



Project to Collect Medical Near-Miss/
Adverse Event Information

Medical Safety
Information

No.165, August 2020

Alert Failure Resulting in Administration of a Drug to a Patient Allergic to It

Nine cases have been reported in which allergy information was not registered on the electronic medical record using a method compatible with the conditions required to ensure that an alert would be displayed when prescribing drugs, resulting in the administration of a drug to which the patient was allergic (information collection period: from January 1, 2015 to June 30, 2020). This information was compiled on the basis of the content featured in the Analysis Themes section of the 58th Quarterly Report.

Cases have been reported in which the name of a drug to which the patient was allergic was not selected and registered using a method compatible with the conditions required for an alert to be displayed, so no alert was displayed at the time of prescription and the drug was subsequently administered.

Conditions for Displaying an Alert	Registration Method	Main Background Factors
Select drug name and register	Text input (free text field)	The staff member was not aware of the method used to select and register the drug name to ensure that an alert would be displayed
		The ward nurse did not know the hospital's rule about selecting and registering the drug name
		The staff member did not know that an alert would not be displayed when prescribing the drug if it was registered using text input (free text field)

◆ Medical Safety Information No.30 “Administration of Allergic Drug to Patient with Previous Known Allergy History” covers cases in which the drug allergy information was not written on the record in the location predetermined by the medical institution.

Alert Failure Resulting in Administration of a Drug to a Patient Allergic to It

Case 1

The electronic medical record system at the hospital is such that, when allergy information is registered by selecting the drug name from a list, an alert is displayed for all drugs with the same ingredients at the time of prescription, but no alert is displayed if text input is used. Nurse A was unused to registering allergy information and did not know the hospital's rule, so used text input to enter "Cravit." When the physician prescribed Levofloxacin Tablets, the alert was not displayed. The pharmaceutical department dispensed the Levofloxacin Tablets and Nurse B handed them to the patient. An hour after taking the drug, the patient experienced symptoms including respiratory distress and eyelid edema.

Case 2

The electronic medical record system at the hospital is such that, when one penicillin derivative is selected and registered in the allergy information, an alert is displayed for all penicillin derivatives in the hospital's formulary at the time of prescription. Usually, medical staff would search for the drug and then register it, but the physician used text input to enter "penicillin, Kefral." After surgery, the physician forgot that the patient was allergic to penicillin derivatives. When the physician prescribed Sulbacillin for injection, the alert was not displayed. After administration of the drug began, the patient complained of numbness in their arms and shortness of breath, so administration was halted.

Preventive measures taken at the medical institutions in which the events occurred

- **Ensure that all staff are fully aware of the registration method required to ensure that an alert will be displayed if the drug is prescribed.**
- **Warn staff that an alert will not be displayed when prescribing the drug if it is registered using text input (free text field).**
- **Ensure that information about patients' allergies is registered using the method required to ensure that an alert will be displayed if the drug is prescribed.**

The measures above are examples. Please consider initiatives suitable for your own facility.

* As part of the Project to Collect Medical Near-Miss/Adverse Event Information (a Ministry of Health, Labour and Welfare grant project), this medical safety information was prepared based on the cases collected in the Project as well as on opinions of the "Comprehensive Evaluation Panel" to prevent the occurrence and recurrence of medical adverse events. See the Project website for details.

<http://www.med-safe.jp/>

* Accuracy of information was ensured at the time of preparation but cannot be guaranteed in the future.

* This information is intended neither to limit the discretion of healthcare providers nor to impose certain obligations or responsibilities on them.

