

**MELANOCARCINOMA OF THE UTERINE CERVIX**<sup>1</sup>\*Dr. Sanjivani Wanjari and <sup>2</sup>Dr. Poonam Varma Shivkumar

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**ABSTRACT**

**Introduction:** Melanocarcinoma or malignant melanoma of the cervix is an extremely rare neoplasm of the uterine cervix. It is more common in postmenopausal and elderly women above 60 years. The etiology is not exactly known and the prognosis is poor. The incidence of genital tract mucosal melanomas has been estimated at 1.6 cases per 1 million females with only less than 2% accounting for malignant melanoma of the cervix. **Case report:** Here we are presenting a case of FIGO stage 1A who was successfully treated with surgery Werthiems' hysterectomy type II. The patient was diagnosed in early stage and hence was amenable to radical surgery. The patient is well and is being followed up. **Discussion:** The symptoms can be an unusual discharge or abnormal bleeding PV. It can be either post-coital bleeding or post-

menopausal bleeding. Diagnosis is done by gynaecological Examination wherein they appear as a polypoid growth over the cervix, which is dark coloured often black or blue coloured. Confirmation is done by histopathological examination. Diagnosis gets delayed because the symptoms can be confused with other gynaecological conditions. Surgical excision is the treatment of choice, radical hysterectomy with wide resection to achieve clear margins of at least 2cm and regional lymphadenectomy. Palliative care in advanced disease and disease recurrences can be done with chemotherapy or radiotherapy. **Conclusion:** It is extremely important to diagnose malignant melanoma of the cervix and treat it at an early stage, as the prognosis is poor. Factors that lead to a better survival rate are, the size of the primary tumour, clear margins after surgical resection and no lymph node involvement.

**KEYWORDS:** melanocarcinoma, malignant melanoma, cervix.

## BACKGROUND

Melanocarcinoma is a rare neoplasm of the uterine cervix. It is more common in postmenopausal and elderly women above 60 years. Prognosis is poor as the diagnosis can get delayed. The diagnosis is usually reached after ruling out other common cervical cancers like squamous cell carcinoma and adenocarcinoma. Malignant melanoma is a common neoplasm of the skin and mucous membranes of the oral cavity, oesophagus, conjunctiva, anus, and gynaecological tract accounting for 1.6% of all cancer cases.<sup>[1]</sup>

Melanocarcinoma or malignant melanoma of the cervix is extremely rare condition. The incidence of genital tract mucosal melanomas has been estimated at 1.6 cases per 1 million females with only less than 2% accounting for malignant melanoma of the cervix.<sup>[2]</sup> Etiopathogenesis of malignant melanoma of the uterine cervix is not well defined, but some of the reasons can be genetic predisposition along with micro environmental, hormonal and infectious factors.<sup>[3]</sup>

Here we are presenting a case of FIGO stage 1A who was successfully treated with surgery Werthiems' hysterectomy type II. The patient was diagnosed in early stage and hence was amenable to radical surgery. The patient is well and is being followed up.

## Case presentation

Mrs XYZ, 55 years old lady, resident of a nearby area, presented with complaints of post-menopausal bleeding since six months and pain in abdomen since one month. She was married for 36 years and was para 3, and sterilization had been done several years back. There was no history of hypertension or diabetes.

On examination the patient's condition was fair, she was of average built. The vitals were stable, mild pallor was present and there was no lymphadenopathy and no pedal oedema. Systemic examination revealed no abnormality. On per abdominal examination there was no mass palpable and no tenderness. On per speculum examination a polypoidal growth was seen over the cervix which was 2×2 cm over the posterior lip of the cervix. It was grey-black in colour and did not bleed on touch. On per vaginal examination there was growth on posterior lip of cervix and rest of the cervix was firm to hard in consistency. The uterus was normal in size and shape and there was no tenderness. Adnexa was not palpable. On per rectal examination parametrium was free and also the rectal mucosa was free.

Ultrasound of abdomen and pelvis was done which showed a bulky cervix with increased vascularity on colour Doppler imaging. Uterus was normal in size and shape. The endometrial echo complex was central, regular and of normal thickness. Bilateral adnexa was normal. There was no fluid in pouch of Douglas. There was no evidence of lymphadenopathy. Rest of the ultrasound examination revealed no abnormality.

