Laparoscopic hysterectomy in a 14 years old girl with sarcoma botryoidesm: A rare case report

Nilam Subedi[1], MD; Asmita Ghimire[2], MD ; Padam Raj Pant[1,2], PhD; Samriddha Raj Pant[2], MBBS

[1]Department of Gynecology and Obstetrics, Grande International Hospital, Kathmandu, Nepal

[2]Department of Gynecology and Obstetrics, Institute of Medicine, Tribhuwan University Teaching Hospital, Kathmandu, Nepal

ABSTRACT

Sarcoma botyroides (Rhabdomyosarcoma) of the uterus is not a common disease. Here we describe a case of 14 yr old young girl, she came to the emergency (ER) department of our hospital with acute retention of urine and per vaginal bleeding on and off. Her MRI and biopsy confirmed sarcoma botryoides. She was planned for surgery. We performed a Total laparoscopic Hysterectomy with Bilateral Salpingoophorectomy with removal of upper vagina.

Keywords: **Sarcoma Botryoides, Rhabdomyo Sarcoma**

Introduction

Sarcoma Botryoides (SB) or Rhabdomyosarcoma is a rare and rapidly growing malignant tumor which primarily affects mainly the female genital tract of children. Its origin is mucosal surface of body orifices such as vagina, bladder and cervix basically from embryonal mesoderm. It accounts for 4-6% of all malignancies among children and young adults[1]. They grossly present as polypoid mass and with grape like appearance also known as botryoides, here in our case also it was a prominent feature.

Case Report

A 14 yrs old student who has been menstruating since last 1 year came to emergency department of our hospital with chief complaint of acute retention of urine and also had complain of something coming out per vaginal (PV) during walking. She had per vaginal bleeding on and off. The mass at introitus was dark red fleshy. As stated by her the mass was gradually increasing in size and associated with foul smelling per vaginal discharge. She had no significant past medical or surgical history and no history of any kind of malignancy in family. On examination patient was mild pale with no edema or any lymphadenopathy. She had well developed secondary sexual characters (breast, axillary hair and pubic hair). Abdomen was distended suprapubically (may be due to full bladder) with no tender areas. Local examination revealed multiple grape like dark red fleshy lesions protruding out of the introitus (Figure 1). The mass had cystic areas with mucosanguinous secretion. Bimanual digital examination revealed a fleshy mass at vagina, however vaginal mucosa was free all around (Figure 2). Uterine size was approximately 8 weeks size and cervix could not be felt separately however bilateral fornices were unremarkable. Per rectal examination showed free rectal mucosa. CECT showed Sarcoma Botryoides and histopathological report of tissue biopsy also confirmed the same. Patient was planned for hysterectomy and laparoscopic approach was tried. We could successfully do laparoscopic radical hysterectomy with bilateral salpingoophorectomy with pelvic lymph node and omental biopsy (Figure 3, 4). Peritoneal fluid was sent for cytology. Her post operative period was uneventful and she was discharged on 3rd post op day.

Corresponding Author:
Nilam Subedi, MD
Email: nsnilam16@gmail.com
Received: 9 October 2024
Accepted: 16 December 2024

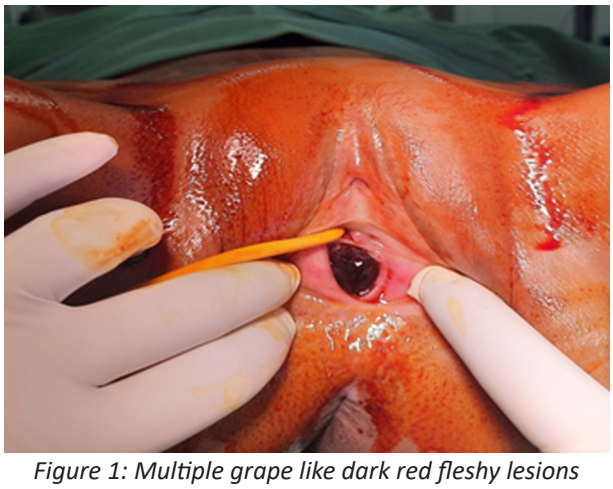

Figure 1: Multiple grape like dark red fleshy lesions protruding out of the introitus

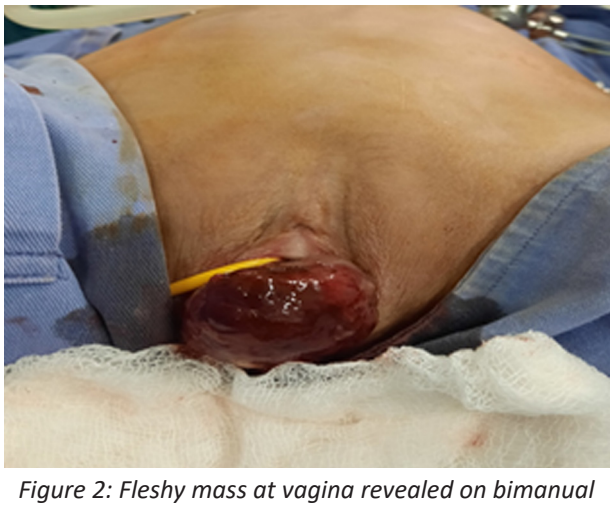

Figure 2: Fleshy mass at vagina revealed on bimanual digital examination with free vaginal mucosa

