

*Case Report***Villoglandular Papillary Adenocarcinoma of the Uterine Cervix, with Parametrium Extension**Sunil V. Jagtap<sup>1</sup>, Swati S. Jagtap<sup>2</sup>, N.S. Kshirsagar<sup>3</sup>, Dhirajkumar B. Shukla<sup>4</sup>, Akash Jain<sup>4</sup><sup>1</sup>Associate Professor, Department of Pathology, KIMSU, Karad<sup>2</sup>Associate Professor, Department of Physiology, KIMSU, Karad<sup>3</sup>Associate Professor, Department of Obstetrics and Gynecology, KHMRC, Karad<sup>4</sup>Assistant Lecturer, Department of Pathology, KIMSU, Karad, Maharashtra, India.

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*Received: 06/03/2014**Revised: 02/04/2014**Accepted: 11/04/2014***ABSTRACT**

Villoglandular Papillary Adenocarcinoma (VGPA) is a very rare subtype of adenocarcinoma of the uterine cervix. It is a variant of cervical adenocarcinoma with an excellent prognosis. It generally occurs in women of child bearing age. We report this rare case of VGPA of cervix in 63 year old female presented with vaginal bleeding and cervical polypoid growth. Histopathological study revealed diagnosis of VGPA of cervix. On radiological investigations found to have invasive lesion with parametrial nodules.

**Keywords:** Cervical carcinoma, Cervical adenocarcinoma, Villoglandular papillary adenocarcinoma.

**INTRODUCTION**

Villoglandular Papillary Adenocarcinoma (VGPA) is a rare subtype of adenocarcinoma of the uterine cervix. The incidence of cervical adenocarcinoma is on the rise over the last decades. [1] The true incidence of villoglandular papillary adenocarcinoma is unknown. So far only 115 cases of cervical VPA have been reported worldwide. All of the neoplasms were exophytic, polypoid lesions with thin papillae. The classic histologic appearance of this entity is a surface papillary component of variable thickness, with papilla that are usually tall and thin but occasionally short and broad, with a fibrous stromal core. The tumor cell should have

no more than mild to moderate atypicity and scattered mitotic figures. It affects early reproductive women and has an excellent prognosis as compared to other endocervical adenocarcinoma. [2,3]

**CASE REPORT**

A 63 year old female, para five with all living off-springs and no history of abortion, presented with complains of per-vaginal bleeding since 8 weeks. There was no history of loss of appetite or weight loss. There was history of tubal ligation done 35 years back. No history of oral contraceptive or other drug consumption. On general examination, patient was averagely built and nourished. Local

examination (per - speculum) revealed a small, polypoid growth in the anterior lip of cervix measuring 2x1.5cms with surrounding area of indurations and thickening. Rest of the cervix was unremarkable. Pap smear done was unsatisfactory for evaluation due to blood and inflammation. Cervical biopsy was performed and sent for histopathological examination.

*Histopathology:* Grossly, we received irregular, polypoid and friable mass measuring 2x1x0.8cm. Light microscopy of the serial sections obtained revealed endocervical tissue along with a tumor forming surface papillary component (fig.1,2). The papillae which were tall and thin and covered with endocervical type epithelium with moderate cytologic atypia. In areas cells with mild pleomorphic nuclei with moderate amount of cytoplasm were noted (fig.3,4). Occasional mitotic activity was noted. Underlying stroma showed foci of invasion showing tumor composed of branching tubular strands separated by fibrous stroma (fig.2). The histopathological diagnosis of villoglandular papillary adenocarcinoma of cervix was given. In-view of invasion of underlying stroma, clinician advised Ultrasonography (USG) and MRI -abdomen to confirm extent of tumor and to rule out metastasis. USG revealed heteroechoic mass lesion in region of cervix extending superiorly to involve lower segment of uterus and inferiorly to involve entire cervix, with no mass lesion in the endometrium and ovaries. Also noted were multiple, tiny, nodules in parametrium with calcification. MRI scan revealed growth in cervix which was hyperintense on T2w sequence and measuring 4x3.4x3.4cms, no evidence of regional nodal, bladder, ovarian or bone metastasis. Intra- venous urography study done was within normal limits. As tumor of stage IIB with stromal invasion and

nodular invasion in parametrium, clinician planned for radiotherapy and chemotherapy.

## DISCUSSION

Villoglandular Papillary Adenocarcinoma of the uterine cervix was first reported not too long ago by Young and Scully in 1989. [2] It became a recognized disease entity worldwide and was added in World Health Organization (WHO) histological typing of uterine cervical cancer in 1994. [4] VGPA represents a rare subtype of endocervical adenocarcinoma and accounts for approximately 4% of all cervical adenocarcinoma. [5] The characteristic tumor histology of VGPA is its extremely villous growth, well defined papillary architecture, and minimal atypia on cytologic features when compared with the common types of cervical adenocarcinoma. [6] Recognition of this tumor as distinct entity is of high clinical importance as VGPA often occurs in early reproductive women and patient's age ranges from 27 to 54 years, with an average age of 37 years. [2,3] than other malignant tumors of uterine cervix. In contrary our patient presented in late age i.e. 63 years. Clinically, relatively indolent behavior of VGPA is generally considered as "exceptionally better prognosis" and a very good treatment outcome than conventional cervical adenocarcinoma. [2,3] This might allow a conservative management such as conization, especially in subjects who want to preserve future fertility. [6]

