

DISTANT METASTASIS FROM CARCINOMA OF CERVIX

by

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It is clinically observed that carcinoma of cervix mostly remains limited within the boundaries of pelvis for which attempts are made by way of radical or ultra-radical surgery to eradicate the disease. When the disease becomes established over a long period or in other words when the patients come late, dissemination of malignant cells from the cervix in the form of deposits have been noted in different parts of body. Metastases in the skull bones is not common nor the site is usual for carcinoma of cervix. Moreover association of widespread malignant cutaneous nodules with skull deposits is very uncommon. It is for this reason the present case is considered worth reporting.

CASE REPORT

A married Hindu woman aged 40 years was admitted on 29.6.1971 for carcinoma of cervix stage II. On admission it was noted that the patient had a tense cystic swelling $1\frac{1}{2}$ inch in diameter over the left parietal bone which the patient thought it was due to some trauma she received on the head about fourteen days prior to admission (Fig. 1). She had also nodules over her chest and abdomen. Since the swelling in the scalp did not show any sign of regression in course of a fortnight, X-ray examination was carried out and it showed a large area of bony defect in the left parietal region with soft tissue swelling (Fig. 2). There was also another small area of bony defect without any soft tissue swelling. X-ray examination of

chest, spine and pelvis did not show any abnormality. Examination under anaesthesia revealed a nodular malignant growth on both lips of cervix and both parametria were involved but not upto the pelvic bones. The upper part of vagina was also involved by the malignant extension. Apart from some areas of submucosal haemorrhage cystoscopy revealed no abnormality. Biopsy of cervix confirmed it to be squamous cell carcinoma. Later in course of a month cutaneous nodules became widespread all of a sudden. Distribution of subcutaneous nodules and enlarged lymph nodes were as follows:

Nodules

Chest and axilla	— 12
Abdomen	— 35
Back	— 18
Head and neck	— 13

Enlarged Lymph Nodes

Axilla	— 9
Chest	— 6
Below inguinal ligament	— 11
Head and neck	— 17

Since her general condition was never satisfactory for a major operation, treatment was commenced with intravenous injections of cyclophosphamide (Endoxan) 1600 mgm at a time. Just prior to commencement of this treatment fluid was aspirated from the scalp swelling and a nodule from the neck was removed for examination. Lumbar puncture showed clear fluid under normal pressure. Histopathological examination of the nodule revealed it to be epidermoid carcinoma which was most probably metastatic. Centrifuged deposit from the aspirated fluid showed malignant cells by Papanicolaou stain, character of cells gave an impression of epidermoid carcinoma. The condition of patient gradually went downhill and she died on 21.8.1971. No autopsy was carried out as the relatives of the patient refused permission for postmortem examination.

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Discussion

The usual and common method of spread from carcinoma of cervix is by direct extension. Invasive nature of the disease may cause early involvement of parametrium, bladder and rectum but the distant sites may remain comparatively free. Lymphatic spread is the next common method and by this route the abdominal glands and organ become involved. Lastly haematogenous method of spread helps to carry malignant cells to a distant site or organ where it gets lodged and forms a metastasis.

Carlson *et al* (1967) while making an analysis of a large number of cases of carcinoma of uterine cervix reported metastases in brain, spinal cord, dura mater and skin. According to Novak and Woodruff (1962) metastases to the skin, brain, liver, pancreas, etc. usually takes place by blood stream route. In his report of 420 necropsies, Henriksen (1949) noted that about quarter of cases had extrapelvic spread including metastases in skull, dura, brain and skin. He further emphasised that presence of metastases in the skin of the chest, the axillary nodes, cervical nodes, pituitary and parotid glands is an evidence of widespread dissemination of the disease. It is quite evident that the disease was advanced and widespread in the patient under discussion and her distribution of subcutaneous nodules and enlargement of lymph glands were in full conformity with this description. Sudden and fresh appearance of enlarged nodules and lymph glands were most probably due to blood borne metastases.

Presence of epidermal carcinoma in the subcutaneous nodule is considered to be metastatic as histopathological picture is quite similar to that of primary growth in cervix. Moreover, development of

nodules at multiple sites were more in favour of secondary deposit than a separate primary pathology. Detection of cells with characters of epidermoid carcinoma from the centrifuged fluid of scalp tumour and typical X-ray appearance of defect in skull bone were strongly in favour of secondary deposit. Although metastases in skull bones is rare, its association with subcutaneous nodules is still rare. Search of literature did not reveal any description of this particular association. Haines and Taylor (1962) are of opinion that solitary metastases in situations as long bones, brain or breast occur rarely.

History of trauma in the patient under discussion caused some confusion with regard to the nature of the scalp swelling. It was presumed at the beginning that the swelling was due to collection of blood. Since it did not subside after some time the possibility of secondary deposit was thought of and it was proved by other examinations. Following a trauma to the tumour, malignant cells can be detected in the blood stream but it does not necessarily produce secondary deposits as metastasis Novak *et al*, (1970). It may be argued that the patient received trauma on the scalp where a metastasis was just growing which caused dissemination of malignant cells into circulation with ultimate production subcutaneous nodules.

Summary

A case report of carcinoma of cervix with metastases in skull bone and skin has been presented. The method of spread of this disease has been discussed and emphasis has been laid on haematogenous spread. Association of trauma on the scalp and appearance of swelling was misleading. Swelling was subsequently

confirmed as metastasis. Combination of skull metastasis and formation of malignant subcutaneous nodule in carcinoma of cervix is very rare.

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See Figs. on Art Paper X