

1412

**PERIPHERAL BLOOD STEM CELL TRANSPLANTATION (PBSCT): A NURSING AND PATIENT PERSPECTIVE.**  
**Morton C.**, Cabral S, Mehta J, Powles R. Leukaemia Unit, Royal Marsden Hospital, Sutton, Surrey SM2 5PT, UK.

PBSCT is a relatively new procedure to provide hemopoietic stem cell support for high-dose chemoradiotherapy of malignant diseases. It has a number of advantages over bone marrow transplantation: shortened period of neutropenia and thrombocytopenia, decreased incidence of infection and amount of antibiotic usage, reduction in blood product transfusions, and shortened duration of hospitalization. The additional benefits of stem cell harvesting for the patient are avoidance of general anesthesia and no overnight hospitalization as the procedure is done on an out-patient basis. The stem cell harvest enables the patient to develop a close rapport with the nurse operating the cell separator. This is beneficial to both patient and nurse by offering opportunities for reflection, discussion and expression of anxieties regarding the impending transplant. Hence the time spent during the harvest procedure is far more productive than undergoing general anesthesia and post-operative care.

1414

**AMBULATORY INTRAVENOUS TREATMENT FOR CHILDREN WITH CANCER**

G. Wisniewsky, B. Hülsmann, U. Bode  
 Universitäts-Kinderklinik  
 Abt. Hämatologie/Onkologie  
 Adenauerallee 119  
 D-5300 Bonn 1 Germany

Modern chemotherapy for malignant diseases require frequent inpatient treatment of children and adolescents. Relapsed patients still have a grave prognosis in spite of intensive chemotherapy. Therefore we developed a palliative therapeutic concept which is based on high quality of life in spite of intravenous treatment. All patients had a permanent venous access which was cared for by themselves or their parents. Dependent on the type of disease and condition of the patient cytotoxic drugs, pain medication or parenteral nutrition were given intravenously via pump. Home physicians or nurses of the oncology clinics saw them once weekly. More than 20 patients were cared for in this way for a total duration of up to a year. The rate of complications was low. Most patients could take part in normal activities and were enjoying a high quality of life in spite of intravenous therapy. Our experience indicates a cost-efficient relapsed therapy which may not be curative but is improving the disease status of some and definitively the quality of life of all patients. For young patients with relapsed cancer the ambulatory intravenous therapy is a true alternative to the established inpatient-treatment.

1416

**IMPROVEMENT OF SUPPORTIVE NURSING CARE IN CANCER PATIENTS AUTOTRANSPLANTED WITH BONE MARROW AND PERIPHERAL BLOOD HEMATOPOIETIC PROGENITORS.** Greco MG and Balbi M on behalf of The Cristina Gandini Transplantation Unit Nursing Team, Division of Medical Oncology, Istituto Nazionale Tumori, Milan, Italy

We report that in cancer patients a dramatic reduction in infection rate, days of isolation, mucositis, and hospitalization due to high-dose chemoradiotherapy is achievable by transplantation of hematopoietic progenitor cells (CPC) circulating in peripheral blood following cancer therapy with high-dose cyclophosphamide (HD-CTX) and administration of recombinant hematopoietic growth factors. Thirty patients (29 lymphomas, 1 breast cancer) were treated with total body irradiation and high-dose melphalan followed by either: i) bone marrow transplant (Group A); ii) bone marrow plus HD-CTX-mobilized CPC transplant (Group B); or iii) bone marrow plus HD-CTX- and growth factor-mobilized CPC transplant (Group C). Nursing care load remarkably differed among the 3 groups of patients (Group A > Group B > Group C) thus demonstrating clinical advantages of transplantation of HD-CTX- and growth factor-mobilized CPC.

1413

**NEEDS AND PROBLEMS EXPERIENCED BY PATIENTS WITH GASTROINTESTINAL CANCER RECEIVING CONTINUOUS AMBULATORY CHEMOTHERAPY.** **Hutchison G.**, Clinical Nurse Specialist and Mansi J L., Medical Oncologist. Dept. of Medical Oncology, St. George's Hospital, London SW17 0QT.

