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Carcinoma in situ Cervix Extension into Endometrium: An Unusual Case Report.

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ABSTRACT

Invasive squamous cell carcinoma is the most common gynecological malignancy in India. Precursor lesion cervical carcinoma in situ with superficial extension to the endometrium without involving myometrium is very uncommon. Here we report a rare case of 55 year old post menopausal women who presented to the gynecology department with pain abdomen, bleeding and discharge per vaginum of two months duration. Post operative histopathological examination of uterus revealed carcinoma in situ cervix with superficial extension to the endometrium. This was a rare phenomenon.

Keywords *: carcinoma in situ, cervix, endometrium, superficial spreading.*

INTRODUCTION:

The terminology of cervical squamous intraepithelial lesions, are thought to represent the precursors of invasive carcinoma has evolved over the years and continues changing today. Carcinoma-in-situ of Cervix usually progresses as infiltrating carcinoma of cervix involving vagina, uterine corpus and later to pelvic and peripelvic tissue. Very rarely, carcinoma-in-situ can extend into the uterine cavity along the surface of endometrium, replacing the columnar epithelium by neoplastic squamous epithelial cells. In exceptional instances, it has been reported to extend into the vagina, to the introitus and even the fallopian tubes.[1,2,3]

CASE HISTORY

A 55 year old postmenopausal female attended the Gynecology outpatient department with complaints of occasional bleeding per vagina and pain abdomen of two months duration. She had normal regular cycles and three full term vaginal deliveries which were uneventful. Per vaginal and per speculum examination showed postmenopausal changes like atrophic uterus, other systemic examination unremarkable. Papanicolaou smears and biopsy taken from the cervix showed carcinoma in situ changes. She underwent total abdominal hysterectomy without adnexae. Specimen was submitted for histopathological examination.

Pathological findings:

We received hysterectomy specimen measuring 6cm×3cm×2cm. Cut surface showed atrophic endometrium, myometrium and unremarkable cervix. (Figure 1)

Figure 1: cut surface of uterus showing atrophic endometrium.

The sections are stained with hematoxylin and eosin. Multiple Sections studied from the cervix showed uniform thickened epithelium with carcinoma-in-situ changes. The epithelial changes were limited to epithelium only and there was neither microinvasive nor evidence of infiltration into the stroma. (Figure2)

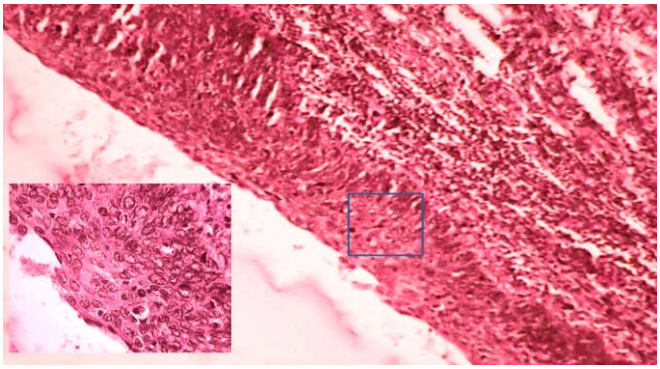

Figure 2: carcinoma in situ changes in cervical epithelium (H&E, x40). Inbox (H&E x400).

Sections from endocervical canal and endometrium showed replacement of covering epithelium by severely dysplastic squamous epithelium. There was no evidence of invasion into myometrium.(Figure 3)

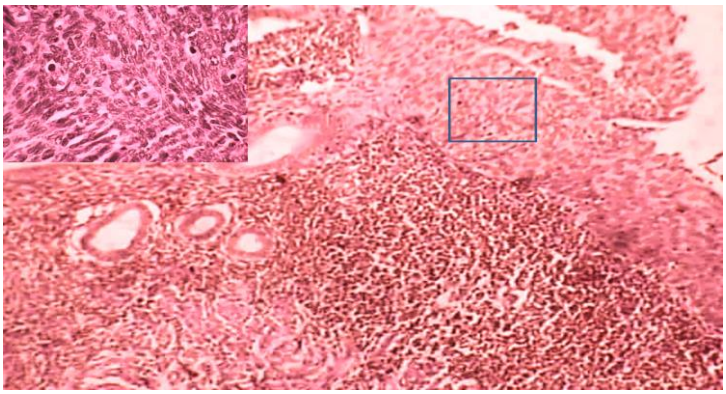

Figure 3: Replacement of endometrial columnar epithelium by dysplastic squamous epithelium. (H&E,x40). Inbox (H&E, x400).

DISCUSSION:

The term carcinoma in situ was employed when there was no differentiation at any level (despite some occasional flattening of the surface cells) and the basal cell was disorganized. Dysplasia was further subdivided into mild, moderate, and severe, depending on the severity of the changes. Carcinoma in situ was further subdivided by some authors into parabasal cell (51 %), keratinizing cell (37%), pleomorphic cell (3%), and small cell (1.5%) types.[4]

Review of the literature revealed 26 reported cases of cervical carcinoma with endometrial surface involvement; of these 26 cases presented by various authors, nine cases were of carcinoma *in situ*,[5,6] two cases of microinvasive carcinoma,[6,7] and 15 cases were of invasive cervical carcinoma.[6,8] In three cases, the fallopian tube was also involved, in direct continuity with the cervical and endometrial lesions.[6,9] In four cases, the bilateral ovaries were also involved.[5,10] In addition, two cases showed an extensive superficial spread to almost the entire genital tract, with associated endometrial stromal sarcoma.[10] Gupta *et al*. reported a case of superficial endometrial spread of carcinoma in situ cervix and pointed out that this condition may follow radiation therapy.[11] In our case it was carcinoma in situ was extending into endometrium upto the level of fundus, replacing the columnar epithelium. There was no history of radiation therapy in the present case.

The intraepithelial lesions share many of the cytological features of the invasive carcinoma, mainly manifested by enlargement, irregularities, and hyperchromasia of the nuclei; increase in mitotic activity; and alteration of the maturation pattern. A continuous range of morphologic abnormalities exists among these lesions, which provide a rough indication of the likelihood with which they would evolve into invasive

carcinoma, if left untreated.[12] In our case the microscopic sections studied from cervix showed uniform thickened epithelium with severe dysplasia/carcinoma-in-situ changes. The epithelial changes were limited to epithelium only and there was no evidence of infiltration into the stroma. Sections from endocervical canal and endometrium from the uterine fundus showed dysplastic squamous epithelium replacing the normal surface columnar epithelium. There was no evidence of invasion into myometrium. Therefore the final diagnosis offered was cervical carcinoma in situ with surface extension into the endometrium.

To conclude, since this pattern is unusual, the prognostic significance and management guidelines are lacking. Most of the reported cases have presented in an early stage of disease probably due to early endometrial involvement. Our case was treated by simple hysterectomy and did not show any recurrence 9 months of follow up.

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