

## CARCINOMA OF THE CERVIX ASSOCIATED WITH CERVICAL TUBERCULOSIS

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Co-existence of carcinoma cervix and tuberculosis is rare. There are only isolated reports of such association. Nogales (1951) reported 1 case of his own and reviewed 7 previously reported in the literature. Cosmor and Szinnyai (1962) reported 4 more cases. During a period of 16 years (1962 through 1977) 3254 cases of carcinoma cervix have been registered in the hospital based cancer registry of Department of Pathology, constituting approximately 49% of total female malignancies. The association of carcinoma with cervical tuberculosis was found in only 4 cases, thus this co-existence is reported due to its rarity.

### Observations

Pertinent clinical features and relevant data are given in Table 1. Biopsy material from all the 4 cases comprised of soft greyish friable bits of 0.5 to 1 cm tissue. Microscopically all the 4 cases were of epidermoid carcinoma, showing masses and sheets of malignant cells

infiltrating the stroma of the cervix. There were well defined desmosomes with individual cell Keratinization (cases 1 and 4) while the other 2 showed well formed epithelial pearls and keratin masses in addition. In all these 4 cases, there were well formed tuberculous granulomas, comprising of epithelioid cells, Langhan's type of giant cell along with areas of caseation, in close proximity with cancerous areas (Figs. 1, 2). All were treated with usual doses of radiation therapy and antitubercular treatment. They responded well to the treatment.

### Comments

Relationship of tuberculosis and carcinoma is a matter of controversy, Cosmor and Szinnyai (1962) postulated that tuberculosis being chronic inflammation may be of importance in carcinogenesis. Cherry (cited by Reference 11) tried to show statistically that the two conditions are causally related. Mcquarrie *et al* (1964), Shahmirany, *et al* (1966) and Rao (1969) described the association of pulmonary tuberculosis and carcinoma of lung, but opinion regarding their etiological relationship remains equivocal. Picone and Bongiovanni (1971) studied the course of 32 patients recovering from tuberculosis who subsequently developed

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TABLE I

*Clinical Features of Four Cases of Carcinoma Cervix With Co-existent Tuberculosis*

S. No.	Age	Complaints	Type of growth	Stage	X-ray chest
1	30 HF	Watery discharge and bleeding 3½ months	Ulceratic growth anterior lip.	II <sub>b</sub>	Positive for healed tuberculous lesions
2	30 HF	Excessive bleeding 6 months	Proliferative growth of both lips	I	Positive for tuberculosis apical lesion
3	65 HF	Bleeding per vagina 3 yrs. following 15 years menopause	Cervix flushed With vaginal wall	II <sub>b</sub>	Negative for tuberculosis
4	50 HF	Bleeding, discharge, dysuria, 8 months following 8 years menopause	Necrotic ulcerative growth both lips	III <sub>b</sub>	Negative for tuberculosis

HF = Indicate Hindu Female.

malignant tumours. The course of tuberculosis remain unaltered by the presence of tumour and they concluded that the two conditions evolve independently. Kaplan *et al* (1974) described active tuberculous infection during or after therapy in 201 out of 58, 265 cases of malignant tumours. In all of these the tuberculous infection was either pulmonary, lymph nodal or disseminated. The prevalence of tuberculosis with genitourinary carcinoma was low.

Rokitansky (cited by Reference 11) expressed that carcinoma and tuberculosis were antagonist, a view gaining importance in recent years. Mathe (1970) proposed that non-specific stimulation of reticuloendothelial system by B.C.G. produce prolongation of remission in leukaemic patients. Faraci, *et al* (1975) report-

ed B.C.G. induced protection against a Murine melanoma in adult Balb/c mice and considered the possibility of specific protection against melanoma cells induced by B.C.G.

Simultaneous occurrence of tuberculosis did not alter the effect of radiotherapy in these cases, as all 4 patients responded well to usual doses. No etiological relationship between tuberculosis and carcinoma could be established in these cases and co-existence appears to be fortuitous.

#### Summary

Four cases of carcinoma cervix with co-existent tuberculosis are reported. Tuberculosis and carcinoma, both are common problems of India, yet their association is uncommon. Inter-relation-

ship of tuberculosis and carcinoma is briefly discussed.

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*See Figs. on Art Paper X*