**KEYWORDS:** ambulatory chemotherapy wellbeing

Inoperable gastro-intestinal carcinoma has a poor prognosis. However, initial studies with a novel combination chemotherapy regime, epirubicin, cisplatin and 5-fluorouracil (ECF) are highly promising for both locally advanced and metastatic disease. Continuous ambulatory chemotherapy is administered via a dual lumen Hickman Catheter, with overnight admission in hospital every 21 days for bolus chemotherapy.

A study was established to determine the needs and problems of patients with a life-threatening diagnosis having to manage new and unfamiliar equipment. The aim was to improve awareness of the physical, emotional and social impact of continuous ambulatory chemotherapy and identify potential nursing care initiatives.

A quality of life questionnaire (EDRTC), with a semi-structured interview, has been used to evaluate both the patients wellbeing and the experiences of patients undergoing this therapy.

Preliminary findings show the value of an individualised information package prepared by specialist oncology nurses, discussed verbally with patients and taken home as a written resource guide.

1415

**THE USE OF HAEMATOPOIETIC GROWTH FACTORS IN ONCOLOGY NURSING.**

**B. Traynor**  
 AMGEN UK, Cambridge, England.

This paper intends to review the uses of haematopoietic growth factors in oncology nursing. Subsequent to the discovery of these proteins, their use in the clinical setting has had a major impact on both nursing practice and patient care. Originally introduced to reduce the haematological complications of conventional chemotherapy regimens, growth factors have been shown to reduce significantly the incidence of febrile neutropenia and to reduce hospitalisation of patients for this treatment-related morbidity. This practice has also been extended to encompass the setting of bone marrow transplantation where major changes are taking place, not simply in patient care but also in the entire transplant procedure. The biology of haematopoietic growth factors will be considered along with their potential therapeutic uses and the implications for change which these have precipitated in oncology nursing practice overall.

1417

**ORGANIZATION OF A NEW MEDICAL INTENSIVE CARE UNIT (ICU) : NURSING EXPERIENCE IN A CANCER INSTITUTE.**

**Markiewicz E.**, Soulier J.P. and the ASTI Team  
 Unité d'Administration et de Surveillance de Traitements Intensifs (ASTI), Institut Jules Bordet, 1 rue Hégier-Bordet, 1000 Bruxelles, Belgium.  
 Our cancer hospital has a medical ICU since 1980. We have recently had the opportunity to build with the active participation of the nurses a new ICU, taking into account our previous experience. During the last 28 months preceding its opening, 1030 patients were admitted for intensive care, including 302 for acute complications of cancer or its treatment and 679 for administration and/or surveillance of special anticancer therapy. The most representative types of complications were : hypercalcemia (33 cases), septic shock (31), cardiac arrhythmia (28), pneumonia and diffuse pneumopathies (23), thromboembolic disease (15). Artificial ventilation was performed in 43 patients. Overall mortality was 19%. There were four main indications for administration of anticancer treatment : patient at special risk (29), high dose chemotherapy (83), phase I (new cytostatic agent or biological response modifier) drug administration (211) and treatment at risky administration such as Interleukin-2 or Taxol (344). We have thus to manage for various problems patients with very different conditions and performance status. Nursing care can be optimally performed, only if nurses have training in both intensive care and oncology and if the architecture of the ICU has been adapted to the care to be provided. Our new ICU has seven beds including five in single rooms and a laminar air flow room for neutropenic patients. The supply system has been adapted to avoid personal circulation into the unit. This approach facilitates the protection of our immunosuppressed patient. The central nurse-station has a central monitoring system incorporating an arrhythmia detector. Invasive hemodynamic monitoring and artificial ventilation are applicable at each bed level. The nurse : bed ratio is 1.8. The nurses, whose training in critical care has been acquired in our or in another ICU, are invited to follow the formation in oncology provided by the Nursing School of the University. In conclusion, the managing of cancer patient in ICU requires adaptation of the nursing organization, to obtain better patient care.