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A Case Series of Carcinoma in Endocervix WTH Uterine Extension Diagnosed As Primary Cervical Cancers by P16+Ve and Vimentin At AHRCC

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Abstract – *Carcinomas of spreading to corpus are quite rare , it needs to be differentiated from carcinoma endometrium. It is very uncommon for these tumors to spread to fundus and involve the endometrium without involving rhe myometrium. The endocervical lesion in particular needs to be differentiated from primary endometrial cancer. Several ihc markers like vimentin , p-16 are recently being used to differentiate. The vimentin is usually positive for endometrial cancer whereas p16 is positive for cervical cancer . Here we report two case of carcinoma cervix with uterine extension and differentiated from ca endomeetrium by vimentin and p16.*

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I. CASE-1

A 41 yrs female presented to opd with complains of,irregular bleeding p/v- for one and half years.She is para two and sterilised.M/h- presently irregular.
On general examination – she is of average built and good nutritional status.
Pallor –mild+
No pedal edema , no supraclavicular lymphadenopathy
p/a- normal
p/s- cervical growth +, with purulent discharge
p/vand p/r- uterus bulky, with growth in the cervix of
3cm , b/l para metrium free ,all fornices free
Investigations-
Routine**– hb-11 gm/dl**

- **Tlc-7000/dl**
- **TPC-1.5LAKHS/dl**
- **Urea-18mg/dl**
- **Creatinine-.93mg/dl**
- **Na-136mmoles/l**
- **k-3.5mmoles/l**
- **HIV,HBsag,HCV negative**
- **ALP-77**
- **ALBUMIN-3.2**

Specific investigations
Cervical growth biopsy – poorly differentiated carcinoma

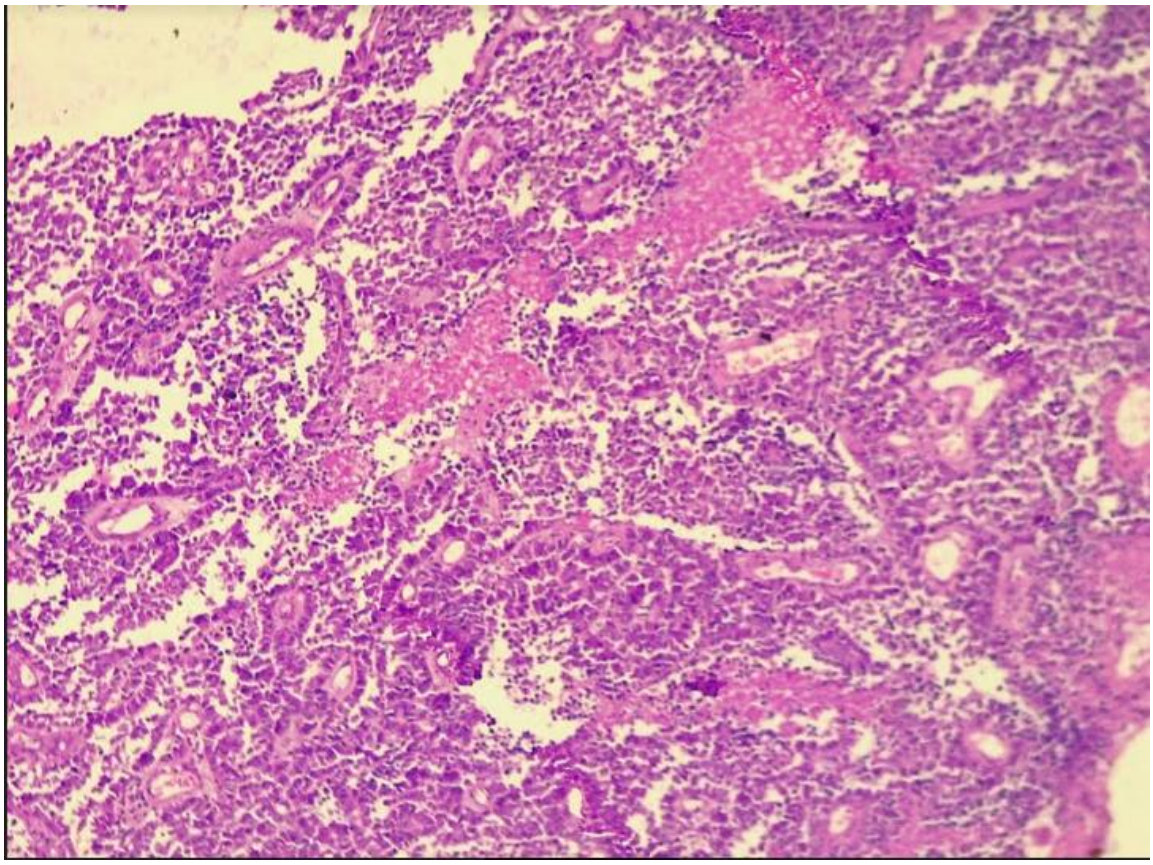


FIG -1 Poorly differentiated(round cell tumor)
Avd – for vimentin and synaptophysin to differentiate endometrial from endocervical carcinoma

