

CYTOLOGY OF MELANOMA OF CERVIX UTERI

(Case Report)

by

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Malignant melanoma is a primary neoplasm of skin but has been known to involve mucosa of eye, oropharynx, genitalia and anorectal junction frequently. An occasional case report has appeared on melanoma of cervix. The present case is being reported for rarity of lesion and also for the cytological picture which made a complete morphological diagnosis possible.

Case Report

M.D. 30 years Hindu female, 4th para, had last child birth at 28 years. came to the hospital for foul smelling painless vaginal discharges constipation and scanty menses for last 3 months, along with a slowly enlarging painful mass in left inguinal region for 1 month.

On examination she was a woman of moderate built. There was marked pallor.

There was no jaundice. The liver was enlarged 5 cms below costal margin, firm, smooth, non-tender.

There was a nodular mass in left inguinal region measuring 3 x 2 cms in size, firm, tender and smooth, not adherent to skin or deeper tissue.

The external genitalia were normal. On vaginal examination uterine size could not be made out. Uterus was fixed to parametrium.

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There was a firm irregular growth involving whole of cervix extending to all the fornices and posterior vaginal wall. There was profuse bleeding.

On speculum examination there was multinodular ulcerative growth involving whole of cervix. The vaginal fornices specially posterior fornix was indurated and thickened. Clinical diagnosis of carcinoma cervix stage-IV was made.

The patient developed deep jaundice and died within a week of admission.

Cytological Examination

Multiple cervical smears were fixed in ether-alcohol. The Pap. stained smear showed a dirty background and red blood cells. Epithelial cells, variable number of acute inflammatory cells and large number of abnormal cells were interspersed isolated or in groups. The abnormal cells were pleomorphic, round, oval or elongated, varying in largest diameter from 10 μ to 126 μ . The cell outline was distinct. The cytoplasm was abundant and in many showed brown pigment as fine granules or coarse clumps of pigment. In most, cells the nuclei were obscured by these granules (Fig. 1). On Pap. smear a malignant melanoma was suspected. Hydrogen peroxide bleached smears were stained with Pap. stain. Another smear was stained with Masson-Fontana Silver technique for melanin.

The Hydrogen peroxide bleached smear clearly showed the nuclear morphology. The nuclear outline were sharp, regular, round or ovoid, hyperchromatic, with dark coarsely clumped chromatin. The nuclei showed 2-3 giant nucleoli which took bluish pink staining (Fig. 2). Many cells showed markedly bizarre

nuclei even giant nuclei and some cells had 4-5 nuclei (tumour giant cells) (Fig. 3). Cellular phagocytosis of tumour cells by the other large tumour cells was seen. Intranuclear vacuolation was observed in some cells.

The Masson-Fontana Silver stain showed brown pigment in cytoplasm to be positive for melanin (Fig. 4).

Cervical biopsy showed a malignant melanoma of cervix (Fig. 5). Biopsy of inguinal lymphnode showed metastatic melanoma.

Comments

Primary melanoma of cervix uteri is a rare entity and 4 to 5 cases could be found in literature (Abell, 1961). Hence, before labelling this case as a case of melanoma cervix all efforts were made to exclude any lesion in the vagina or a distinct primary in other parts of the body. No other lesion was found and the case was considered as for primary malignant melanoma of cervix uteri metastasizing to inguinal lymphnode and probably liver.

The histogenesis is possibly similar to that of melanoma of mucocutaneous junction at other sites. The tumour may arise from existing junctional melanocytes or from the melanin containing cells observ-

ed within the stroma of cervix uteri (Wimhofer and Stoll, 1954). Nicholson (1936) described histomorphology of vaginal vault at the margin of cervix uteri which included sebaceous glands, hair follicle, shaft of sweat gland and pigmented melanocytes. Willis (1936) recorded unusual prosoplasia in uterine cervix with formation of hair follicle and shafts. Cid (1959) reported 2 instances of melanotic endocervical pigmentation of endocervix and further stated that on subsequent investigation 3.5% uterine cervix contain melanin containing cells. He regarded these cells to be neurogenic in origin and thus there is possibility that primary melanoma may arise from these cells.

References

1. Abell, M. R.: Am. J. Clin. Path. 36: 248, 1961.
2. Cid, C. M.: Ann. Anat. Path. 4: 617, 1959.
3. Nicholson, G. W.: J. Path. and Bact. 43: 209, 1936.
4. Willis, R. A.: J. Path. and Bact. 43: 223, 1936.
5. Wimhofer, H. and Stoll, P.: Zentralb. Gynak. 76: 1840, 1954.

See Figs. on Art Paper VIII-IX