

## Proffered Papers

### Cancer care – The role of advanced technology

1448

ORAL

#### The psychological implications of genetic testing in breast cancer

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Breast cancer is the most common cancer among women in Europe. Between five and ten percent of breast cancer is hereditary. BRCA1 and 2 are genes predisposing to early onset breast cancer and between them appear to account for the majority of inherited breast cancer risk. Testing for mutations in both genes is now possible and, where a mutation is detected in an affected family member, a screening test can be offered. This can provide information to other family members and help predict risk. On this basis we are engaged in offering such a service to a large family containing 558 individuals with a known BRCA2 mutation. Offering a blood test to determine gene carrier status is a highly emotive one. Having an altered gene confers a lifetime risk of developing breast cancer of 80–85%. Women with a BRCA1 gene also have a 40% risk of developing ovarian cancer. This may result in women experiencing a range of psycho-social sequelae including fear, anxiety, depression, anger, uncertainty, denial and guilt. One of the great difficulties in facilitating individuals to cope with the psychological impact of genetic testing is the uncertainty associated with the success or otherwise of surveillance screening and prophylactic surgery. Those availing of genetic testing should not suffer serious psychological distress as it is thought to interfere with adherence to surveillance programmes and possible early detection of breast cancer. The field of cancer genetics and genetic testing is only in its infancy and its real psychological impact will only be determined in the years to come. This paper will present an overview of the difficulties experienced by individuals and will suggest ways of supporting them during this uncertain process.

1449

ORAL

#### A comparative study between 3 venous port systems with diff. types of catheter

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**Objective of the Study:** comparison between three types of catheter attached to three different venous ports with emphasis on the ease of using the ports.

**Methods:** The study was begun on Nov. '95 and ended on May '96. The study started as a comparison between 2 types of ports: Port-A-Cath (Pharmacia) with an open-ended silicon cath. vs Bardport (Bard) with a Groshong three position valve cath.. In February '96, Port-A-Cath II (Pharmacia) with a polyurethane open ended cath. was also included in the study. 123 ports were inserted: 38 Port-A-Cath, 61 Bardport and 24 Port-A-Cath II

**Results:** The frequency of puncturing the ports during the study period was: 5.0 times for Port-A-Cath, 4.7 times for Bardport and 2.6 times for Port-A-Cath II. The ease of using the ports differed significantly: blood sampling was easy in 84.1% of the cases with Port-A-Cath, 77.7% with Bardport and 93.5% with Port-A-Cath II. The following complications were seen: 2 cases (5.2%) of haematoma post insertion, 2 cases (5.2%) of thrombosis and 1 too deep implantation with Port-A-Cath (2.6%) 1 twisted catheter (1.6%) requiring revision, 2 cases of thrombosis (3.2%) and 1 case of skin infection (1.6%) with Bardport; 2 cases of thrombosis (8.3%) with Port-A-Cath II.

**Conclusion:** blood sampling via Bardport was not possible with 4 of these ports during the study, in spite of following the specific procedure. 2 of these ports were examined. The valve was functioning well and there was no distal accumulation of residual blood that might intermittently hamper. Port-A-Cath II was better appreciated regarding the ease of blood sampling. Manipulation of the patient, to make blood sampling possible, seemed no longer necessary with this type of port.

1450

ORAL

#### Nursing implications of the management of anaemia-related fatigue with epoetin alfa (Eprex®)

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**Purpose:** Fatigue is a nursing problem. It can be so severe that patients can not function normal. 80–90% of cancer patients report fatigue during chemotherapy treatment. Fatigue is often caused by anaemia and sometimes a reason to postpone or discontinue treatment. In a multicenter trial the effect of early intervention and/or treatment with epoetin alfa on anaemia in cancer patients is being evaluated. This paper reports about preliminary implications for nursing practice.

**Methods:** In our hospital 12 patients are being treated for anaemia with epoetin alfa or placebo three times per week (sc.). Patients can be included when they suffer from anaemia during chemotherapy. Endpoints of the study are: transfusion requirements, effect on Hb, predictive algorithms for response, Q of L, subject burden and work loss. Here we address the question how nursing can contribute to the treatment of anaemia-related fatigue.

