

# Siriraj Concurrent Trigger Tool : Incontinence Associated Dermatitis (IAD) for Prevention and Management guideline in Pediatric patients

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## Abstract

Incontinence-Associated Dermatitis (IAD) is a common problem for adult and pediatric patients with feces/urine incontinence. It is painful and places the patient at an increased risk of secondary infection as well as pressure injury development. The Goal of this study: to reduce Hospital acquired IAD in pediatric patients by follow the flow Concurrent Trigger Tool Siriraj: Incontinence Associated dermatitis in Pediatric patients. Result showed that hospital acquired IAD was reduced from 50% to 27.78%. **Keyword** Incontinence-Associated Dermatitis

## Introduction

Incontinence-Associated Dermatitis (IAD) is a common problem for adult and pediatric patients with feces and/or urine incontinence and also a prevalent condition with significant negative impact. It is painful and places the patient at an increased risk of secondary infection as well as pressure injury development. Furthermore, it can be costly and difficult to treat.<sup>1</sup>



Pediatric skin is commonly believed to have advantageous properties for wound repair. The skin structure has smaller corneocytes, thinner stratum corneum and pH is more alkaline. It's weaker and also considered to be more sensitive and prone to injury than adult.<sup>2</sup> This is the most common cause of skin dermatitis in pediatric and is due to irritant contact dermatitis resulting from the combination of localized physical, chemical and mechanical irritation (such as from urine, feces and moisture). Because of increased moisture, there is a change in the permeability of the epidermis allowing increased entrance of irritants and increased susceptibility to frictional damage from diaper. This is enhanced by stool enzyme activation (urease), interacting with urine to increase pH in order to further irritant and damage skin.<sup>3</sup> The key is prevention: maintaining dry, protected skin is vital. Prevention is the most effective way to treat IAD. The prevalence IAD in Pediatric Department, Siriraj Hospital was collected semi-annually by Enterostomal Therapist nurses. Between 2014 to 2016 in February and August, the results in this time period were 4.6%, 5.33%, 8.67%, 7.36%, 6.33%, 6.25% respectively. The incidence in pilot pediatric unit was found hospital acquired IAD 52.63% (N=19) of all patients with IAD. It was level 1: red but skin intact 36.84% and level 2: red with skin breakdown 15.79%.



## The Goal of this study

To reduce Hospital acquired IAD in pediatric patients by follow the flow Siriraj Concurrent Trigger Tool: Incontinence Associated Dermatitis for prevention and management Guideline in Pediatric patients.

## Implementation

Initial skin assessment start when patient admitted in hospital. If no risk factor is present, we issue our standard nursing care and reassess every 8 hours. If Patients have risk factor, follow the flow Concurrent Trigger Tool Siriraj : Incontinence Associated dermatitis for prevention and management Guideline in Pediatric patients

## Result

Table 1: Percentage of IAD before admits and Hospital acquired after used Incontinence Associated Dermatitis for prevention and management Guideline in Pediatric patients.

No patients present IAD (N = 18)	Percentage of IAD
before admits (n=13)	72.22
- IAD Level 1 : Skin Redness but intact (n=12)	66.67
- IAD Level 2 : Skin Breakdown (n=1)	5.56
Hospital Acquired Incontinence Associated Dermatitis (n=5)	27.78
- IAD Level 1 : Skin Redness but intact (n=4)	22.22
- IAD Level 2 : Skin Breakdown (n=1)	5.56

After 1 month the pilot study used the Incontinence Associated Dermatitis for prevention and management Guideline in Pediatric patients was showed that hospital acquired IAD have 27.78% (N=18) include IAD level 1: 22.22% and IAD level 2: 5.56%. Hospital acquired IAD reduced from 52.63% to 27.78%.

## Conclusion

The most important of IAD prevention is concerned and awareness that risk factors contributes to IAD development, meanwhile usage of product and follows guideline that appropriate for IAD Severity to restore or maintain integrity skin.<sup>4</sup> Hospital acquired IAD was reduced by following Incontinence Associated Dermatitis for prevention and management Guideline in Pediatric patients.

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