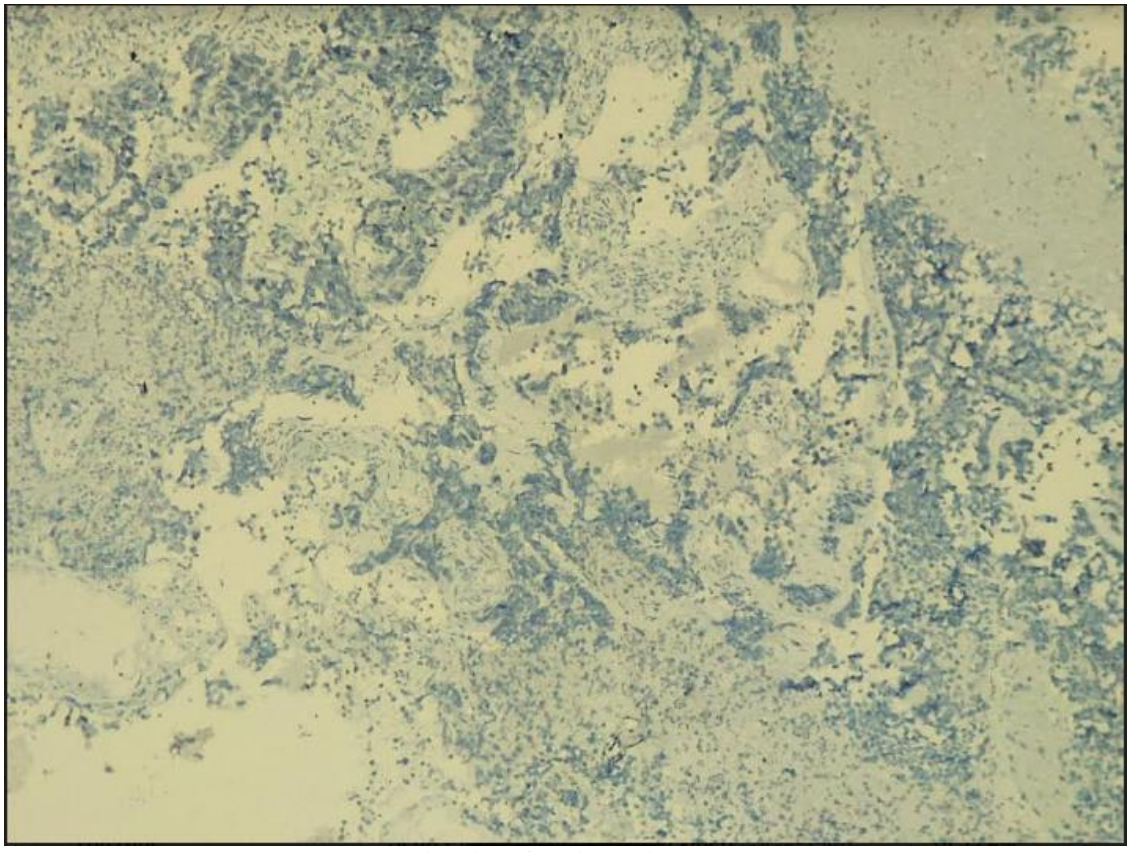


FIG-2 SYNAPTOPHYSIN –ve

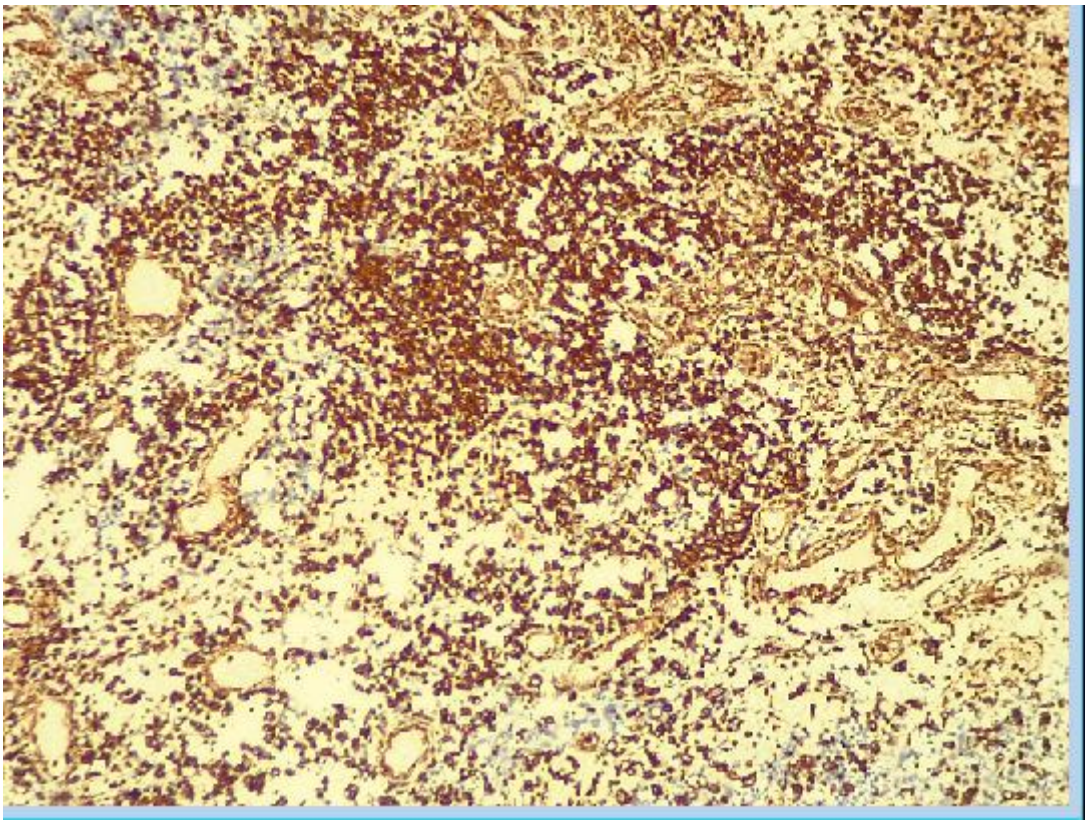


FIG-3 **VIMENTIN-VE**

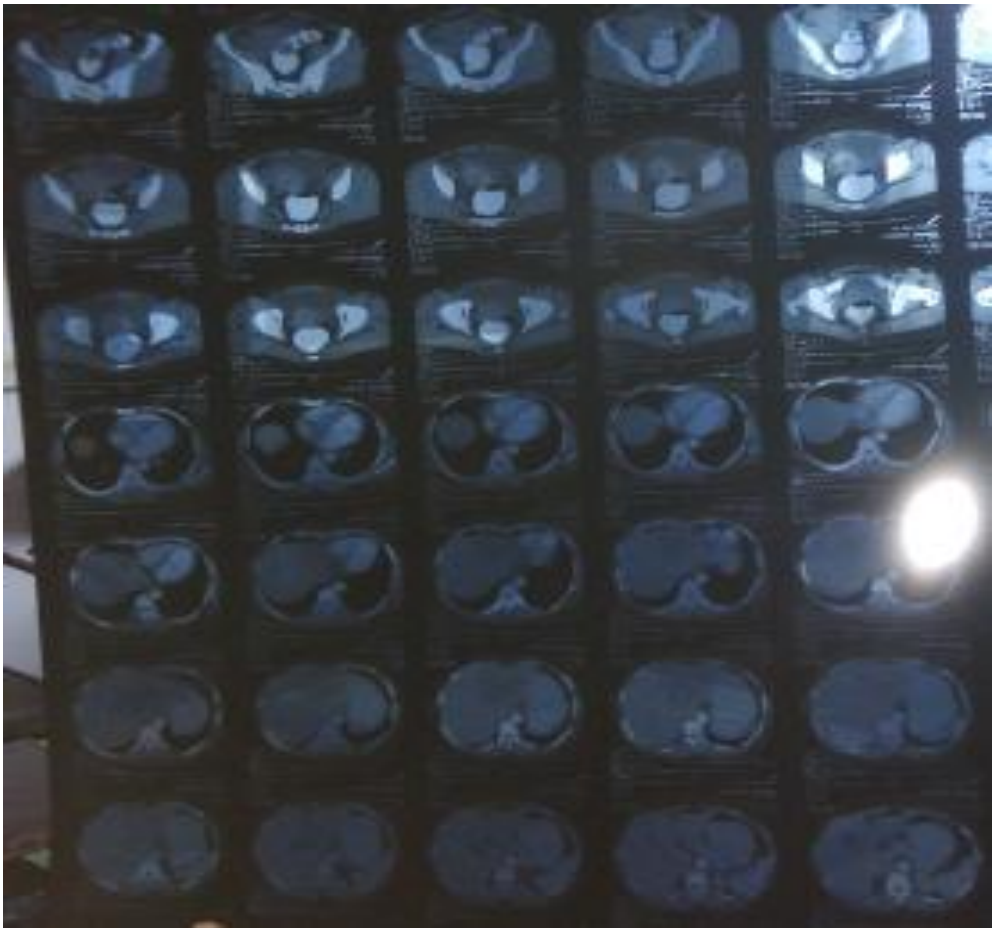


FIG-4

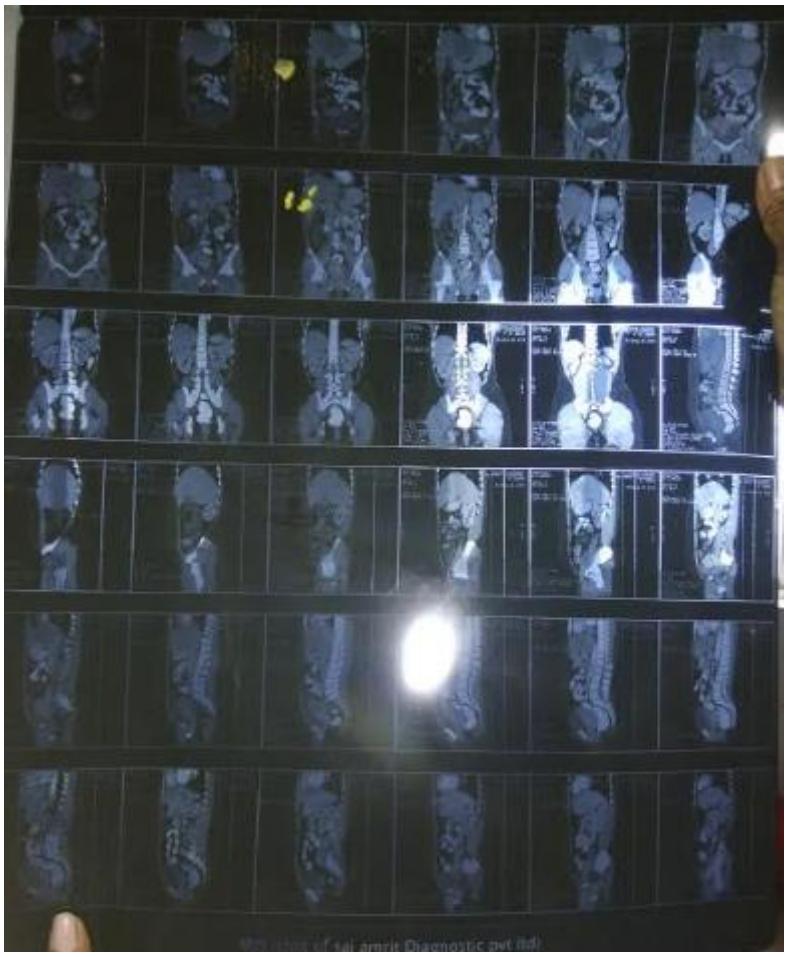


FIG-4CECT –bulky cervix and uterus a with endometrial endocervicak endovaginal collection with heterogenous cervix . presence of multiple punctuate calcification in cervix .Anterior lip of the cervix measures 18mm and posterior lip 19 mm. cervix appear hypodense heterogenous with a small hypodense lesion of size 8,4mm x 8.4 mm in anterior cervix.
Hypodense lesion with peripheral calcification noted in right adnexa separate from right ovary ?iiliac node . similar hypodense lesion with calcific foci noted in the left adnexa close to iiliac vessels . left ovary not visualised
