cell population (4x).

Figure D. Desmin immunohistochemical stain demonstrating the residual leiomyoma (4x).

Discussion

Gynecologic presentation of solitary extramedullary plasmacytoma (SEMP) is rarely discussed in the literature. SEMP and multiple myeloma (MM) have drastically different management and prognoses. There have been only twenty-four cases of gynecologic plasmacytoma reported¹, none of which have involved the myometrium or leiomyomata. Only three of the cases were determined to be related to systemic MM. Uterine cervix plasmacytomas treated with complete surgical resection with hysterectomy were found to have no gynecologic recurrence or progression at follow-up ranging from 3 months to 3.5 years later²⁻³. However, it is estimated that 30-50% of cases of SEMP will progress to systemic disease⁴. This may imply that a complete surgical resection of myometrial plasmacytoma would be beneficial in SEMP and may have benefit in MM involvement of the myometrium in addition to systemic treatment for symptomatic relief and prevention of gynecologic recurrence.

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