

EDP 17**THE IMPACT OF EARLY DIAGNOSIS ON TUMOR THERAPY. MODERN TIMES IN DIAGNOSTIC PATHOLOGY.**

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Fine-needle biopsy, occasionally supplemented by large-needle biopsy, provides the most cost-effective diagnostic evaluation of thyroid cancer.

Currently, breast-conserving surgery is becoming increasingly popular in the Western countries. However, there are still many problems that remain unsolved, primarily concerning the clinically significant tumor that may remain in the breast after the conservative treatment. Magnetic resonance imaging of fresh breast tissue or tissue embedded by freezing produces cross sectional images with high resolution. Tumor samples removed during surgery have been examined by NMR relaxation methods. The T_2 relaxation data indicate that this method is suitable for use on excised human tumors. The NMR-spectra obtained from human mastectomy specimens await early report of minimal breast cancer multifocality. One of the problems associated with gastroscopic evaluations of early and minimal cancer is the relative low information content of the macroscopic findings. Applying the techniques of computer assisted image processing can help to determine the location of even a very small early cancer of the stomach.

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EDP 18**THERAPY OF PRECANCEROUS CONDITIONS AND LESIONS OF THE GI-TRACT**

F. P. Gall

The most important precancerous lesion in the colon are adenomas. Their prevalence is 50 % in male and 40 % in female at 60 years of age.

Adenomas are benign in 90 %. In the Erlangen registry of colorectal polyps 6778 adenomas are in files. The adenoma-carcinoma sequences are clearly related to size, type and histology. Therefore all adenomas must be removed completely.

In ulcerative colitis of 7 - 10 years duration and involvement of 1/2 - 2/3 of the colon, the expected cancer incidence is 15 - 20 %. The most important sign for prophylactic colectomy is the repeated proof of neoplastic dysplasia as described by Riddell.

In adenomatosis coli almost all untreated patients died before the age of 45, due to colorectal cancer. Symptomatic patients have a cancer incidence of 68 %. Adenomatosis coli is therefore an absolute indication for surgery. In former years most surgeons performed a colectomy with ileo-rectal anastomosis. The incidence of cancer in the retained rectal stump varied from 4 - 25 % in 20 years. Today colectomy, proctomucosectomy with an ileal reservoir is the procedure of choice.

The precancerous lesions and conditions of the upper GI-tract will be also discussed in detail.

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ML 01**MAIN LECTURE****ADVANCES IN RADIOTHERAPY AND ONCOLOGY: PAST AND FUTURE**
J. Einhorn

Cure for cancer was very rare at the turn of this century. Surgery was the one method by which a few patients were cured. In December 1899 the first cure for cancer by radiotherapy was reported. Since then, radiotherapy has developed into a method which allows us to deliver any radiation dose to any part of the body with an exactness that can not be achieved by any method in pharmacology. During an 18-month period in 1941 and 1942, the initial series of discoveries was made that led to the development of chemotherapy in cancer treatment.

What are the main problems at present and the prospects for the future? Examples of the developments taking place at the Radiumhemmet in Stockholm are the results of controlled clinical trials in breast cancer, the results of treatment in anaplastic giant cell carcinoma of the thyroid, use of monoclonal antibodies for treatment of gastro-intestinal tumors and the development of a coordinating cancer centre serving the Stockholm-Gotland region.

ThT 01**THERAPY OF HIGH MALIGNANT NON-HODGKIN-LYMPHOMA (NHL) STAGE I, OF LOW MALIGNANT NHL STAGES I AND II, AND OF CENTROBLASTIC-CENTROCYTIC LYMPHOMA STAGES I - III.**

H. Sack and St.L. Roth

Aims of the clinical study are the investigation of the natural extension patterns and the adequate therapy of NHL in low stages. A careful staging to secure stages I or II and the use of the Kiel classification are preconditions. Natural history and prognostic factors of the primarily extranodal NHL are because of their rare incidence not yet well enough known. Corresponding to their localization the prognosis varies considerably between 15 and 80% 5 year survival rates.

The first study block includes high malignant nodal and extranodal NHL in stage I and shall test under randomized conditions whether adjuvant chemotherapy following primary radiotherapy is able to improve prognosis. In the second block radiotherapy alone is prescribed as therapy for low malignant NHL stages I and II. For centroblastic-centrocytic NHL the curative indication of total lymphatic irradiation shall be tested in stages I to III. Patient recruitment starts in 1986.

The evaluation of the rate and localization of recurrences will give a better knowledge of the necessarily irradiated regions, the optimal dose and the question whether chemotherapy should be added to primary radiotherapy. The weight of prognostic factors as tumor size, histology, number of involved regions etc. can be better determined.

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