ABSTRACT

**Background:** Atopic dermatitis is a chronic pruritic inflammatory skin disease, typically affecting children more than adults. Defective skin barrier, defective innate immune system, and heightened immunologic responses allow increased colonization by various organisms even in normal skin of atopic dermatitis patients. *Staphylococcus aureus*, the most virulent species from *Staphylococcus* genus, is one of bacteria that have a big role in atopic dermatitis.

**Purpose:** To compare the colony of *Staphylococcus aureus* from antecubital non-exacerbated child with atopic dermatitis than normal child without history of atopic dermatitis.

**Method:** Antecubital skin swabs for culture collected from 17 patients with non-exacerbated atopic dermatitis and 17 controls to investigate the presence of *Staphylococcus aureus* colonization and count the number of colonies.

**Result:** *Staphylococcus aureus* skin colonization was seen in 5 patients (29.41%) but none in control group (p=0.044), relative risk 2.417. All of positive colonization revealed moderate and heavy bacterial growth ($10^4$->$10^5$ cfu/cm$^2$)

**Conclusions:** Non-exacerbated atopic dermatitis child patients showed increased risk of *Staphylococcus aureus* colonization than normal child.

**Keywords:** atopic dermatitis, *Staphylococcus aureus*, colonization