The patient was posted for minor surgery. The growth over the cervix was removed and a four quadrant biopsy was taken from the cervix. Also dilatation and curettage of the uterine cavity was done. Histo-pathology report was suggestive of Melanocarcinoma of the cervix. MRI abdomen & pelvis was done on 1.5 Tesla MRI machine with Gadolinium contrast. MRI showed no abnormality.

Because of this diagnosis we examined the patient for melanotic lesion of skin or other sites, however no other lesions were found.

The decision for surgical intervention was taken and Werthiem's hysterectomy was planned. Type II hysterectomy with bilateral salpingo-oophorectomy, bilateral removal of fibro fatty tissue along the iliac vessels and removal of the upper vagina with a cuff was done. There were no enlarged lymph nodes. Histo-pathology report confirmed the diagnosis of Melanocarcinoma of the cervix, which was limited to the cervix. Endometrium was in proliferative phase. Myometrium was unremarkable. Cuff of vagina was unremarkable. Both parametria were unremarkable.

### **Differential diagnosis**

Benign conditions like cervical polyp, fibroid polyp Malignant conditions like Squamous cell carcinoma of the cervix and Adenocarcinoma of the cervix, these being the more commonly seen varieties.

### **Pathological Discussion**

Cervical cancer is the most common cancer in women from developing countries. Predominantly it is squamous cell carcinoma in 90% cases, 2-4% are adenocarcinoma and the rest are other histological types. Primary melanoma of the cervix is a rare condition. A total of 5% melanocytic malignancies in females occur in the vulva, with rare malignancies also detected in the ovary, uterus and uterine cervix.<sup>[4]</sup> Aetiology of malignant melanoma is unknown. Risk factors such as HPV 16, radiotherapy or estrogen hormonal influence have

been implicated.<sup>[5,6]</sup> Rohwedder et al, recently pointed out the relation between human papillomavirus (HPV) infection and primary gynaecological malignant melanoma.<sup>[5]</sup>

Diagnosis of primary cervical malignant melanoma can be difficult because clinical presentation mimics other genital malignancies like squamous cell carcinoma and adenocarcinoma. The symptoms are usually discharge or abnormal bleeding either post-coital bleeding or post-menopausal bleeding. Diagnosis is done by gynaecological examination wherein they appear as a polypoid or exophytic growth of the cervix. On gross examination the tumours appear dark coloured often black or blue coloured. Confirmation is done by histopathological examination.<sup>[6]</sup>

In our patient also the growth appeared blue/grey coloured on per speculum examination. After excision of the growth the histopathology report was melanocarcinoma of the cervix.

### **Discussion about management**

There is little consensus in the treatment of malignant melanoma of the cervix, due to the limited number of cases and the lack of clinical trials. Hence it is necessary to individualize the treatment of every patient. The basis of treatment is surgical excision in order to remove the lesion. Radical hysterectomy with wide resection to achieve clear margins of at least 2cm and regional lymphadenectomy are the preferred options.<sup>[7,8,9]</sup>

Radiotherapy is often reserved for cases with unsatisfactory surgical margins, locally advanced disease, or cases where there is lymph nodes involvement.<sup>[10]</sup> Chemotherapy and Immunotherapy can be other treatment options.<sup>[11]</sup>

The overall prognosis of malignant melanoma of cervix is poor because it is usually diagnosed at an advanced stage. Yuan G et al reported 14 cases of malignant melanoma of the cervix. Of the 10 patients who underwent surgery, eight patients developed recurrences and 7 patients died of it. The mean survival time of four patients received TH was 19.5 months (9 to 28), and was 66.8 months (20 to 193) for six patients received RH ( $P=0.016$ ). All patients who were alive had radical hysterectomy and pelvic lymph node dissection.<sup>[12]</sup>

For palliative therapy in advanced stages, adjuvant chemotherapy and radiotherapy, with or without surgical excision can be considered. Advanced disease and disease recurrences can have variable outcomes.

In our patient it was decided to go in for primary surgery in the form of Wertheim's hysterectomy Type II, followed by adjuvant therapy if necessary. However the patient is doing well and is under follow up.

