SUCCESSFUL MANAGEMENT OF AGGRESSIVE EMBRYONAL RHABDOMYOSARCOMA

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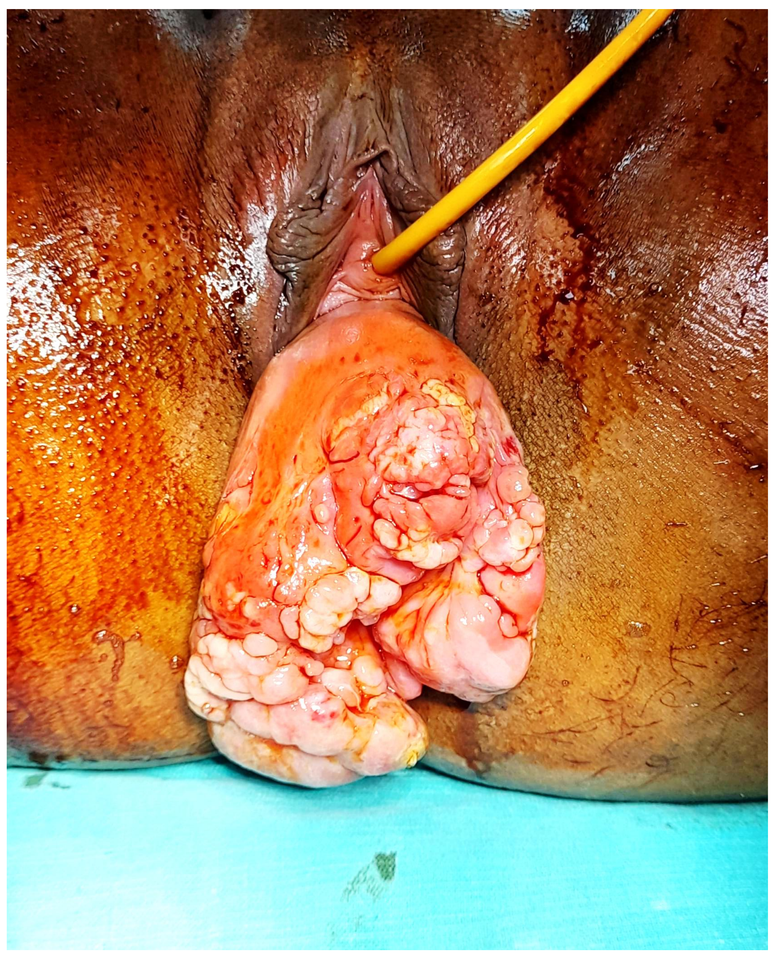
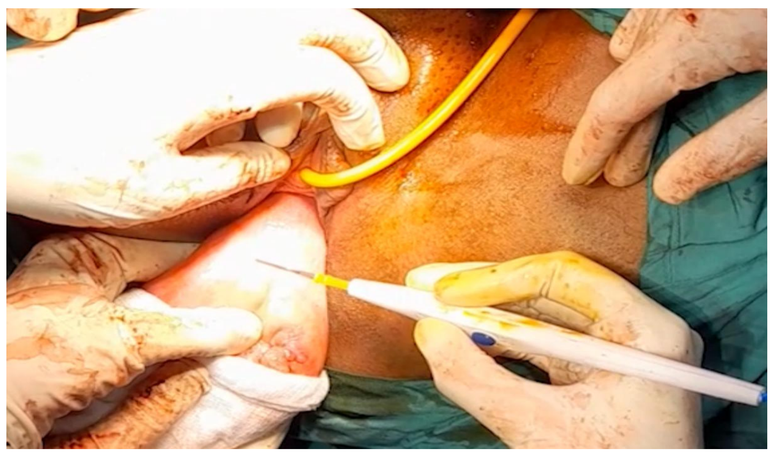
Introduction

