group. Median survival is 27 months. Six months and 1 year survival is 89% and 71% respectively. Stage related 3 year actuarial survival was for stage I: 91%, stage II: 50%, stage III: 53% and stage IV: 20%. Late mortality was cancer related in 41 patients: distant metastasis: 23, distant metastasis + locoregional recurrence: 10, locoregional recurrence: 8. Quality of survival of the 55 survivors showed an excellent or good feeding capacity in 49 (89%) patients. Nine patients developed an anastomotic stricture treated with a mean of two dilatations. Weight status showed a mean decrease of -7.3 kg (-33 kg to +10 kg) as compared to the preoperative weight and -3, kg (-26 kg to 17 kg) as compared to the patients ideal weight. Final Visick score was grade I: 34 (61%), II: 11 (20%), III: 7 (12%), IV: 3 (5.4%). Conclusion: Today oesophagectomy for carcinoma can be performed with a minimum mortality and acceptable morbidity. Risk factors have to be judged individually especially in relation to radicality of associated lymphadenectomies. Survival is as expected stage related but even in distant lymphnode metastasis acceptable prolonged palliation is obtained with excellent to very good functional outcome in the majority of patients justifying resection or primary treatment in absence of gross tumour spread or solid organ metastasis.

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THE ROLE OF INTRA LUMINAL BRACHYTHERAPY IN

## THE ROLE OF INTRA LUMINAL BRACHYTHERAPY IN TREATMENT OF CANCER OF THE OESOPHAGUS

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A prospective, non-randomized study was performed in 201 patients with inoperable cancer of the oesophagus. 101 were treated with palliative reason with Intra Luminal Brachytherapy (ILB), (n = 56), or combined External Beam RadioTherapy (EBRT) and ILB, (n = 45). 100 patients were treated with Radical Radiotherapy: group 1) 50 Gy EBRT +  $2 \times 7.5$  Gy ILB, (n = 54), group 2) 60 Gy EBRT +  $2 \times 6$  Gy ILB, (n = 46).

Results: ILB as single modality treatment results in good, life long improvement of dysphagia. Median survival is 3.4 months and 1-year overall survival 5%. EBRT + ILB has equal effects, with median and 1-year overall survival of 4.7 months and 13% respectively.

Treatment related complications were rare. In the radical group 50 Gy +  $2 \times 7.5$  leads to a median, 1- and 2-year survival of 9.3 months, 40% and 13% respectively. For 60 Gy +  $2 \times 6$  this was 11.8 months, 43% and 31%. Complications were mild.

Conclusions: Intraluminal Brachytherapy is save and effective in palliation for carcinoma of the oesophagus. Results with intraluminal brachytherapy alone are comparable with combination of EBRT + ILB. In Radical Radiotherapy increasing EBRT dose from 50 to 60 Gy + ILB  $2\times 6$  Gy increases local control as well as overall survival.

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## ECF IS A HIGHLY ACTIVE REGIMEN WITH LOW TOXICITY SUITABLE FOR NEOADJUVANT TREATMENT OF OESOPHAGOGASTRIC CANCER

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The CRC Section of Medicine and The GI Unit, The Institute of Cancer Research and The Royal Marsden Hospital, Sutton, Surrey, SM2 5PT, U.K. Initial trials with ECF demonstrated a 71% response in oesophagogastric cancer with modest toxicity, renewing interest in neoadiuvant therapy. We now report our experience of 235 consecutive patients treated between 1989 and 1994. All diagnoses were histologically proven. The regimen comprises epirubicin 50 mg/m<sup>2</sup> and cisplatin 60 mg/m<sup>2</sup> 3 weekly  $\times$  6–8 with protracted venous infusion 5-FU 200 mg/m<sup>2</sup>/d throughout. Responses were evaluated with CT scan and gastroscopy. 173 patients had metastatic disease and 62 had locally advanced disease (LAD). Measurable response occurred in 135/220 (61%, 95% CI 55-68%) with CR in 11% and PR in 50%. Symptomatic response occurred in 50-85%. Quality of life was improved or maintained in most patients. Toxicity was modest; 22% grade 3/4 leucopenia and 14% grade 3/4 non-haematological toxicity. There were 6 treatment related deaths, all during the first 3 years. 29 patients with LAD who responded proceeded to surgery. 19 (66%) had a potentially curative resection; histological CR was demonstrated in 6 (32%). Overall median survival was 256 days. Patients with LAD and ECOG performance status 0-2 had a median survival of 404 days with a 1 year failure free rate of 40%. We conclude ECF is a highly active regimen with acceptable toxicity that can render locally advanced tumours operable. This potential is being evaluated in the MRC "MAGIC" trial comparing ECF before surgery with surgery alone.

