注射薬抗癌剤調製支援プログラムの開発とその評価

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Development and evaluation of an admixing support system for injectable anticancer drugs

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Abstract

Objective: Preparation and dispensing of cancer drugs are often complicated. We developed an admixing support program for injectable anticancer drugs.

Methods: Database sets and operating programs have been developed using FileMaker Pro (FileMaker Inc.), which have facilitated calculation of the admixing liquid volume and the number of vials from the dosage of the drug and contents per vial automatically. The program also indicates proper dosage, infusion liquid volume and/or drip infusion rate based on the individual patient information (i.e. age, weight, height, body surface area). Using check sheets prepared by the program, pharmacists and nurses involved in the admixing procedure in the pediatric ward. A questionnaire concerning efficacy of the check sheets was carried out for nurses (n=20).

Results: The program was applied to 433 calculations for injectable anticancer drugs (nine patients). In response to a questionnaire, nurses in charge of admixing anticancer drugs estimated the value of this program.

Conclusion: Using this program, the admixing procedures have been performed more precisely and improved proper medical inspection and medical safety practices.

Key words: anticancer drugs, admixing support system, risk management, rational drug use