A different therapy, is therefore, selected for individual subjects on the basis of clinical experience, for this rare malignancy. [6] As in our case patient had invasive lesion with parametrium involvement and hence was treated with radio and chemotherapy. After 18 months followup, patient was asymptomatic and radiological studies revealed regression of

lesion with no evidence of further metastasis. So far only 115 cases of cervical VGPA have been reported worldwide; of these only 9 metastasized and 2 deaths were reported. [7,11] In 30% of

cases, VGPA is associated with other forms of invasive cancers, which may have an important impact on the prognosis. [2,3]

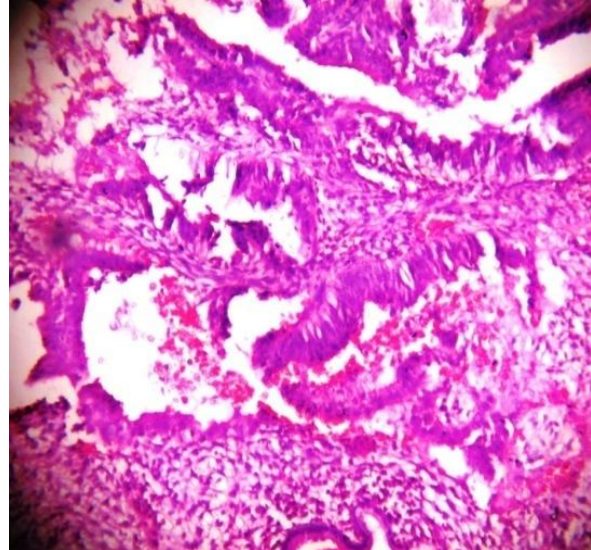


Fig.1,2: Photomicrograph showing tumor forming surface papillary component and foci showing invasion (H&E stain, 10x)

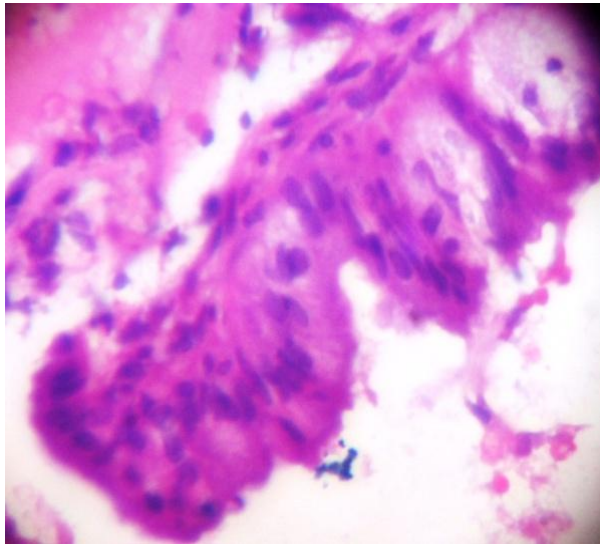
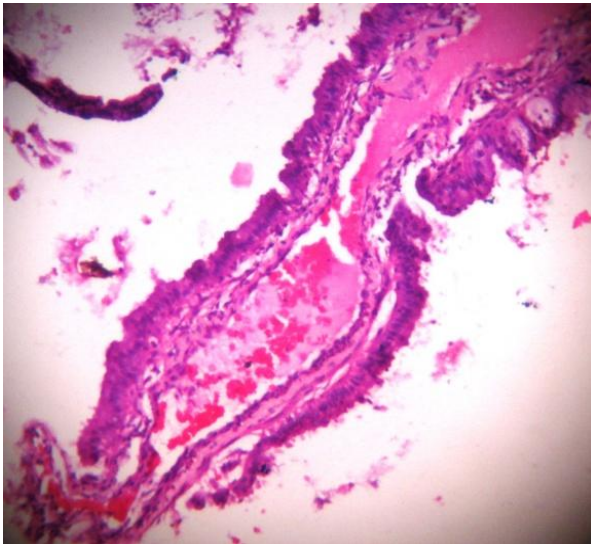


Fig3,4: Photomicrograph showing tall and thin papilla covered with endocervical type epithelium with moderate cytologic atypia (H&E stain, 10x and 40x)

Young and Scully therefore reserve the term VGPA for tumors in which the villoglandular pattern is exclusive or almost exclusive one. So VGPA have distinct clinic-pathologic features and excellent prognosis. VGPA have been reported to rarely cause lymph vascular invasion or lymph node

metastasis, leading surgeons to conduct less invasive surgeries such as conization. [2,6] Regarding differential diagnosis, other papillary adenocarcinoma can be problematic. Serous papillary adenocarcinoma of the cervix has fine, irregular and more cellular papillae than

VGPA.<sup>[1]</sup> Clear cell papillary adenocarcinoma of the cervix is characterized by marked cytologic atypia, high mitotic activity and occasional presence of psammoma bodies. VGPA should be distinguished from endocervical adenocarcinoma with a minor villoglandular component. The adenosarcoma and adenoma malignum should be considered in the differential diagnosis. <sup>[1,8]</sup>

## CONCLUSION

Villoglandular papillary adenocarcinoma (VPA) is a very rare subtype of adenocarcinoma of the uterine cervix, with favorable prognosis. VGPA rarely cause lymph space invasion or lymph node metastasis. Recognition of this tumor as distinct entity is of high clinical importance, as the treatment modalities would be different including conservative management and less surgical intervention.

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