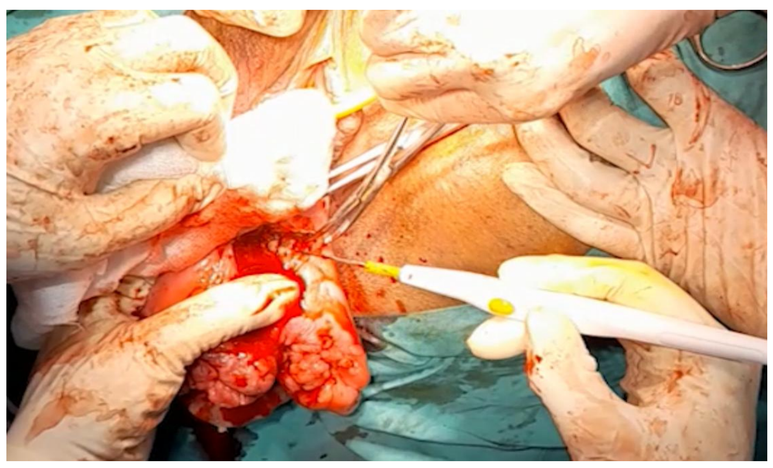
- Embryonal rhabdomyosarcoma (RMS) of the female genital tract is a rare malignancy primarily affecting pediatric and adolescent populations, with adult cases being uncommon. [1]
- It has an incidence of 0.36 per 100,000 woman-years, comprising less than 5% of uterine cancers, and are often challenging to diagnose preoperatively due to the lack of specific clinical presentations or imaging studies. [2]
- Current literature is limited, with a focus on the clinical presentation, diagnosis, and treatment options for embryonal RMS, particularly in the context of the cervix. [3]

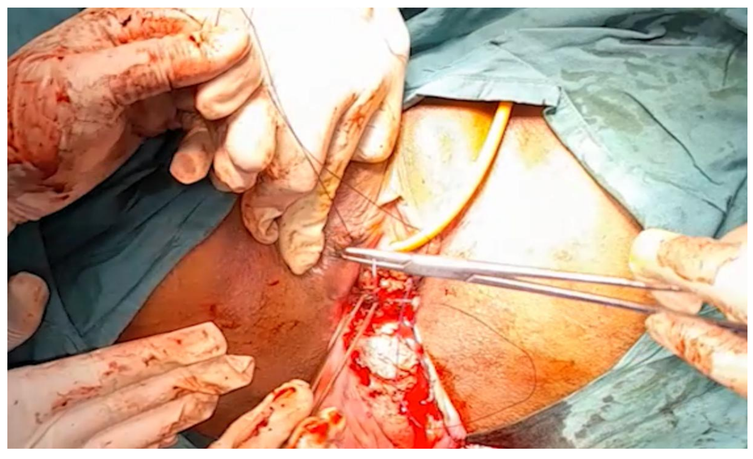
Case Summary

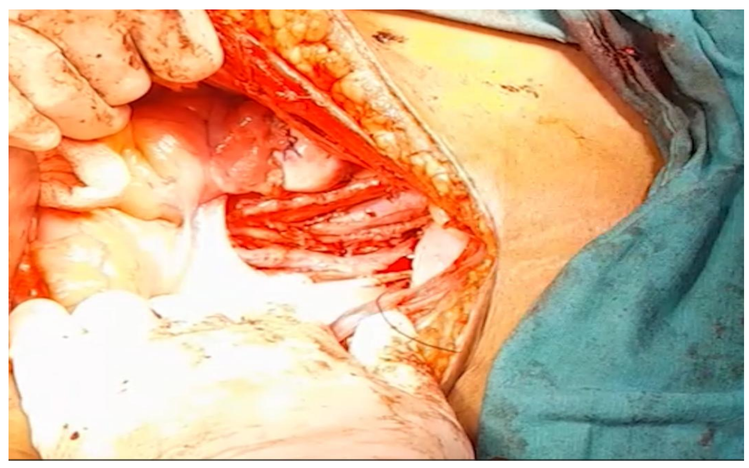
Mrs. XYZ, 23 years, M/F 2 years, P1+0, admitted with complaint of something coming out of vagina for 18 months, which she first noticed at start of her pregnancy. She underwent biopsy of cervical growth 3 times, once during pregnancy & twice after delivery of her baby. Her 3rd biopsy, revealed embryonal rhabdomyosarcoma of cervix. She took 3 sessions of chemotherapy from INMOL Hospital and was then referred to Services hospital for resection of tumor. Surgery was performed by combined abdominoperineal approach. Cervical mass was excised vaginally followed by total abdominal hysterectomy with conservation & transposition of bilateral ovaries out of pelvic cavity. Patient was then referred to INMOL hospital for further treatment (chemo/radiotherapy). The patient has been in follow-up for over 24 months post-tumor removal, with no signs of recurrence and remains in good health, indicating that the treatment was appropriate.





