Palliative Treatment - Supportive Care **Palliative Treatment**

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SUBCUTAMEOUS (SC) MORPHIME (M) FOR THE MANAGEMENT OF DYSPHEA (D) ASSOCIATED WITH ADVANCED CANCER. Robin L. Fainsinger, Carla Ripamonti, Tara MacEachern, Eduardo Bruera. Palliative Care Program, Edmonton General Hospital, University of Alberta,

The purpose of this prospective, crossover, double-blind trial was to assess the effects of M on the intensity of dyspnea in patients (PTS) with advanced cancer.

PTS with restrictive respiratory failure, normal cognitive status (score <24 in the Mini-mental State Questionnaire) and D during bed rest (≥ = 20 in VAS 0-100) were randomized to receive M 50% higher than the regularly scheduled dose (mean: 34±12mg) subcutaneously vs placebo at 10:00 am. The following day a crossover took place. D at 30, 45, and 60 minutes after M were 19+18, 14+18, and 16+18, respectively, versus 30+26 (p=<0.05), 32 ± 27 (p=<0.01), and 35 ± 29 (p=<0.05), respectively after placebo in 10 patients. No difference in oxygen saturation or respiratory rate were observed. The PT and investigator blindly chose M as more effective in 9 and 8 cases (p=0.01 for PTS, p=0.04 for investigators). M was later used as SC injections for D in 45 consecutive PTS. 312 SC doses were administered. Good subjective response (no or "mild" D) was documented 30 min. after the injection in 291 cases (90%). No cases of respiratory depression were observed. Our results suggest that intermittent M injections for D are safe and effective.

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RECTAL VERSUS ORAL MORPHINE FOR THE MANAGEMENT OF CANCER PAIN. A DOUBLE-BLIND, DOUBLE DUMMY. **CROSSOVER TRIAL**

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Oral (O) morphine (M) may be difficult to administer in patients (PTS) with nausea and vomiting. Rectal (R) M could be advantageous for home management of PTS with immunologic deficiencies or bleeding disorders. However, the effective equivalent analgesic doses have not been established. In a double blind, double dummy clinical trial, 34 opioidnaive cancer PTS with pain were randomized to M 10 mg O or R for 2 days at 08:00. During day 3 & 4 a crossover took place. Pain scores (visual analogue scale 0-100mm) calculated as percentual change from baseline (prior to M administration) are recorded at different intervals 10-20-30-40-60-90-120-180 minutes. We can conclude that: 1) a liquid solution of morphine is well absorbed by the rectal route. 2) development of analgesia proved to be significantly faster for patients receiving rectal morphine 3) rectal route appears to be safe and effective and could be used for the administration of rescue doses of morphine to patients on oral or parenteral opiates.

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DEXAMETASONE TOXICITY IN BRAIN TUMOR PATIENTS B. Jeremic, d. Grujicic, V. Antunovic, M. Stojanovic, M. Matovic University Hospital, Kragujevac and Clinic of Neurosurgery, Belgrade, Yugoslavia

In order to establish the frequency of clinically important corticosteroid tocicities and to determine treatment or patient characteristics which were predictive for toxicity, hospital charts from 225 patients with primary or metastatic brain tumors were reviewed. 131 (57%) pts developed at least one steoid toxicity and 52 (23%) pts required hospital admission for diagnosis and/or treatment of steroid-related complications. Toxicities included hyperglycemia in 44 pts, infections in 53, gastro-intestinal toxicity in 29, proxymal muscle weakness in 49, while peripheral edema of magnitude 3-4+ was noted in 21 pts. 8 pts experienced psychiatric symptoms. Duration of steroid treatment and the total administration dose predicted for toxicity. Pts with toxicity also had a significant serum hypoalbuminemia. Our study showed population of pts with primary or metastatic brain tumors indicating toxic events and risk factors. However, further studies are needed to more accurately assess the relationship of hypoalbuminemia with the development of dexametasone toxicity.