Left lobe of liver shows appears heterogenous(?neoplastic).Fairly well defined sol in left lobe of liver which shows peripheral nodular enhancement
Adv- fnac of liver sol
Fnac of liver sol –smears appear highly cellular and shows malignant cells and large clumps in single with few leucocytes
Imp- metastatic adenocarcinoma
DIAGNOSIS – poorly differentiated carcinoma cervix in stage IV b
TREATMENT – chemotherapy

CASE - 2
A 57 yrs old female presented with complains of bleeding p/v-5months.She is para 3.she is a known case of dm /hypertension. She has attained menopause 14 yrs back.
On general examination- she is of normal built and normal stature
p/a – soft ned
p/s- small fleshy growth
p/v and p/r- uterus bulky , growth in cervix b/l fornices free
INVESTIGATIONS-
Routine – hb-10 gm/dl

- **Tlc-8000/dl**
- **TPC-1.3LAKHS/dl**
- **Urea-15mg/dl**
- **Creatinine-.83mg/dl**

- **Na-135mmoles/l**
- **k-3.7mmoles/l**
- **HIV,HBsag,HCV negative**
- **ALP-67**
- **ALBUMIN-2.9**

USG- uterus bulky in size (8.5x 2.5x3.4) . Hypoechoic lesion in cervix of size (2.6x 2.6). Rt ovary normal normal in size (2,5x1.8), left ovary normal in size (1.9 x1.8). No enlargement of paraaortic nodes
IMP- Bulky uterus with hypoechoic lesion in cervix
CECT- No free fluid in abdomen in abdomen , no bowel wall thickening / dilation seen
No abdominal mass or significant lymphadenopathy
No evidence of appendicitis . No renal calculi or hydroureteronephrosis
Degenerative changes noted in thoracolumbar spine in the form .

