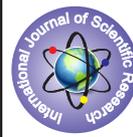


SMALL CELL CARCINOMA OF CERVIX: A CASE PRESENTATION ON SEQUENTIAL APPROACH



Pathology

KEYWORDS:

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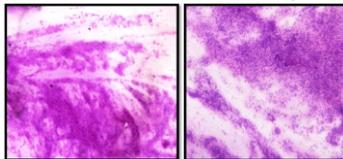
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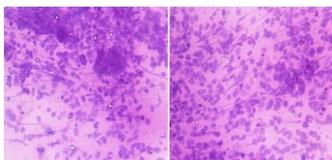
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INTRODUCTION-

- Small cell carcinoma of the cervix is a rare and a very aggressive tumour.
- Once being considered to be a rare type of squamous cell carcinoma, evidence has proven that most of the tumours express one or more markers of neuroendocrine differentiation.
- The behaviour of this rare malignancy is different from that of squamous cell carcinomas, with a high propensity for nodal and distant metastases. Hence, there is a need to highlight this histopathological entity.
- A 67-year-old woman presented to the cancer Out Patients Department with intermittent lower abdominal pain which was there since past six months.
- The pain was dragging in nature and it increased over the past two weeks. Patient also complained of low backache. Her past history and family history were uneventful.
- Per vaginal examination revealed a bulky cervix with foul smelling scanty discharge.
- Cervical smears for cytological examination was taken and found suspicious of undifferentiated carcinoma, which was followed by cervical biopsy for histopathological examination



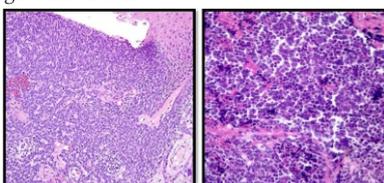
CYTOLOGICAL PICTURE OF SMALL CELL CARCINOMA 4X AND 10X



CYTOLOGICAL PICTURE OF SMALL CELL CARCINOMA 40X

CYTOLOGICAL FINDINGS-

- Moderately to highly cellular smear.
- Cells appear in loosely cohesive multidimensional aggregates and sheets as well as single and dispersed.
- Cells are monotonous in size (approximately 2x intermediate squamous cell nuclei).
- Very high nuclear/cytoplasmic ratios with delicate rims of amphophilic cytoplasm.
- Nuclei have finely granular/stippled chromatin, with nuclear moulding and smear artefact.
- Background is mostly clear but may have granular proteinaceous diathesis material (clinging diathesis) and apoptotic degenerated single tumour cells.



HISTOPATHOLOGICAL IMAGES OF ANAPLASTIC SMALL CELL

CARCINOMA CERVIX 10X AND 40X

HISTOPATHOLOGICAL FINDINGS

- Histopathological findings showed solid nests with marked peripheral palisading pattern and rosette formation.
- Small tumor cells with scanty cytoplasm having a very high nuclear/cytoplasm ratio and indistinct cell borders.
- The nuclei are round to oval and showing increased but fine granular chromatin. Nucleoli indistinct.

The sample was further send for IHC markers outside our institution-

MARKERS(CLONES)	RESULT
PAN CK (AE1/AE3)	FOCAL POSITIVITY IN PERINUCLEAR DOT-LIKE PATTERN
Cd45 (P07126/162B11/0)	NEGATIVE
CHROMOGRANIN (POLYCLONAL)	POSITIVE
Cd56 (123C3)	POSITIVE
MARKERS(CLONES)	RESULT
P40 (C8.1)	NEGATIVE
SYNAPTOPHYSIN (SMP88)	POSITIVE
P16 G175-405)	POSITIVE
TTF-1 (8G7G3/1)	POSITIVE

- The tumor cells are positive for CHROMOGRANIN, SYNAPTOPHYSIN, CD56, P16, TTF-1, PANCK

X-ray and M.R.I. Scan of spine

- revealed bony metastasis.
- Revealed a *malignant mass lesion in lower uterine segment from cervix* extending into the anterior wall of rectum with multiple retroperitoneal and pelvic lymphadenopathy and thrombosis of both INFERIOR VENA CAVA AND COMMON ILLIAC VEINS.
- Metastatic osteolytic lesions in left pubic bone.
- Mesentric panniculitis.

DISCUSSION-

- Small cell carcinoma accounts for 1-6% of cervical carcinoma. Expression of **CHROMOGRANIN, SYNAPTOPHYSIN, CD56, P16, TTF-1**, have been previously reported in small cell carcinoma of the uterine cervix. Therefore, their expression favours the microscopic and clinical diagnosis of small cell carcinoma cervix.
- It is *clinically aggressive* and frequently presents with parametrial invasion and pelvic lymph node metastases. The reported 5 year survival rate is 14-39%.

CONCLUSION

- Small cell carcinoma of the cervix represents an *uncommon variant and can be confused with poorly differentiated squamous cell carcinoma of cervix* but have a particularly *poor prognosis*.
- Traditionally, the diagnosis was established from routine histopathological sections and most of the cases were misdiagnosed.
- It is proposed that the present criteria for the diagnosis of cervical small cell carcinoma are too strict. *The diagnosis should rely on the microscopy of H&E sections and the distinctive clinical behaviour along with neuroendocrine markers.*

- however, absence of neuroendocrine differentiation should not exclude the diagnosis, as it does not appear to influence the clinical behaviour.
- Management of small cell carcinoma of the cervix is systemic, with chemotherapy as the first line of treatment. Surgery and radiotherapy may improve control of local disease but are unlikely significantly to influence the overall prognosis.

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