medical sciences

Gathered from last week's annual meeting of the American Radium Society in San Diego

BRAIN TUMORS

Premature radiation therapy

When a patient with a cancer outside the central nervous system develops symptoms in the CNS, it is often assumed that the cancer has spread to the brain. The patient may be given radiotherapy, even if a brain tumor has not been demonstrated with X-rays and without surgery or tissue diagnosis.

But Dr. Robert Raskind of the Kaiser Foundation Hospital in Oakland, Calif., claims that radiation, though it may prove a helpful adjunct to surgery, should only

be used with extreme caution.

Dr. Raskind reports that of 51 patients in whom a single metastatic lesion of the brain was removed surgically, the lesion was either unrelated to the primary cancer or noncancerous in 12. Forty-four of the 51 survived the operation, and 40 showed good to excellent sensorimotor function and mental and intellectual integrity. One year following brain surgery, 15 have survived.

METASTATIC NODES

Successful therapies

Few studies have been conducted on metastatic cervical nodes from an occult primary lesion—cancer spreading to the neck from an unknown primary source. Moreover, treating patients with lymph node cancer of the neck when the disease has spread and when the site of the disease is unknown is complicated and difficult.

Reporting on studies with 80 such patients, a Puerto Rican physician declares the situation is not hopeless. Dr. José Pico of the University of Puerto Rico School of Medicine in San Juan says most such patients are over age 50, and the male/female ratio is 2:1. In 63 of the 80 cases studied, the disease manifested itself as a large tumor. For this reason, either a needle biopsy or incision of the node was used to diagnose the cases.

Radiotherapy proved the best treatment in 52 percent of the cases, and most undergoing it as primary treatment had advanced metastatic disease or were not candidates for radical surgery. In 29 percent (23 cases) surgery was the main treatment but in 16 of those additional post-operative radiotherapy was given. Fourteen received no treatment.

Dr. Pico says that eight of 38 patients survived for five years. The metastatic nodes of these patients were in the upper and mid parts of the neck where treatment is generally more successful than that given in the lower neck or chest-wall areas.

RADIOTHERAPY

Radiation from two sources

Radium deposits have produced highly successful results in treating cervical cancer, reports Dr. Gilbert H. Fletcher of M. D. Anderson Hospital at the University of Texas in Houston. Statistics for Dr. Fletcher's work are based on studies with 1,350 patients over a 12-year period from September 1954 through June 1966. Ninety

percent showed no evidence of the disease two years after being treated with the deposits in the early stages of the condition.

But Dr. Fletcher claims that a combination of intracavitary radium (inserting radium in the uterus or vagina for example) and external irradiation is generally more successful.

Of 123 patients treated with radium deposits in the uterus and vagina, 117 were free of cancer two years later, and of 283 patients given radium deposits and external radiation, 262 had no recurrence after a two-year period.

Dr. Fletcher says that in the more advanced stages of carcinoma of the cervix, the 16 of 19 treated with radium only were free of disease after two years, and 115 of 137 treated with radium and external radiation showed no evidence of disease.

THERAPY

Primary lymphoma of the orbit

Orthovoltage therapy—X-ray therapy with less than 200,000 volts—has produced good local control of lymphoma of the orbit, the bony cavity that contains the eyeball, with few resulting complications. Furthermore, says Dr. S. C. Foster of Columbia-Presbyterian Medical Center in New York, in a significant percentage of patients the disease does not spread.

Dr. Foster, in collaboration with C. S. Wilson, also of Columbia-Presbyterian Medical Center, reviewed 36 patients with primary lymphoma of the orbit treated at the Presbyterian Hospital during the past 30 years. The predominant pathological diagnosis was lymphosarcoma.

Orthovoltage therapy achieved local control in all patients. Local recurrences were successfully retreated and, the physicians note, recurrences were in the front of the orbit, primarily in a low-dose area, suggesting there is a minimum dose that should be used to treat the whole orbit.

LYMPH NODE CANCER

Combined treatment stressed

Early detection, frequent checkups and combined surgery and radiation to control lymph node cancer are stressed by a Texas radiologist. Dr. Gilbert H. Fletcher of the M. D. Anderson Hospital says that irradiation after surgery effectively prevents spread or recurrence of the disease.

Reporting on a study of 469 patients, the physician claims that irradiation of initially uninvolved areas of the neck for squamous, or scaly, cell carcinomas of the base of tongue and tonsillar area prevented new nodal disease from occurring.

A dose of 4,500 to 5,000 rads for five weeks controlled 80 to 90 percent of nonpalpable cancer cells (where nodes are not perceptible to touch), whereas doses ranging from 5,000 rads for five weeks to 7,000 rads for seven weeks controlled a high percentage of palpable nodes.

272

science news, vol. 97