**Results:** Treatment with epoetin alfa decreases transfusion needs during chemotherapy. Study results can first be evaluated after trial closure, but during this trial we identified some issues for nursing practice. Epoetin alfa gives patients more energy, but also nursing contributes to treatment results. Important aspects are: early detection and treatment of anaemia, fatigue assessment, on-line graphical Hb registration, patient information, and instruction on epoetin alfa use. These have become part of daily nursing practice in our hospital.

**Conclusion:** Although fatigue basically is a nursing problem, a medical intervention to the problem can be necessary and valuable (e.g. when anaemia is identified as one of the causes). Treating cancer patients for their anaemia has changed nursing practice in our hospital resulting in better care for the cancer patient.

1451

ORAL

#### Taxol-like premedication reduces the toxicity of amifostine

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The purpose of chemotherapy is to achieve a maximum anti-tumour effect with a minimum of toxicity. There is generally an optimum dose intensity above which the palliative effect of chemotherapy is negated by increasing toxicity. These side effects may lead to delays in chemotherapy which can have a negative impact on the efficacy of the therapy. When it is possible to increase the dose of chemotherapy without an attendant increase in toxicity there is a real chance that the therapeutic effect can be enhanced. There are a number of interventions that can potentially be used to achieve this goal. These include the use of haematopoietic growth factors, the interleukins and the use of cytoprotective agents. The advantage of the last group of agents is that they have the potential to protect tissues other than the haematopoietic system such as kidneys, the nervous system and the mucosa. These ideas have played a role in the clinical development of one of these agents namely amifostine. Investigations have shown that amifostine has the ability to protect patients against bone marrow depression, neurotoxicity and nephrotoxicity. The protective effect is greatest if amifostine is administered before platinum and there is no evidence that the antitumour effects are reduced by its use. Various changes in the protocol have been made result-

ing in amifostine administered with reasonable tolerance. Amifostine has significant side-effects, the most important being nausea/vomiting, hypocalcaemia and hypotension. Here we report that, since we added a taxol-like premedication to the anti-emetic regime, the incidence of hypotension has been greatly decreased. Our nursing guidelines are based upon its use in three protocols over four years of experience.

1452

ORAL

### Reflections about nursing during highly aggressive chemotherapy especially in peripheral blood stem cell transplantation

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**Purpose:** On behave of our personal experience with patients during high dose chemotherapy the extreme isolating rules in nursing are questioned. Probably it is possible to use an individualized nursing with improved social contacts between nurse, patient and social surrounding.

**Method:** Since 1994 about 70 patients were treated with high dose chemotherapy in curative and palliative intention in our department. First all therapies took place in the BMT unit in isolated rooms with positive pressure filtered air, later they were performed at regular oncological and hematological wards. Data base is our personal experience and the written clinical observations.

**Results:** Not being able to perform the extensive nursing criteria we observed in spite of our skepticism that this kind of nursing costs no obvious damage and improves quality of life. On medical items as mortality and infection rate this needs to be proved. Still some problems concerning nursing need to be solved. For us the loose of regulations and standardization causes insecurity. The expectation to keep "in touch" with the patient over a long time period although he is not necessarily sympathetic is a constant effort. How many and what kind of rules respectively structure do we need is an open question. It is necessary to work as a team of nurses, doctors, social workers and psychologists to perform this kind of intimate nursing. Professional supervision to support the team is essential.

**Conclusion:** It is necessary to discuss this experience in forum of involved people. We are not able to find all answers and instructions just by doing. Further research is required.

1453

ORAL

### Acute renal failure in the oncological ITU: A five year retrospective study

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The Royal Marsden NHS Trust has Britain's only Intensive Care Unit that cares for patients with cancer. Over 70% of patients who require intensive care are suffering from Septic Shock or Severe Sepsis and there is therefore a high proportion who present with or go on to develop Acute Renal Failure. In common with other Cancer ITUs the most common form of Renal replacement therapy used is Continuous Veo-Venus Haemodiafiltration (CVVHD).

