Para-Aortic Lymph Node Irradiation in Cervical Carcinoma

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Abstract—Cervical carcinoma metastatic to the para-aortic lymph nodes is generally considered incurable. Three of 6 patients with proved metastases are alive and well three to eleven years following irradiation. Para-aortic regions can be adequately treated with 6,000 rads in six weeks via a 360° rotational 60Co treatment plan. Extensive surgery immediately prior to radiotherapy contributed to complications in 1 patient. Of 5 who lived at least one year following irradiation, more distant metastases developed in 2. Over 85 per cent of patients with more distant metastases die within a year. Para-aortic metastases secondary to endometrial carcinoma may be treated similarly.

Index Terms: Lymph Nodes, cancer • Lymph Nodes, irradiation • Radiations, Injurious Effects, complications of radiotherapy • Uterus, Cancer, complications of radiotherapy • Uterus, Cancer, radiotherapy • Uterus, Cancer, recurrence

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In the treatment of carcinoma of the cervix, most gynecologists and radiotherapists accept the demonstration of metastatic involvement of the para-aortic lymph nodes as evidence of incurability (8). An analysis, however, of a small group of patients with biopsy-proved metastatic disease to the para-aortic nodes treated with intensive radiotherapy at Kings County Hospital would tend to question this pessimistic approach.

It has been generally believed that para-aortic node involvement indicates a hopeless situation for the following reasons: (a) the disease in the para-aortic nodes cannot be eradicated; (b) the volume of tissue involved does not allow curative doses to be administered because the ensuing complications would be prohibitive; and (c) the disease has spread beyond the initial echelon of lymph node involvement and therefore has now been disseminated throughout the body.

Six patients with carcinoma of the cervix with biopsy-proved para-aortic lymph node involvement and no known evidence of more distant or diffuse metastatic disease were treated with radiotherapy to the para-aortic node areas. Three are alive and free of disease three to eleven years following para-aortic irradiation (Tables I and II).

There are many reports which demonstrate that cervical carcinoma metastatic to pelvic lymph nodes can be eradicated by irradiation (4, 5, 7-9). If it can be assumed that carcinoma in a para-aortic lymph node is as radiosensitive as carcinoma in a pelvic lymph node, it can reasonably be expected that radiotherapy can locally control some para-aortic metastatic disease.

Of the 5 patients who received the recommended 6,000 rads in six weeks to the para-aortic region, severe complications developed in only 1 (Case VI). A malabsorption syndrome and a small-bowel cutaneous fistula appeared before death; this patient, however, was subjected to vulvectomy, vaginectomy, and anterior exenteration just prior to irradiation of the para-aortic node region. One can assume that the extensive surgery contributed to the severity of the complica-