advice and support. Deterioration of their general condition should be recognized early. Hofpoort is a regional hospital. Visits on the day-care ward imply a lot of time, energy and stress. As part of a quality assurance program routine telephone contacts in between treatments were initiated if the interval exceeded one week. The patients are informed about the aim of the contacts and if they agree, the contact is scheduled. During the conversation the situation of the previous week is assessed and adequate advice can be given. If necessary the patient is referred to his/her physician, a dietician or a social worker. A well kept patient report is maintained. This setup has proven to be feasible and effective.

Patients are able to get answers to important questions and many problems can be prevented. The level of care for patients on the day-care ward is improved and relations between nurses and patients are optimized.

1429 POSTER

# I.V. TUBING CHANGES EVERY 4 DAYS VERSUS 2 DAYS IN PATIENTS WITH CENTRAL ACCESS CATHETERS. A PROSPECTIVE RANDOMIZED STUDY

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An increased risk of infection is associated with repeated manipulation of I.V. tubing. It would be preferable therefore to limit the frequency of venous line changes.

Guidelines in documented studies recommend changing tubing every 2 to 3 days. The aim of this study is to show whether changing I.V. tubing every 4 days rather than 2 days, the current protocol in I.C. U. at IGR, increases the risk of catheter infection.

Method

A prospective randomized study aims to show the equivalence of 2 methods of I.V. tubing change, 4 days versus 2 days, on the incidence of catheter infection. 125 patients will be included in each of the 2 groups.

Parameters studied include assessment of catheter site, patient temperature and blood culture results. The I.C.U. blood sampling policy has not been modified apart from the addition of a routine blood culture from the central catheter on admission to the unit. Patients are surveyed throughout their stay in I.C.U. Patients discharged with a catheter in situ are followed up for 48 hours after leaving I.C.U.

Result.

50 Patients have been included in the study so far. Preliminary results show the two methods to be equivalent. If these findings are confirmed in the completed study, a considerable economy in time and material will be obtained.

1430 POSTER

## ORAL ETOPOSIDE IN THE ELDERLY WITH AN ASSOCIATED PHARMACOKINETIC (PK) STUDY: THE RESEARCH NURSE'S CONTRIBUTION

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For the elderly cancer patient (pt) standard intravenous chemotherapy
(CT) treatments may cause many logistical problems as well as being
costly in terms of hospitalisation. In a trial conducted at the above centre in Italy, oral etoposide (VP16) was administered to a group of elderly
patients with various tumours and included a PK study. The aims were
to evaluate (i) toxicity; (ii) bioavailability and other PK parameters; (iii)
feasibility of a Limited Sampling Strategy (LSS) in the PK study; (iv)
patient compliance and quality of life (QOL). Dosage and modality of
drug administration was standardized for all patients (oral VP16 100 mg
for 14 days). The research nurse was responsible for all aspects regarding
drug administration and PK blood sampling. Four days of hospitalization were required in the 1st cycle in order to conduct the PK study. All
other CT cycles were conducted on an outpatient basis and at home.

Conclusions: The research nurse proved to play an important role in quality assurance in the following ways: (i) general protocol compliance improved; (ii) consistency and accuracy in PK sample collection and data recording was seen; (iii) continuity of pt care by one nurse seemed to be beneficial and pt compliance was improved; (iv) decreased hospitalization resulted in less physical and psychological stress and increased patient QOL; (v) LSS demonstrated that 3 samples would be sufficient for PKs and it would thus be possible to perform in the Outpatient Dpt without overburdening staff or being too invasive for the pt.

POSTER

### NURSING DIAGNOSIS IN LEUKEMIA AND LUNG CANCER PATIENTS

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A descriptive study was conducted to identify and describe nursing diagnosis, their related factors and defining characteristics in leukemia and lung cancer patients and to categorize nursing diagnosis within Functional Health Patterns (FHP). Content analysis of 30 nursing records and interviews with 16 oncology nurses were used. In the leukemia population 47 nursing diagnoses were identified and classified within 10 FH. In the lung cancer population 28 nursing diagnoses were identified and classified in 9 FHP. Most of the diagnoses were formulated in the Nutritional-Metabolic Pattern, the Cognitive-Perceptual Pattern, the Activity-Exercise Pattern and the Coping-Stress Pattern. Diagnoses that occurred frequently in both populations were sleep disturbance, pain and self-care deficit. Although most of the diagnoses identified in the interviews were also found in the records, the interviewed nurses emphasized psychosocial problems. Diagnoses which were difficult to deal with for nurses were anxiety, uncertainty, denial and ineffective coping of patient and family.

1432 POSTER

#### **EXPERIENCES WITH THE "PATIENT'S BOOK"**

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Cancer patients, in particular, have a need to communicate with caregivers on their own terms. To meet this demand, we created an individual "patient's book" based on; (A) objective, written information dealing with diagnostic procedures, radiotherapy, chemotherapy, surgery and discharge. We followed the quality assurance process, dividing the information problems into structure, process and outcome. (B) an artistic lay-out to meet the patient's feelings of distress. To add a psychological dimension to the book, an authoress, a nature photographer and a painter were engaged. Patients in the ward evaluated A in 1993/94. This time patients evaluated both A and B one week after discharge, by filling in an anonymous questionnaire with four-level scales or yes/no questions. Preliminary results show that patients now are more aware of side-effects of their treatment. Other results may indicate that patients receive written information alone, not in combination with oral, as clearly was the intention. Furthermore, the evaluation reveals that the patients are very happy with our "patient's book".

1433 POSTER

#### COMPARISON OF THREE INTRAVENOUS CONNECTION SYSTEMS ON A HEMATOLOGY WARD

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Most of the patients treated in the hematology ward have a Central Venous Catheter (CVC). The care for the CVC is complex and has to be done as hygienically as possible. Last year several systems were introduced which seem to have resolved most of the complex care for the CVC. The hematology ward has done three comparative studies between intravenous connection systems. The following systems have been under study: Standard system (Terumo), Click-Lock system (Vigon) and Bionecteur (Vigon).

Research items were: efficiency, safety and the utility value. The items were defined and measured as following: (a) efficiency: time necessary to change the system, time to take blood samples, time to administrate medication and the costs of the material (b) safety: needlestick injury, leakage, and (c) utility value: is the system easy to handle for the nurse as well as the patient? In the study 15 nurses were involved. The results for the standard system, Click-Lock and Bionecteur were as follows: (1) Time to change the system: resp. 4 minutes, 30 seconds, 34 seconds, (2) Basic costs of one changement of the system: F3.28, F5.67, F3.32. As third item no needlestick injury was found by one of the systems. The incidence of the leakage was  $1\times$ ,  $2\times$  and  $2\times$ . Both the Click-Lock and the Bioncenteur were found positive in the fact of utility. Based on these results the hospital is changing the standard intravenous connection system into Bionecteur system. At this moment a new study has been started on the same research items for the Interlink system (Baxter/Dickinson). The study will be finished in July this year and presented in the congress.