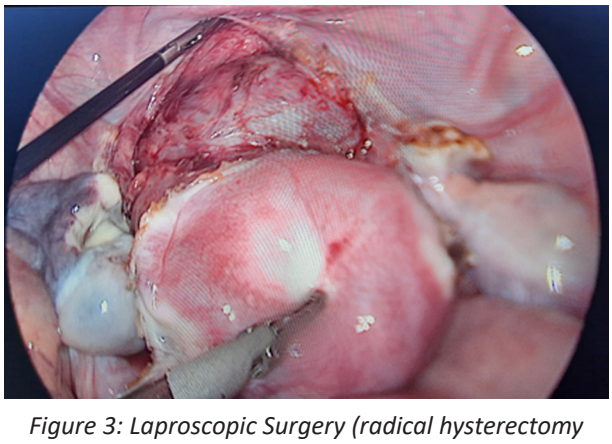

Figure 3: Laproscopic Surgery (radical hysterectomy with bilateral salpingoophorectomy with pelvic lymph node and omental biopsy)

Peritoneal fluid did not show any malignant cells while histopathological (HPE) report revealed Sarcoma Botryoides arising from uterine cervix. She did not require any additional chemotherapy. We could follow up patient for only 6 months during which she was completely doing well.

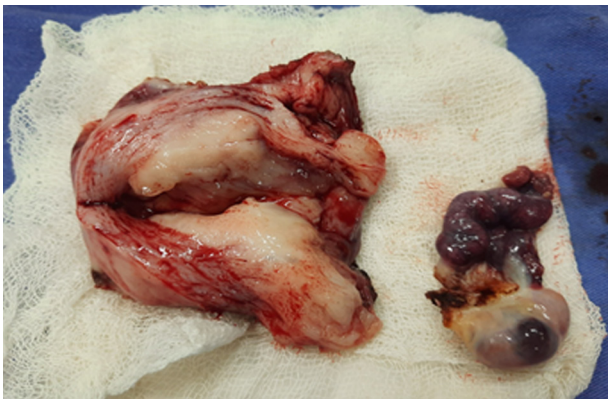

Figure 4: Excised mass sent for biopsy

Discussion

As it's an extremely rare case, so information can be collected only through case reports. With origin from embryonic muscle cells sarcoma botryoides is a malignant tumor[2]. It is usually seen in female infants and young children and presents as a submucosal lesion which gives a typical grape like appearance[3]. Patient of SB usually present with abnormal vaginal bleeding, prolapsing mass per vaginum or an abdominopelvic mass. Sarcoma Botryoides can be treated by radical surgery, fertility sparing surgery, chemoradiation and sometimes combination of both. But till date the optimal management is not clear. Zanetta et al reported that the prognosis of cervical SB is better than other forms of genital SB[4]. As reported by Daya and Scully cervical botryoid has better prognosis as compared to vaginal botryoid[5]. A single polypoidal lesion which can be completely removed during surgery has favorable outcome[6]. Contrary to above, Gruessner et al reported that vaginal lesion have higher survival rates and better prognosis as compared to cervical lesions. They reported 96% survival rate for vaginal lesions and 60% for cervical botryoid[7]. Most of the cases reported doing abdominal hysterectomy but here taking in consideration age of the patient and size of uterus we attempted laparoscopic approach and we succeeded. Most common chemotherapy regimen used for SB is VAC (Vincristine, d-Actinomycin and Cyclophosphamide). There are reports of resuming menstrual function and reproduction after 6-12 cycles of chemotherapy[7].

In our patient, we underwent Total Laparoscopic Hysterectomy with Bilateral Salpingoophorectomy (BSO) with removal of upper vagina along with pelvic lymph node and omental biopsy. The decision of BSO was taken in account of associated embryonal carcinoma in ovary. Main reason of

going for surgery was risk of recurrence, poor patient compliance and wish of patient party for surgery.

Conclusion

Sarcoma Botryoides is an extremely rare disease and generally it presents as cervicovaginal mass. Diagnosis is made through histopathological examination. But due to its rarity, the gold standard treatment is not yet codified.

References

1. Chakrabarty SB, Sarkar A, Ray J, Tigga MP. Sarcoma botryoides in a 14 year old girl: a rare case. Int J Reprod Contracept Obstet Gynecol 2015;4:927-9.
2. Mousavi A, Akhavan S. Sarcoma botryoides (embryonal rhabdomyosarcoma) of the uterine cervix in sisters. J Gynecol Oncol 2010;21(4):273–5.
3. Gordon AN, Montag TW. Sarcoma botryoides of the cervix: Excision followed by adjuvant chemotherapy for preservation of reproductive function. Gynecol Oncol 1990;36(1):119–24.
4. Zanetta G, Rota SM, Lissoni A, Chiari S, Bratina G, Mangioni C. Conservative treatment followed by chemotherapy with doxorubicin and ifosfamide for cervical sarcoma botryoides in young females. Br J Cancer. 1999;80:403-6.
5. Daya DA, Scully RE. Sarcoma botryoides of the uterine cervix in young women: a clinicopathological study of 13 cases. Gynecol Oncol. 1988;29:290-304
6. Gruessner SE, Omwandho CO, Dreyer T, Blutters-Sawatzki R, Reiter A, Tinneberg HR, et al. Management of stage I cervical sarcoma botryoides in childhood and adolescence. Eur J Pediatr. 2004;163:452-6.
7. Gordon AN, Montag TW. Sarcoma botryoides of the cervix: excision followed by adjuvant chemotherapy for preservation of reproductive function. Gynecol Oncol. 1990;36:119-24.