Mahdi Shahriari, J Cancer Sci Ther 2017, 9:1(Suppl)
http://dx.doi.org/10.4172/1948-5956-C1-096

How to prevent chemotherapy medication errors?

Mahdi Shahriari
Shiraz University of Medical Sciences, Iran

Introduction: Chemotherapy medication errors are source of some morbidity and significant mortality. Prevention from these complications should be addressed to the new staff and nurses in the oncology wards.

Method: A systematic review on the publicated chemotherapy medication errors and outcomes was done, although it must be believed that the reported cases are tip of an iceberg of errors that are not published.

Results: Important examples of errors were: Miscommunicated verbal orders, Total course or cycle dose given every day inspite of weekly or every two weeks or over three consecutive days; Lack of pertinent patient health care information (i.e. lab data and patient demographics such as age, height, weight and surface area); Use of incorrect patient information/lab data or the information/lab data for another patient; Excessive interruptions during order processing or dose preparation (Phone, patients' ring, pagers, etc); Poor packing and labeling by manufacturers; Poor communication between pharmacy and the nursing and medical staff; Use of abbreviations of drug names (example: Vin for Vinblastin, Vincristine and Vinorelbine); Similar sounding drug names within the therapeutic class (example: Doxorobicin, Daunorubicin); Use of trade names which may vary even for generically available agents; Lack of warning stickers or labels to prevent inadverent intrathecal administration of drugs such as Vincristine, Vinblastine, Doxorobicin and Daunorubicin; Failure to round drug doses which potentially leading to a 10 fold overdose if the decimal point is not seen; Widely differing dosing regimens for the same tumor type (example: various regimens of 5-Fluorouracil in colorectal cancer) or in various tumors; Use of outdated lab data (example: serum creatinin or liver function tests for dose modification of certain medications). Also there are some error prone medical transcriptions, for example: qd or QD for daily doses; qn, qhs, hs, bt for bedtime; x3d for x 3 days; per OS for orally or PO (misread as for left eye!); Failure to use a zero before a decimal point when the dose is less than a whole unit (example: avoid .1 mg instead of 0.1 mg).

Conclusion: Chemotherapy medication errors are not infrequent and should be considered that they may happen in your ward, by you and your personnel's, so a patient safety committee and annual education of all the staff is advisable, although new nurses should be trained on arrival. The guideline and continuous education program should be considered. Observation of trainees by authorized staff is suggested.

Biography

Mahdi Shahriari has obtained a Diploma from north of Iran and then in 1978 he entered Shiraz University of Medical Sciences. After 9 years of training in Medicine (1988), he was accepted as Pediatric Resident then he had practiced 2 years as Pediatrician. From April 1992 till July 1994, he was trained as Pediatric Hematologist-Oncologist and then became a Scientific Member of Shiraz University of Medical Sciences. He has more than 50 publications in the field of Hemostasis, Anemia and Pediatric Oncology. At present, he is Member of Board Certification of Pediatric Hematology - Oncology of Iran.

shahryar@sums.ac.ir

Notes: