Development of a First Dose Antibiotic Allergy Awareness Checklist

Kwok TK(1), Hui LF(2), Pang Janet(3), Lee Teresa(3), Ho Helen(3), Yeung HC(4), Fung Judy(1), Lui SL(1)
(1)Department of Medicine, (2)Quality & Safety Office, (3)Department of Pharmacy, (4)Department of Surgery

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Introduction
In April 2013, a patient with known allergy to an antibiotic was prescribed that antibiotic in our Hospital and remained unnoticed for 5 days. Fortunately, there was no significant consequence. Nevertheless, we felt that it is important to develop a mechanism to prevent this from happening again.

Objectives
To prevent the inadvertent administration of antibiotic to patients with known antibiotic allergy by ensuring that ward staffs are aware of the drug allergy history of our patients before administration of the first dose of antibiotic.

Methodology
First, we employed intensive visual management in ward to alert ward staffs about which patient has history of drug allergy. Then we developed a simple-to-use mandatory checklist for patients who are going to receive the first dose of antibiotic. The checklist has double safety check about drug allergy history by nurse & doctor. The check list included drug allergy checking from CMS, hospital record & direct history from the patients. Furthermore, pharmacy will not deliver the antibiotic without a completed checklist. The double checking characteristic of the checklist should be able to prevent most of the drug allergy incident provided that the compliance of the check list is good. We have a pilot implementation of the checklist in the ward with the incident. We fine-tuned the check list and held 2 training sessions for all ward staffs before the actual rollout of the checklist in all the wards in our Hospital. The compliance of the checklist was audited 3 months after implementation.

Result
There was no more first dose antibiotic allergy related incident since the
implementation of the check list. The compliance rate of this check list was 97.25% after 3 months of implementation. The complicated environment in ward is a major factor for causing error. For important drugs administration or procedures, visual management & check list are useful tools to reduce error by increasing the alertness of the staff. However this system only works if the compliance is good. A near 100% compliance should be obtained. We will continue to educate our staffs & hope we can obtain a better compliance.