**Aim:** 1. To collect five years data on the numbers of cancer patients who develop acute renal failure necessitating therapy and identify predisposing factors. 2. To look at outcomes over the 5 year period. 3. To examine the CVVHD technique and the nursing associated with it. 4. To examine the properties of the new Bio-compatibility membranes and their use in removing Cytokines. 5. Cost and Resource implications.

1454

ORAL

### Enhancing patient care: The role of a lymphoma clinical nurse specialist in the UK

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**Purpose:** This paper will describe the work and impact of a lymphoma clinical nurse specialist in a large cancer centre in the United Kingdom. Funding was secured by the Cancer Relief Macmillan Fund and it is believed to be the first post of its kind in the UK.

**Brief Description:** The incidence of malignant lymphomas is increasing. Research shows that cases of Non-Hodgkin's lymphoma increased by 20–50% world-wide every five years during the 1970's and 1980's (Coleman et al 1993 and Hartge et al 1994). Despite this increase, there is often a lack of knowledge amongst both the general public and health professionals about the disease and its management.

The complexity of lymphomas in relation to aetiology, pathology and presentation necessitates intricate patient assessment and management if successful patient outcomes are to be achieved. Today there is evidence that patients treated in protocols do better than those who are not and there are trends to more intensive treatments and shorter in-patient times.

**Conclusion:** It was identified that patients lacked nursing input in terms of support, information and education while undergoing staging and often combined modality therapies. The lymphoma nurse specialist post affords an exceptional opportunity to combine medical knowledge and clinical expertise (e.g. performing bone marrow biopsies) with the ethos of nursing in order to enhance the total care of the patient.

1455

ORAL

### Extending the role of the clinical nurse specialist in Medical Oncology/Haematology

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**Purpose:** Within the Department of Medical Oncology/Haematology, there is a rapid turnover of junior doctors. It was acknowledged that there were problems associated with some routine procedures being carried out, including the insertion of central venous catheters (CVC) and bone marrow sampling; patients waiting an unacceptable length of time, no documented procedural policies, a higher than average number of CVC insertion related complications, and a large number of inadequate bone marrow samples. It was decided that a Clinical Nurse Specialist (CNS) trained to carry out these procedures could help to address the problems.

**Methods:** Training of the CNS was supervised by the Senior Consultants and Registrars in Medical Oncology and Haematology. Following completion of training, a formal assessment of competency was documented.

**Results:** The CNS has inserted more than 500 CVC, and undertaken 900 bone marrow procedures. A documented procedural policy has been established. CVC insertion related complications have been reduced, and adequate bone marrow samples are consistently obtained.

**Conclusion:** A CNS trained to perform routine procedures has resulted in an improved service for patients. Junior doctors have the opportunity to perform CVC insertion and bone marrow procedures with help and supervision from an experienced operator.

1456

POSTER

### Intratumoural collagen/chemotherapy: Novel therapeutic strategy for accessible tumours

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Chemotherapy is conventionally delivered systemically. In an effort to deliver more drug to the tumour site, improve local control and minimise the morbidity of systemic chemotherapy, regional chemotherapy can be administered by a variety of ways including the intra-arterial, intrathecal and intraperitoneal routes. Many formulations for direct injection of chemotherapy into tumours have been investigated.

A novel gel delivery system which allows high chemotherapy concentrations by association of active drug suspended in a collagen gel has been developed. The addition of adrenaline to the mixture limits the diffusion of drug away from the injection site. By this means cisplatin and fluorouracil may be administered locally. Initial pilot studies have shown tumour responses despite previous failures with systemic chemotherapy with minimal toxicity for the patient.

Multicentre studies are currently in progress to determine efficacy and toxicity of this approach to the management of accessible tumours.

A key aspect of these studies has been the training of a specialist nurse in all aspects of preparation and administration of the system to act as a resource to all disciplines involved in its use.

We will present our experiences with this method of treatment and demonstrate the value of the specialist nurse in evaluating treatment toxicity versus patient benefits with the aim of improving quality of life.

1457

POSTER

### Professional nursing aspects of pulsed dose rate (PDR) brachytherapy

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**Background:** Since June 1993, 80 patients with gynaecological and anal