## CONCLUSION

Malignant melanoma or melanocarcinoma is extremely rare in genital cancers. It is necessary to diagnose malignant melanoma of the cervix and treat it at an early stage. Factors leading to better survival rate are - the size of the primary tumour, clear margins after surgical resection and no lymph node involvement. The primary management continues to be surgical resection. Hence management can be a combination of primary surgery with a multidisciplinary approach including radiotherapy or chemotherapy if required.

## Clinical significance

Malignant melanoma or melanocarcinoma is a common neoplasm of the skin and mucous membranes of the oral cavity, oesophagus, conjunctiva, anus, and very rarely found in the genital tract which accounts for 1.6% of all cancer cases.

The commonly found cancers of the uterine cervix are either squamous cell carcinoma or adenocarcinoma of cervix. Malignant melanomas occur more commonly over the vulva.

The purpose of the case report is because of the rarity of the condition. Clinicians should be aware about such atypical presentation of cancer of the uterine cervix.

## REFERENCES

1. J. H. Lee, Jisun Yun, Jung-Won Seo, Go-Eun Bae, Jeong-Won Lee, Sang Wun Kim. Primary malignant melanoma of cervix and vagina. *Obstet Gynecol Sci.*, 2016; 59(5): 415-420.
2. McLaughlin C.C., Wu X.C., Jemal A., Martin H.J., Roche L.M., Chen V.W. Incidence of noncutaneous melanomas in the U.S. *Cancer*, 2005; 103: 1000–1007. [[PubMed](#)] [[Google Scholar](#)]
3. Runger TM, Klein CE, Becker JC, Brocker EB. The role of genetic instability, adhesion, cell motility, and immune escape mechanisms in melanoma progression. *Int J Cancer*, 1994; 56(3): 370-374.
4. Kedzia W, Sajdak S, Kedzia H and Spaczynski M: Primary melanoma of the uterine cervix in a 19 year old woman-case report. *Ginekol Pol.*, 1997; 68: 386–389.(In Polish).

5. A. Rohwedder, B. Philips, J. Malfetano, D. Kredentser, and J. A. Carlson. Vulvar malignant melanoma associated with human papillomavirus DNA: report of two cases and Archives of the Balkan Medical Union March 2017 / 61 review of literature. American Journal of Dermatopathology, 2002; 24(3): 230-240.
6. U. S. Khoo, R. J. Collins, and H. Y. S. Ngan, "Malignant melanoma of the female genital tract. A report of nine cases in the Chinese of Hong Kong," *Pathology*, 1991; 23(4): 312–317. View at: [Google Scholar](#)
7. Khurana A, Jalpota Y. Primary malignant melanoma of the uterine cervix. Indian J Pathol Microbiol., 2009; 52: 575–6. 10.4103/0377-4929.56164 [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]
8. Kristiansen SB, Anderson R, Cohen DM. Primary malignant melanoma of the cervix and review of the literature. Gynecol Oncol., 1992; 47: 398–403. 10.1016/0090-8258(92)90148-C [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]
9. Myriokefalitaki E, Babbel B, Smith M, et al. Primary malignant melanoma of uterine cervix FIGO IIa1: a case report with 40 months ongoing survival and literature review. Gynecol Oncol Case Rep., 2013; 5: 52–4. 10.1016/j.gynor.2013.04.004 [[PMC free article](#)] [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]
10. Piura B. Management of primary melanoma of the female urogenital tract. Lancet Oncol., 2008; 9: 973–81. 10.1016/S1470-2045(08)70254-7 [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]
11. Mousavi AS, Fakor F, Nazari Z, et al. Primary malignant melanoma of the uterine cervix: case report and review of the literature. J Low Genit Tract Dis., 2006; 10: 258–63. 10.1097/01.lgt.0000229564.11741.4e [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]
12. Myriokefalitaki E, Babbel B, Smith M, et al. Primary malignant melanoma of uterine cervix FIGO IIa1: a case report with 40 months ongoing survival and literature review. Gynecol Oncol Case Rep., 2013; 5: 52–4. 10.1016/j.gynor.2013.04.004 [[PMC free article](#)] [[PubMed](#)] [[CrossRef](#)] [[Google Scholar](#)]
13. Yuan G, Wu L, Li B, An J. Primary malignant melanoma of the cervix: Report of 14 cases and review of literature. Oncotarget., 2017 Apr 18; 8(42): 73162-73167. doi: 10.18632/oncotarget.17183. PMID: 29069859; PMCID: PMC5641202.