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 inplantation 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-