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PORNSRI INGCHAROENSUNTHORN : CLINICAL PHARMACY
ACTIVITY IN PARENTERAL NUTRITION SUPPORT FOR PEDIATRIC
PATIENTS IN A NEWBORN SURGERY WARD AT THE QUEEN SIRIKIT
NATIONAL INSTITUTE OF CHILD HEALTH. THESIS ADVISOR : PREECHA
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Board of Surgery, BUSBA CHINDAVIJAK, Ph.D. 153 P. ISBN 974-664-905-1.

Parenteral nutrition (PN) has become an important adjunctive therapy in a variety of diseases. PN preparation and utilization are two essential steps to provide PN support. At the Queen Sirikit National Institute of Child Health (QSNICH), PN solution is compounded by nurses at nursing stations. This situation might confront with the problem of microbial contamination. Thus this study was designed to establish a Parenteral Nutrition Admixing Unit (PNAU) in the Pharmacy Department, the QSNICH and to identify the roles of pharmacists in PN support. The study was designed as a descriptive study and was divided into two phases: preparatory phase and running phase. There were three steps in the preparatory phase: preparation of PN room, validation of sterile area, and preparation of documents. In the running phase, traditional and clinical roles were performed to determine the role of pharmacists in PN support. Patients who were admitted to the newborn surgery ward were recruited at the beginning of the running phase according to the study criteria. Validation of laminar air flow hood for its sterile area was performed by using the settling-plate method. The test was repeated 6 times until the results were negative for microorganism. The PNAU started the service on 1st September 1999. From then till 31st March 2000, there were 419 bottles of PN prepared by the pharmacist for 33 patients (average of 13 bottles per patient). Every bottle was tested for sterility and the results showed no microorganism. A total of 337 interventions or average of 10 interventions per patient was performed by the pharmacist. The top three categories of interventions were calculation of the amount of phosphorus, calculation of the amount of zinc, and solution modifications. The overall acceptance rate for recommendations was 94%. In conclusion, the PNAU could deliver a good quality of PN to be administered to patients. Furthermore, the study revealed that the pharmacist could contribute to formulating, assessing and monitoring PN support in the multidisciplinary team approach.