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## SECOND MALIGNANCIES (SM) IN ESOPHAGEAL CANCER (EC) AFTER COMBINED MODALITY TREATMENT: IMPLICATIONS FOR FOLLOW-UP AND CHEMOPREVENTION

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From 5/85 to 12/92, 101 consecutive patients (median age: 61 yrs), with locally advanced EC received a combined chemoradiotherapy treatment, Sixty-one pts were treated with FU + CDDP × 4 cycles and concurrent RT (50 Gy) and 40 pts with 2 courses of the same regimen plus concurrent RT (30 Gy) followed by surgery. Overall survival (OS) at 6 yrs was 22%. In 14 pts EC developed after a previous neoplasm and they were excluded from the analysis. In the remaining 87 pts with primary EC (OS 23% with a median follow up of 77 mos) a total of 12 pts (median age 67 yrs, range 49-79) developed a SM after a median of 27.5 mos (range 7-83) from the diagnosis of EC: 4 epidermoid head and neck cancers, 3 gastric adenocarcinomas (1 early gastric cancer), 1 distal esophageal adenocarcinoma, 2 non small cell lung cancers, 1 colon adenocarcinoma, and 1 vaginal squamous cell carcinoma. Actuarial cumulative risk for SM at 2, 4, and 6 yrs is 6%, 17%, and 23% respectively. Total incidence rate was 6% with an age-adjusted incidence of SM 3 times higher than that of primary cancer in the general population. The high incidence of SM in long-term survivors with EC strongly supports a prolonged follow-up oriented to the early detection of SM. This population with high rate of SM should represent an optimal model to assess the role of chemoprevention.

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ADVANCED GASTRIC CANCER: COMPARISON OF FAMTX (5FU, ADRIAMYCINE, METHOTREXATE) VERSUS ELF (ETROPOSIDE, 5 FU, LEUCOVORIN) VERSUS FUP (INFUSIONAL 5 FU + CISPLATIN). RESULTS FROM AN EORTC TRIAL OF THE GITCCG AND THE ARBEITSGEMEINSCHAFT FÜR INNERE ONKOLOGIE (AIO)

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FAMTX, shown superior to FAM (J Clin Oncol 1991;9:827) has been compared to ELF (Sem Oncoll supp2, 1990) and FUP (Eur J Cancer 1994;30A:1263). Eligibility criteria included locally advanced and/or metastatic gastric cancer, measurable, evaluable or non measurable disease, performance status O-2, age < 76 years and adequate organ functions. A total of 373 pts were randomized by 52 institutions. This preliminary analysis is based on 274 eligible pts. Grade 3-4 toxicities were (ELF-FUP-FAMTX): vomiting 8-25-10%; mucositis 3-13-10%; leucopenia 6-4-7%; thrombocytopenia 0-4-2%. There were 5 toxic deaths (2 FUP and 3 FAMTX). The median number of cycles was 4 (1-8), 4 (0-6) and 3 (0-6) respectively. Extramurally reviewed objective response (OR) in 132 assessable pts with measurable disease was; ELF 21%; FUP 27%; FAMTX 20%. SD was achieved in 35%, 41% and 42% respectively. Downstaging with subsequent resection was achieved in 0/15, 2/18 and 4/16 respectively. Median survival was 7, 8, 7 mths respectively. In conclusion no significant differences in response or survival were detected. The low OR rate may be due to the number of pts receiving no (3%) or only one cycle of chemotherapy (12%, 14% and 20% respectively) and to the number of institution which entered less than 4 pts (n = 19).

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## IMPROVEMENTS IN SURVIVAL AND CLINICAL BENEFIT WITH THE USE OF GEMCITABINE (GEM) AS FIRST-LINE THERAPY FOR ADVANCED PANCREATIC CANCER: A RANDOMIZED TRIAL

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Following phase II clinical observations that patients with pancreas cancer experienced improvement in disease-related symptoms with GEM, a quantitative definition of clinical benefit (CB) was developed as a primary efficacy measure (Andersen, 1994, *Proc ASCO* 13:461). CB has