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Asking for history of toxoid immunization in patients with acute injury induced wound: Is it reliable?

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ABSTRACT

Objective: To ask for history of toxoid immunization in patients with acute injury induced wound and discussed for the reliability.

Methods: A total of 180 patients got wound from acute injury and got a management in a health unit were asked with a question whether he/she had history of previous toxoid immunization.

Results: Based on this observational study, it can be seen that there are many problems in “answer” of the patients.

Conclusions: Since toxoid is a safe and save preventive vaccination, it should be regularly given as mass vaccination for any patients who got wound from acute injury and get a management in any health units.

1. Introduction

Trauma is the important concern in acute medical care. The acute injury is a common problem in medicine and this usually induces wound. The wound infection is the serious unwanted complication^[1,2]. This is usually due to wound contamination and the tetanus is the most serious infectious disease due to wound contamination. Wound care is the need and the use of toxoid immunization is indicated^[3,4]. Since toxoid is often used, some patients might have previous immunization.

In general, there should be a specific protocol in each setting for management of toxoid immunization. This protocol is aiming at high quality in patient management. The protocol must be developed based on the standard practice guideline, and it

should range from pre-immunization till post-immunization steps. The example of recommendation is listed in [Table 1](#) and [Figure 1](#).

Table 1

Present recommendation for toxoid immunization.

Step	Recommendation
Pre-immunization	Proper wound care Check for history of previous immunization Laboratory screening (not routinely done) Finding for any contraindication (such as history of allergy to toxoid) Giving information of immunization to the patient Asking for informed consent
Immunization	Pre-immunization counseling Administration of toxoid according to immunization guideline Appointment for booster dosage if any
Post-immunization	Follow-up for booster dosage if any Observation of any side effect Post-immunization counseling

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The study protocol was performed according to the Helsinki declaration and approved by the Ethic Committee of TWS Primary Care Center, Bangkok, Thailand which approved the investigations. Informed written consent was obtained from all patients.

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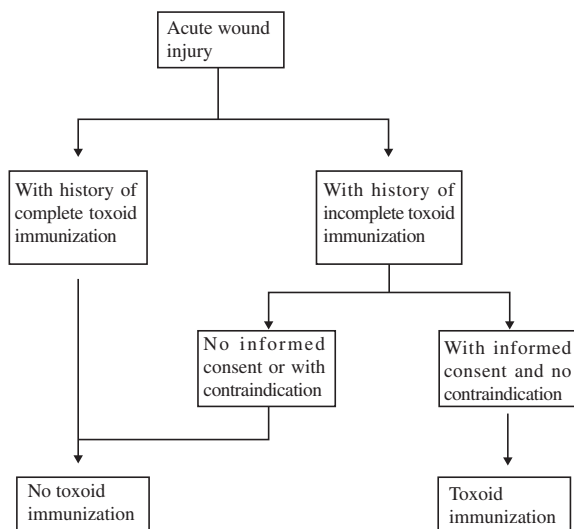


Figure 1. Flowchart showed management of wound injury by toxoid immunization.

In general practice, it is no doubt that the practitioner has to manage the acute problem and the wound, at first. This includes the basic life support, bleeding control, cleaning of wound and repairing of wound. Then the practitioner has to consider the use of antibiotic for the prevention of bacterial infection from wound contamination. At the same time, the toxoid immunization has to be considered. For sure, this has to be based on the informed consent principle. For sure, this means there must be the pre-immunization counseling for the patient. To decide to give the toxoid immunization, it is firstly to receive informed consent from the patient. The practitioner has to consider that there is no contraindication. When the immunization was decided, administration has to be correctly performed according to immunization guideline. Route of administration, dosage and booster have to be altogether fulfilled. The following of the booster dosage in toxoid immunization is needed and this requires the good patient compliance to immunization. Also, after immunization, the post-immunization counseling should be provided. The information of protective immunity and how to manage the next possible wound injury must be explained to the patient. Also, the observation of possible side effect of toxoid is needed.

In this short report, the authors presented an experience on asking for history of toxoid immunization in patients with acute injury induced wound and discussed for the reliability.

2. Materials and methods

This is observational study were carried out during a one-year period, 2014. The focused population was the patients who got wound from acute injury and got a management in a health unit. All patients got standard wound management and were asked with a question whether he/she had history of previous toxoid immunization. Additional questions by interviewing were used in all cases to get the details.

3. Results

According to this work, 180 patients were asked. Of these patients, 80 (44.4%) answered no previous immunization. For further addition information from interviewing, of those 100 cases who answered “yes”, only 60 cases got complete appropriate previous immunization. The left 30 got too long previous immunization, 10 got incomplete previous immunization. For those 80 cases who answered “no”, 30 cases had the history of recent diphtheria toxoid vaccination (due to national campaign to getting rid of diphtheria^[5]) and did not know that it was also a kind of toxoid.

4. Discussion

Based on this observational study, it can be seen that there are many problems in “answer” of the patients who got wound from acute injury and got a management in this health unit. Both “yes” and “no” group for previous toxoid immunization showed no reliability of the answer. This might reflect the problem of vaccination information provided to the vaccinees. It is needed that medical personnel have to give the correct complete information on vaccination to the patients. This can be useful for future referencing.

Based on this finding, it can support the pervious note that toxoid should be usually given regardless on immunization history. The history taking for previous immunization is highly unreliable^[6]. In fact, except the identified problem in this report, there are also other possible problems such as incorrect vaccine administration that must be taken into account. Since toxoid is a safe and save preventive vaccination, it should be regularly given as mass vaccination for any patients who got wound from acute injury and got a management in any health units. Otherwise, the laboratory screening tool might be applied^[6].

Conflict of interest statement

The authors report no conflict of interest.

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