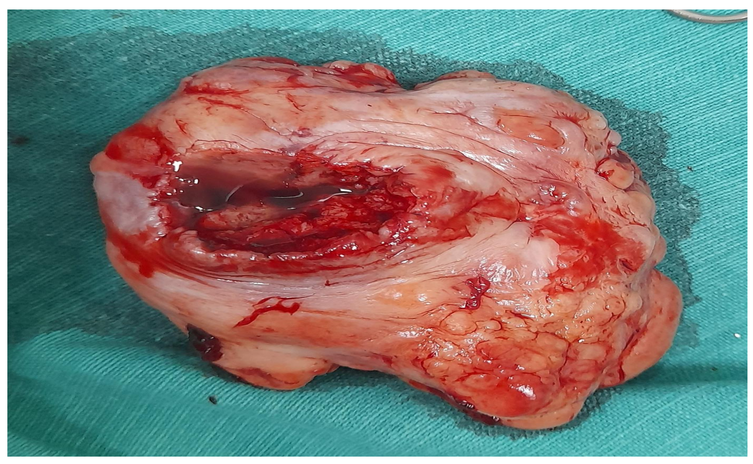


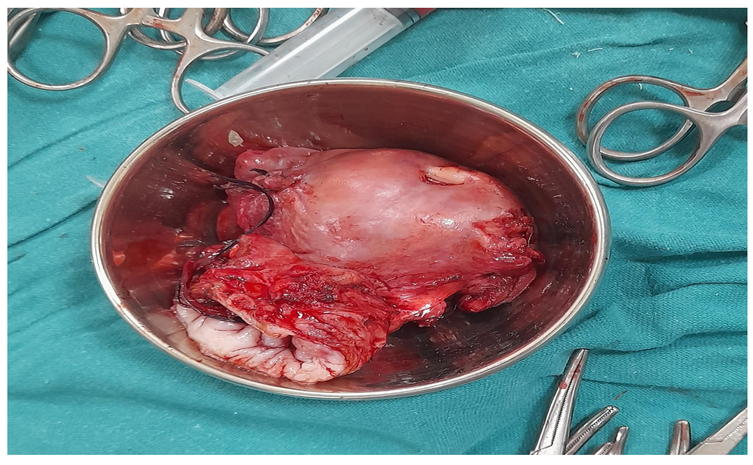




Discussion

- Embryonal rhabdomyosarcoma (RMS) of the uterine cervix is an exceptionally rare mesenchymal tumor, accounting for a small fraction (0.4-1.0%) of all cervical cancer cases.[3]
- The most common histological subtype of RMS affecting the female genital tract is embryonal, making up 60% of all cases.[4]
- Patients typically present with vaginal bleeding and an exophytic or polypoid cervical mass, which often resembles a grape-like cluster.[7]
- Diagnosis is primarily based on histopathology supported by immunohistochemistry, revealing rhabdomyoblasts within a myxoid stroma.[8]
- MRI is the gold standard for assessing disease extent, local invasion, distant metastases, and surgical planning.[7]
- There is no single optimal management protocol, but a multimodal approach involving surgical intervention, systemic chemotherapy, and radiotherapy generally improves patient outcomes.5
- Fertility-sparing procedures (polypectomy, trachelectomy) combined with adjuvant chemotherapy are preferred for localized cervical disease in young patients.[6]
- A simple total hysterectomy with ovarian conservation is recommended for combined cervical and uterine involvement without parametrial invasion.[6]
- Neoadjuvant chemotherapy can reduce tumor size before surgery.[5]





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