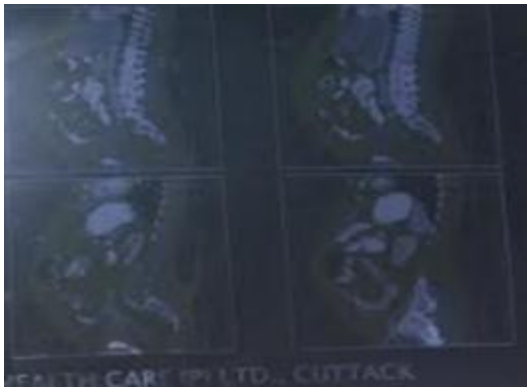


FIG -5

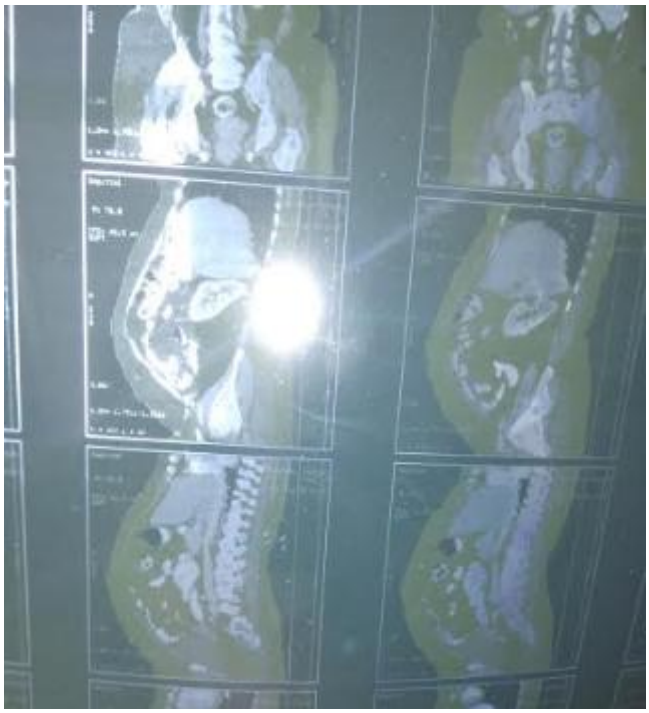


FIG-6

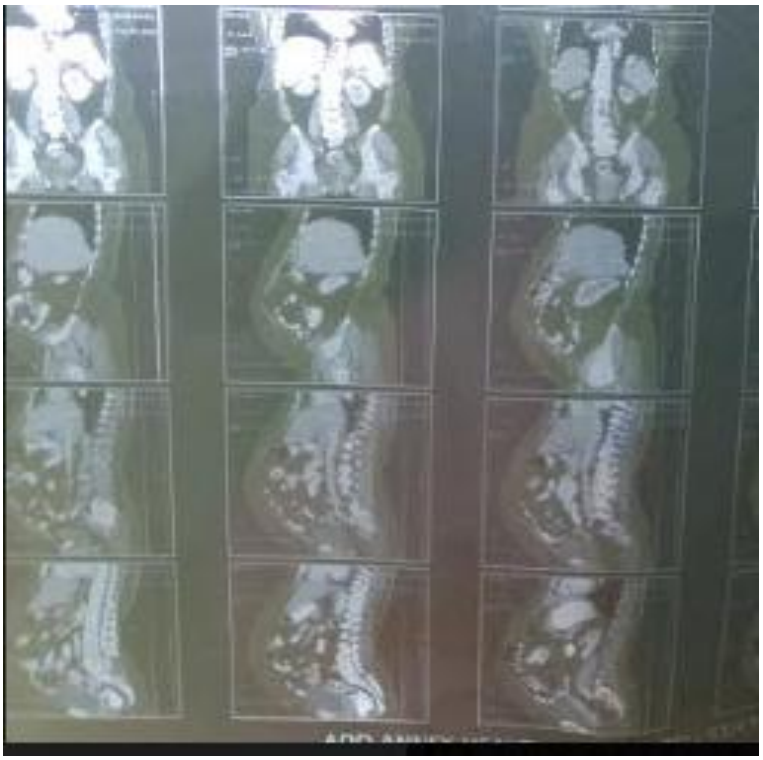


FIG -7

CECT – NORMAL FINDING EXCEPT FOR A MILDLY HYOPECOIC LESION IN CERVICAL REGION

Cx biopsy – squamous cell carcinoma , moderately differentiated with focal glandular differentiation endocervix
Ihc- p16 +ve

PROCEDURE – Type II radical hysterectomy(WERTHEIMS HYSTERECTOMY)+ BPLND(BILATERA; PELVIC NODE DISSECTION)
IOP- B/L Parametrium free
Good dissectiabiliy
Vagina free of tumor
Omentum and other abdominal organs healthy

CUT SECTION – growth found involving the endocervix extending to corpus

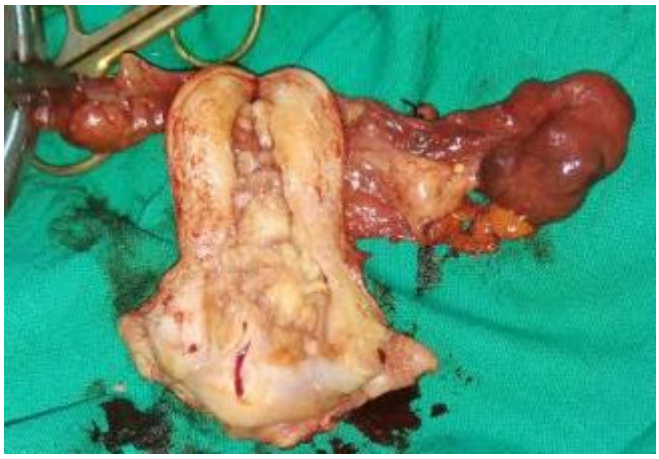


FIG -10

Due to high suspicion endometrial cancer , omental biopsy taken

GROSS CUT OPEN SECTION(showing growth in endocervix extending to uterus)
Endocervix show proliferative growth of size2x2.5 cm extending upto the endometrial cavity. Ectocervix appears free , thickened hypertrophic.
Growth appears to involve < 50% of stroma
Rt appendage measure 2x1.5 .5 cm , ovary and fallopian tube 4cm appears unremarkable
Lt appendage containing ovary 3x2x1 and fallopian tube have a para tubal cyst
Omental specimen appears unremarkable

Microscopic examination-
Invasive adenocarcinoma of cervix grade 2
Depth of invasion – 7mm into the stroma
Percentage of stroma involved -80%
Lower uterine segment involved
Endomyo-superficial endometrial part involved by adenocarcinoma
Basal endometrium free of tumor
b/l ovaries and tubes unremarkable
b/l parametrium is free
all the regional lymph nodes show reactive changes
omentum free of tumor

