

Gy with 4 fractions in 4 days after precise localisation of the tumour by surgical procedure and clips.

Preliminary results, for the 146 patients that have at least one year followup, are as follows. We have observed complete tumour response in 10%, partial response in 70% and stabilisation in 20%.

Precise information about visual results and factors influencing visual results will be given.

146 ORAL CHOROIDAL METASTASES: TO TREAT OR NOT TO TREAT

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The role of external beam radiation therapy (EBRT) in the management of choroidal metastases (CM) was evaluated retrospectively.

From 1970 to 1993 58 patients with CM of 80 eyes underwent EBRT with doses ranging from 20 to 53 Gy. The female to male ratio was 2.9, median age 59 years. The results of treatment measured by complete response, visual acuity improvement, retinal reattachment and eye conservation was respectively 63%, 75%, 65% and 100%.

Patient characteristics (primary tumor, histology, details of CM) will be presented.

Post-irradiation complications and related technical characteristics of the treatment will be highlighted as well as the relationship between overall survival and primary site.

From our data, EBRT is a very efficient and safe palliative treatment for CM and helps preserving a good vision, thus the quality of life in patients who have a poor overall prognosis.

147 ORAL ACCELERATED RADIATION WITH CONCOMITANT CARBOPLATIN FOR GLIOBLASTOMA MULTIFORME

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The long-term efficacy and safety of postoperative accelerated fractionated radiotherapy with concomitant carboplatin was evaluated in 83 patients with glioblastoma multiforme. Patients received 2 Gy radiation three times a day for two 5-day cycles separated by 2 weeks. Prior to each radiation treatment a 2-hour intravenous infusion of 33 mg/m² carboplatin was administered. Following radiotherapy, patients were to receive procarbazine, CCNU, and vincristine, (PCV) for one year or until tumor progression. Seventy-four patients with a median age of 55 years received at least one course of PCV. Their median survival duration was 55 weeks. Covariates individually predictive of improved survival were younger age ($P < 0.01$), higher Karnofsky performance status ($P = 0.055$), total or subtotal resection vs. biopsy ($P = 0.056$) and smaller radiation volume ($P = 0.008$). Seven patients had documented therapy-induced neurotoxicity.

Accelerated fractionated radiotherapy, as used, enables concomitant full dose administration of chemotherapy or radio sensitizing agents in glioblastoma multiforme.

148 ORAL CURATIVE MANAGEMENT OF RECTAL ADENOCARCINOMA WITH RADIOTHERAPY ALONE: A SERIES OF 250 CASES

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This report pools the results of two institutions using since 1970 the strategies developed in Lyon by Jean Papillon. (1) *Low and mid rectum T1 and selected T2 well differentiated adenocarcinoma* treated with intrarectal contact X-ray (ICRT) and interstitial brachytherapy (IBT). Since 1970, 200 patients (113 T1, 87 T2) were treated in Dijon and Lyon-Sud. Transrectal ultrasonography has been used for staging since 1987. Failures rates (unlimited follow-up) are local in 4.5% (T1) and 19.5% (T2), nodal in 0.9% (T1) and 9% (T2), metastatic in 3.5% (T1) and 12.5% (T2). Salvage treatment was successful in 20/24 pelvic failures. Ultimate pelvic control was obtained in 189/200 (94.5%) with preservation of a functional anal sphincter in 95% of PTS with pelvic control. No severe complication occurred. (2) *Low and mid rectum T2 and T3 adenocarcinoma* treated with external radiotherapy (30–39 Gy in 10–13 fr. and 14–17 days to the posterior pelvis. Concomitantly, ICRT delivers 60–80

Gy in 2–3 fr. After a 6- to 8-week rest period, a 20–30 Gy boost is delivered by IBT. Fifty patients were treated (34 T2, 16 T3). Twelve out of 50 (24%) had a local failure (5/12 with a subsequent surgical salvage treatment) resulting in an 82% ultimate control rate with a functional sphincter. G2 complications occurred in 16% (rectorragia/ulcer). A single patient had a G3 necrosis.

149 POSTER PROGNOSTIC FACTORS IN LUNG CANCER WITH BRAIN METASTASIS

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The role of palliative cranial irradiation and relevant prognostic factors were analyzed prospectively in 103 lung cancer patients who had brain metastasis between October 1991 and December 1994. The male to female ratio was 92/11. Age range was 33–83 (median:59). Histological types were adenocarcinoma 30/103 (29%), epidermoid carcinoma 30/103 (29%), SCLC 27/103 (26%), large cell carcinoma 3/103 (3%), carcinoma without certain histopathological classification 11/103 (11%). Radiotherapy was completed in all except 8 cases. Palliation was accomplished in 92% of the cases. Palliation duration ranged between 0.5–36 months (median: 3). Median survival was 4 months. Extent of brain metastasis (solitary/multiple), presence or absence of metastasis other than brain, local symptom status at the time of brain metastasis and time of brain metastasis were the analyzed prognostic factors. Local symptom status and presence or absence of metastases other than brain were found statistically significant ($P < 0.01$ and $P < 0.05$ respectively).

150 POSTER CONSTRUCTION AND FIRST EXPERIENCE WITH A CUSTOMIZED "BELLY BOARD" MOULD TO MINIMIZE THE VOLUME OF SMALL BOWEL IN THE IRRADIATION OF PELVIC MALIGNANCIES

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Radiation enteritis is a common complication of radiotherapy for pelvic malignancies, often requiring medical therapy, breaks of the treatment and sometimes the hospitalization or a surgical intervention.

The volume of irradiated small bowel (SB) is considered one of the most important factors in determining gastro-intestinal side effects. Numerous techniques, principally based on the reduction of the irradiated SB volume have been applied to avoid or decrease radiation enteritis. We have realized a customized "belly board" as a bowel minimization device, modifying the original technique of Shanahan (*IFROBP* 1989, 17, 187–88). We use a polyurethane foam mould to place and immobilize the patient in prone position with anterior lower abdominal wall compression. A block of polystyrene in the shape of a reverse pyramid is placed under the superior abdomen during the solidification of the mould to obtain a hole for the displacement of the SB. From October 1994 to March 1995, we have utilized such device in 28 consecutive patients irradiated for pelvic tumours. The mean high dose SB volume irradiated was 56.2 cm³ (range 0–390) and the partial dose SB volume was 218.5 cm³ (range 0–588). This technique permits not only the displacement of the SB (favoured also by recommended bladder distension) minimizing the irradiated SB volume, but also contribute to the immobilization of the patient in a comfortable and repeatable position.

151 POSTER HYPERFRACTIONATED ACCELERATED RADIATION THERAPY IN RADICAL TREATMENT OF CANCER PATIENTS

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Total dose is just one of the factors important to the achievement of success in radiotherapy. Biological higher doses of radiotherapy to the primary site and if involved, to draining lymph nodes have produced higher response rates and suggest that higher doses may result in improved survival. Radical treatment policy in different institutions varies from conventional fractionated schedules to hyperfractionated (accelerated or not) or shorter hypofractionated ones. To achieve this goal in