

Clinical Pharmacist and Clinical Pharmacologist Opinion of Narrow Therapeutic Index (NTI) Drugs

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Abstract

Purpose: If the drugs are routinely required for therapeutic drug monitoring (TDM), they may be considered NTI drugs. By basing some criteria that affect the degree of separation of the concentrations that elicit the therapeutic and the adverse effects, an attempted to avoid the vagaries inherent in preparing a list of individual drugs themselves. Methods: I reviewed over 200 commonly prescribed drugs in the retail and hospital pharmacies in the US. As the Food and Drugs Administration (FDA) clinical pharmacologist and as practicing clinical pharmacist in hospitals for 25 years, there are no drugs that of concern than the Narrow Therapeutic Index (NTI) drugs. Results: NTI drugs are very dangerous in that any small change in the dose or concentration or interaction with any drugs, may end up with major consequences. That is why in hospitals, NTI drugs are routinely monitor such as vancomycin and gentamicin. Similarly, at the FDA, it is essential that labels specify the drug levels for certain conditions or diseases that are being monitoring. Conclusions: The plasma levels sometimes are required for in-patient and out-patient for drugs such as valproic acid, digoxin, and theophylline. It is essential that NTI must be monitored in-patient and out-patient.

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