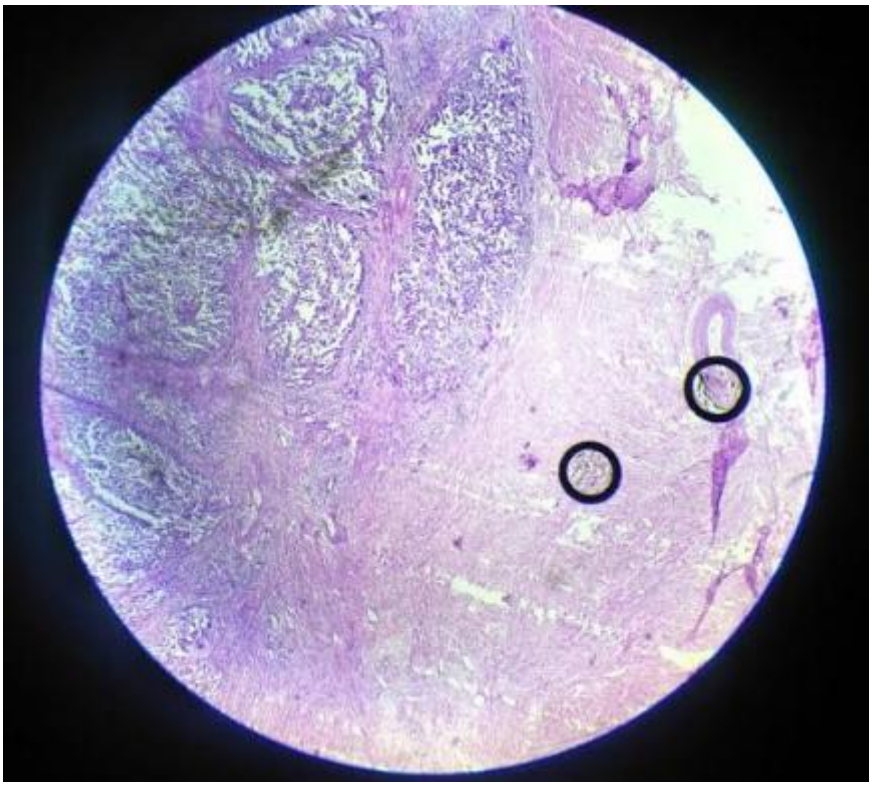


FIG-11

Invasive adenocarcinoma of cervix grade 2
Depth of invasion – 7mm into the stroma
Percentage of stroma involved -80%

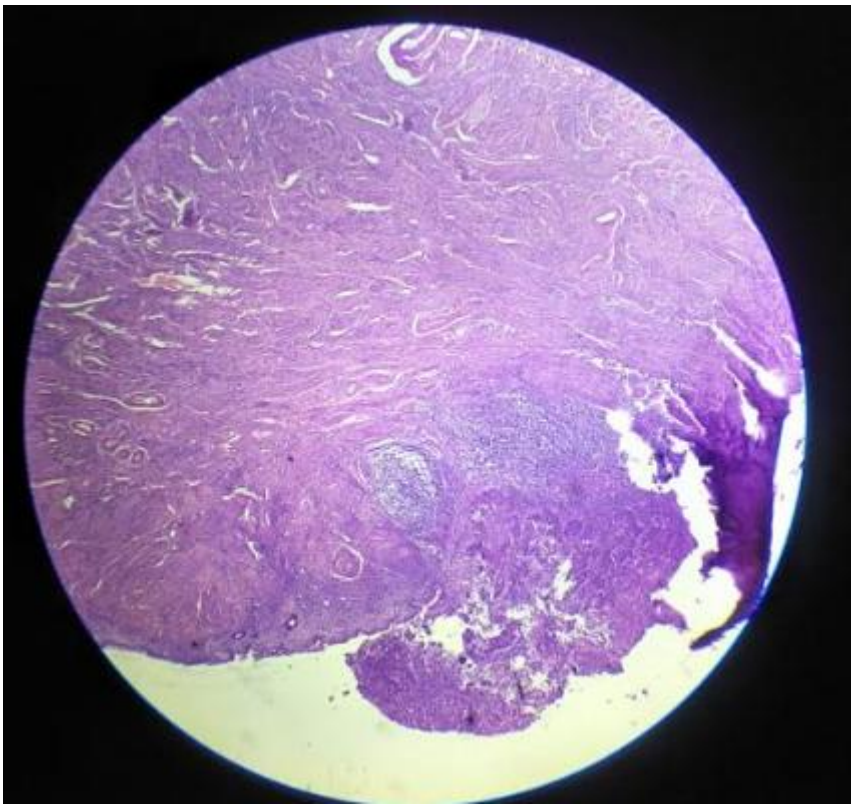
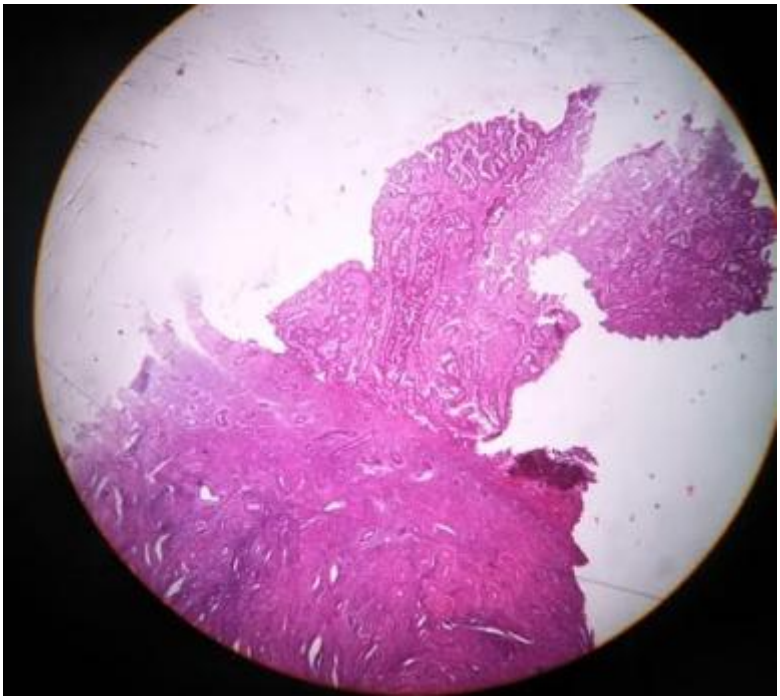


FIG-12

Endomyo-superficial endometrial part involved by adenocarcinoma
Basal endometrium free of tumor



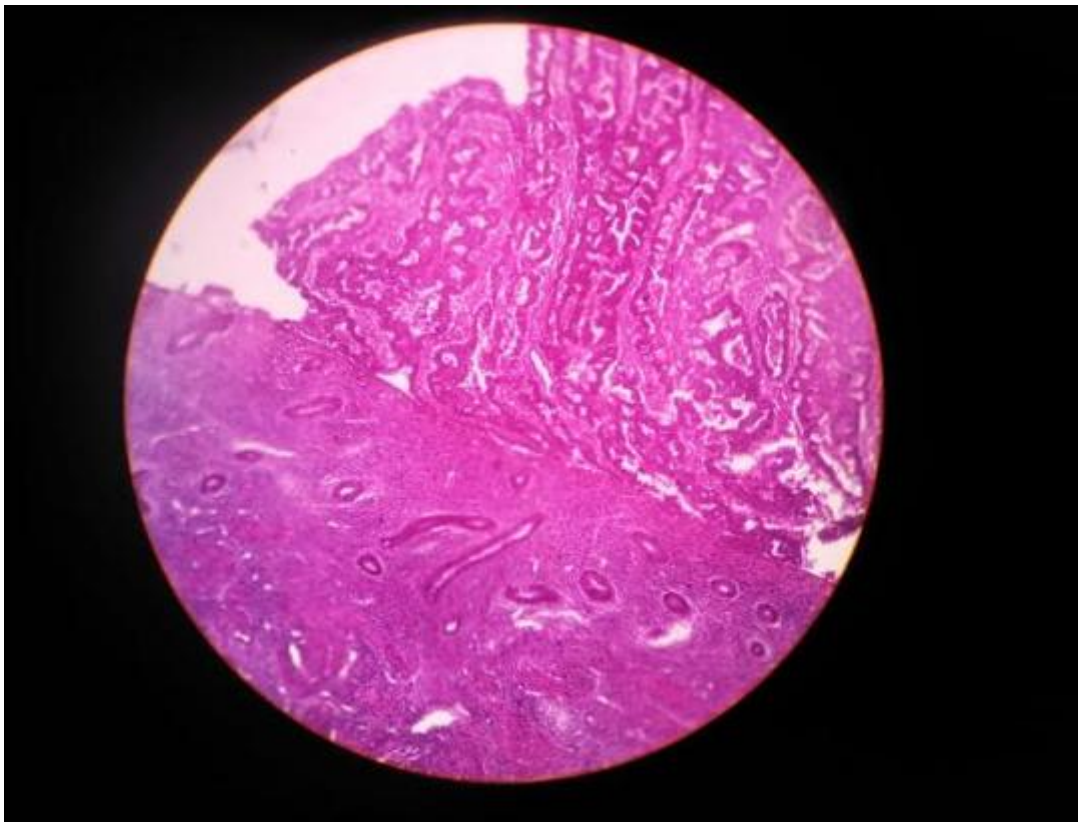


FIG -13 HPV RELATED HIGH RISK ENDOCERVICAL CARCINOMA

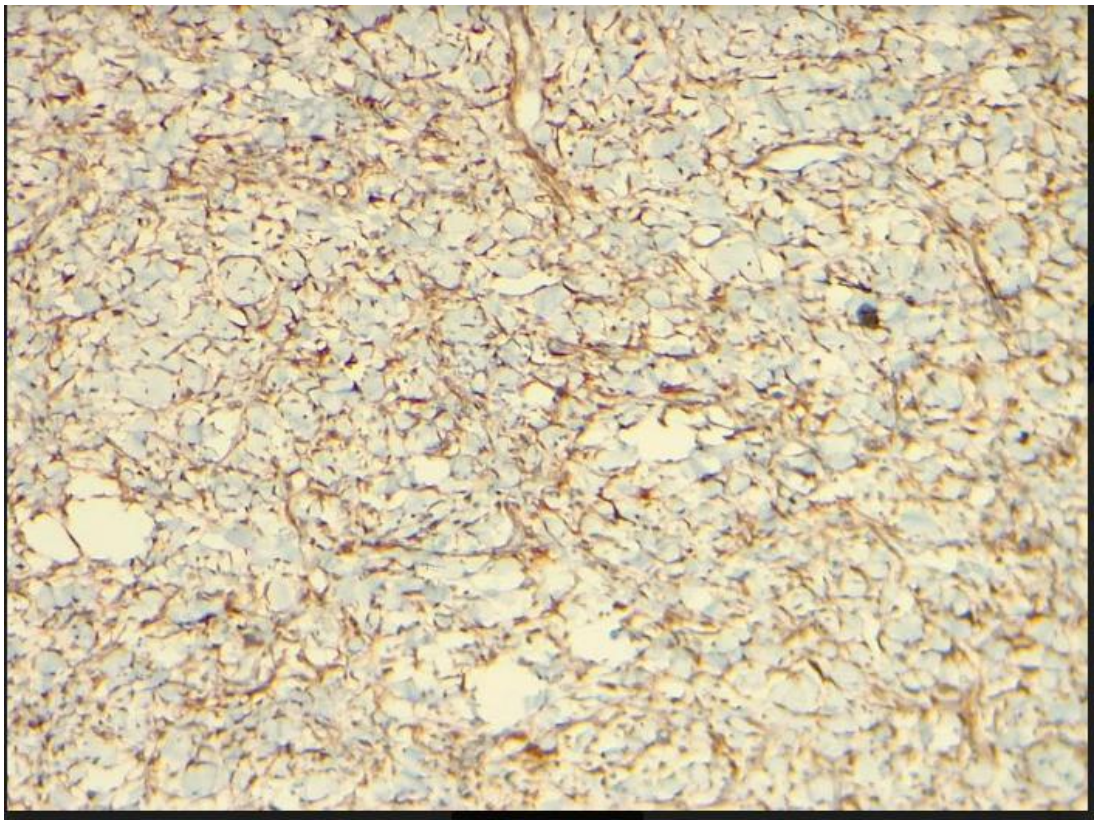


FIG -14 IHC PI6 +VE

DIAGNOSIS – primarily endocervical adenocarcinoma STAGE IB2

II. Discussion

when clinical and histopathological evaluation is not effective in differentiating primary endocervical carcinoma from endometrial carcinoma ihc panel of p16, vimentin is used.There are multiple reasons why the distinction adenocarcinomas of endocervix from endomettrium is problematic. These include overlap in morphology and involvement of both the sites by tumor on imaging studies as well as biopsy specimens and on gross microscopic examination of a hysterectomised specimen.(1)

Moreover the dominant component of the hysterectomised specimen may not represent the primary tumor , as spread of a smaller primary tumor can result in a larger tumor at another site.

Difficulties arise in endocervical and endometroid carcinomas of low grade.

1.Shared cellular differentiation .Both tumor types can have mucinous and endometroid features. HPV related adenocarcinoma of the endo cervix have a hybrid of mucinous and endometroid features, often with numerous apically situated mitotic figures and basally situated basal bodies.(2)

2, Tumors of both types share the glandular architecture and both can have the villoglandular and pappilary pattern

3. Involvement of both the endometrium and endocervix in biopsy / curettage or hysterectomised specimens

4. Lack of an identifiable precursor lesion . This is often a problem in biopsy and curettage specimens , but also can be problematic when both the endocervix and endometrium often including the lower uterine segment. In this situaion precursor lesions may be simulated(endocervical adenocarcinomas extending into the endometrium and simulating atypical hyperplasia , or endometoid adencarcinoma of endometrium extending to endocervix and mimicking a premalignant endo cervix glandular proliferation(3)