ENDOBRONCHIAL LASER THERAPY IN ADVANCED LUNG CANCER <u>Špásová I.,</u> Pátek J., Fišer F., Opálka P.

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We followed the course of consecutive patients with inoperable primary bronchogenic carcinoma with tracheal or endobronchial tumours who underwent palliative Nd-YAG laser photoresection between January 1991 and July 1992. 181 laser photoresections were performed in 53 patients. All patients were treated with flexible fiberoptic bronchoscope under local anestesia. The laser power settins were 30 W and a pulse duration 1,0 second with a median total energy 1 470 joules.

The airway caliber was improved in 84,0 % of 181 treatment sessions. Significant bleeding was observed in 15 cases (8,3 %) and subcutaneous emphysema in 1 case (0,6 %). Deaths or other complications were not observed.

The median time from the last photoirradiation to death was 4,7 months. The median length of survival was 8,2 months. 49,1 % of the patients were alive at $\sin x$ months, 18.9 % at one year and 11.3 % at 18 months after first photoresection. Eight patients are still living for 60, 34, 16, 11, 11, 9, 8 and 8 months.

We conclude that endobronchial laser is efficient and

safe in the treatment of large airways malignant tumours.

SINGLE INTRAVENOUS INFUSION OF CLODRONATE IN CONTROL OF METASTATIC BONE PAIN - A DOUBLE BLIND TRIAL

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The bisphophonates are potent inhibitors of bone resorption and have now become the standard treatment for tumour-induced hypercalcaemia. It also appears that continuous administration may slow the progression of lytic bone disease. In this pilot study we investigate whether a single high dose infusion has any acute efect in controlling bone pain.

Twenty-one patients with metastatic bone disease and pain poorly controlled by analgesics were randomnized to receive either a four hour 500ml normal saline alone. After one week there was crossover with each patient receiving the alternative treatment. After the second week the patients were asked which had been the more effective treatment : first week much better than second, first week slightly better than second, no difference, second week much better than first or second week slightly better than first. During the two week trial period the patients also recorded daily pain scores and listed their analgesic intake. Serum and urine biochemical assessments were performed at days 1.8 and 15.

Six patients expressed a strong preference for clodronate, while two strongly preferred placebo; a further four had a weak preference for drug compared to three preferring placebo and six patients expressed no preference. Of the fifteen patients expressing any preference therefore, ten chose clodronate. Serum and urine calcium showed no change after clodronate and there was no significant change in serum creatinine or white cell count.

These preliminary findings suggest that a single infusion of clodronate may produce pain relief in a propoortion of patients with metastatic bone pain although the numbers were too small to be statistically meaningful. The therapeutic implications of a safe and rapidly effective option for poorly controlled bone pain are such that we now plan to start a larger scale trial to determine the response rate and optimum regimen.

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PAIN KILLING WITH CALCITONIN NASAL SPRAY SZÁNTÓ, J. NAT.INST.OF ONCOLOGY, BUDAPEST, HUNG.

The physiological role of calcitonin is the preservation of osseal integrity by reducing the osteoclast activity. On the other hand, this 32 amino-peptide acts as an analgetic drug in cancer caused by osteolytic metastases. In previous studies using injection form the pain killing activity was 65% of the patients. As this treatment form needs medical assistance, it was decided to compare the pain reducing activity of nasal spray with the ampule form. It was found that 300 MRC unit of nasal spray equalled 100 MRC unit injection. The pain killing activity was observed in 53,8% of the patients. The reduction in quantity of analgetics used daily was 48,5%. The average decrease of the pain duration /in hours/ was 42,5%. The alteration of pain intensity was measured by visual analogue scale. One of the most important effect of the drug, that it improves the quality of life beside its pain killing capacity. Using the ECOG score system a reduction of the original sum of 3,00 has dropped to 2,13.