4. The dominant tumor component does not necessarily represent primary site. Some endocervical adenocarcinomas can have limited endocervical component and a dominant endometrial component or a endomyometrium involvement simulating a primary endometrial carcinomawith endocervical extension. Conversely , small endometrial adenocarcinomas can exhibit extensive cervical involvement(4)

Panel of markers to differentiate endocervical and low grade endometrial cancers

Marker	**endocervicaladenocacinoma (hpv related)**
P16	+ve
Vimentin	**-ve**
MARKER	**(endocervical adenocarcinomas (hpv not related)**
P16	**-ve**

Endometrial adenocarcinoma +ve for vimeenin , -ve for p-16. Sometimes p-16 may be focally positive but staining intensity is very low , in comparision to endocervical adenocarcinomas(5)

Purpose – It is very important to distinguish the endocervical and endometrial carcinoma as the Treatment modalities and type of surgical procedures are different. The purpose was to highlight on dilemas and overlapping features of both these tumors, to reach at good diagnosis it is of more help if distinction is done intraoperatively.

References:

[1]. Stanbler a ,Sherman me ihc and human pappiloma virus in situbhybridization are useful for distinguishing endocervical and endometrial am journal surf patholo 2002
[2]. Ansari –lari etal distinctin of endometrial adencarcinomas ihc p-16 corelated am j surg pathology 2004
[3]. Yemelyanova A , V ang r etal . endocervical and endometrial or emdomyometrial simulating primary endometrial carcinomas am j surg path2009
[4]. kong etal am j surg patholo 2010
[5]. Castrillon DH, distinction of endocervical and endometrial carcinomas in journal of pathology 2002

Smruti Sudha Pattnaik M.B.B.S, et. al. "A Case Series of Carcinoma in Endocervix Wth Uterine Extension Diagnosed As Primary Cervical Cancers by P16+Ve and Vimentin At AHRCC." *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, 20(03), 2021, pp. 41-50.