

Rashes in School: Should They Stay or Should They Go?



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CONTINUING NURSING EDUCATION

Texas Children's Hospital is an approved provider with commendation of continuing nursing education by the Texas Nurses Association - Approver, an accredited approver with distinction, by the American Nurses Credentialing Center's Commission on Accreditation.

REQUIREMENTS FOR SUCCESSFUL COMPLETION

To receive contact hours for this continuing education activity, the participant must:

- Sign in to the activity
- Attend the entire activity
- Complete a participant evaluation online

Once successful completion has been verified, a "Certificate of Successful Completion" will be awarded for 6.0 contact hour(s). For web link issues, email cne@texaschildrens.org

LEARNING OUTCOME

At the conclusion of this continuing nursing education activity, the participant will be able to improve nursing management, care coordination and resources for school age children.

CONFLICTS OF INTEREST

Explanation: A conflict of interest occurs when an individual has an opportunity to affect or impact educational content with which he or she may have a commercial interest or a potentially biasing relationship of a financial nature. All planners and presenters/authors/content reviewers must disclose the presence or absence of a conflict of interest relative to this activity. All potential conflicts are resolved prior to the planning, implementation, or evaluation of the continuing nursing education activity. All activity planning committee members and presenters/authors/content reviewers have submitted Conflict of Interest Disclosure forms.

The activity's Nurse Planner has determined that no one who has the ability to control the content of this CNE activity – planning committee members and presenters/authors/content reviewers – has a conflict of interest.

COMMERCIAL SUPPORT

This CNE activity has not received commercial support.

JOINT PROVIDER STATEMENT

This CME/CNE activity has been jointly provided by Texas Children's Hospital collaboratively with Texas School Nurses Organization Region IV.

Disclaimer



- Rough guidelines based on my professional career
- Based on American Academy of Pediatrics and Center of Disease Control
- Can vary from state to state and more specifically district to district
- Use your own schools guidelines

Introduction



- School nurses are front line care providers-have the tools and power to promote health throughout their school.
- Good skin hygiene and hand-washing are the backbone of preventing the spread of common illnesses
- School nurses can protect children from exposure by educating the school community, including teachers, parents, and children.
- By increasing knowledge of childhood rashes, school nurses will be prepared to identify, isolate if necessary, and therefore decrease the spread of infectious rashes in their schools.

Case #1



Hurwitz 2016

Molluscum Contagiosum: Should Stay

Molluscum Contagiosum



- Common skin infection, caused by the pox virus
- Self limited, can last up to 1-2 years, sometimes shorter, sometime longer
- Spread through skin to skin contact however children should be allowed to attend school as long as skin affected is covered. The inner core is the viral body and is the most contagious part of the lesions.
- Symptoms:
 - Skin colored pearly umbilicated papules
 - Found anywhere on body, loves warm moist areas
 - When red and inflamed usually a sign that immune system is revving up to fight virus. Usually PCPs concerned about secondary bacterial infection but more often that not it is not bacterial infection. Hold off on antibiotics

Molluscum Contagiosum



- What to do:
 - Recommend to send note home to parent
 - Can safely stay at school and participate in all normal activities
- Treatment:
 - Does not have to be treated as it is self limited and will resolve on own time
 - If interested in treatment:
 - ✦ Cantharidin
 - ✦ Liquid nitrogen
 - ✦ Topical retinoids
 - ✦ Oral cimetidine

Molluscum Contagiosum



- **Prevention:**
 - Keep affected areas covered
 - Maintain good hand washing technique
 - Avoid bathing with affected individuals, sharing towels
 - Don't pick at lesions

Case #2



Bologna 2018

Verruca Vulgaris:
Should Stay

Verruca Vulgaris (Wart)



- Common skin infection, caused by human papilloma virus
- Self limited, can last up to 1-2 years, sometimes shorter, sometime longer
- Warts are contagious by the virus entering the skin through a small cut or scratch. Children should be allowed to attend school, can keep affected areas covered to help with transmission risk
- Symptoms:
 - Skin colored to pink rough papules, often rough exterior with small black dots noted
 - Found anywhere on body

Verruca Vulgaris (Wart)



- **What to do:**
 - Recommend to send note home to parent
 - Can safely stay at school and participate in all normal activities
- **Treatment:**
 - Start with over the counter salicylic acid 17% topical gel with duct tape, can pare with nail file in morning, would try for 3 months before seeking medical care by professional
 - The sooner you treat them, the less they will spread. If you note a lesion, would bring attention to child's parent

Verruca Vulgaris (Wart)



- **Prevention:**
 - Keep affected areas covered
 - Maintain good hand washing technique
 - Don't pick at lesions
 - Avoid chewing or sucking at affected areas-nail biters can lead to warts on lips

Case #3



Bologna 2018



Hand Foot and Mouth: Should Go

Hand, Foot and Mouth



- Common skin infection, caused by viruses from the Enterovirus group-Coxsackievirus A16 is typically the most common cause of HFMD
- Usually affects infants and children younger than 5 years old.
- Spread by close personal contact with infected person, fecal-oral transmission (changing dirty diapers) and respiratory transmission (air when an infected person coughs or sneezes)
- Symptoms:
 - Characterized by pustules, vesicles, and ulcers on hands, feet, mouth and buttock
 - Low grade fever



- **What to do:**
 - Highly contagious: Should go home
 - Can return after 1 week or when lesions are resolved.
- **Treatment:**
 - Symptomatic relief
- **Prevention:**
 - Hand hygiene and avoiding contaminated surfaces
 - Children should stay home while sick with hand, foot, and mouth disease

Case #4



Hurwitz 2016

Lice: Should Stay

Head Lice



- Infestation with the human head by louse, *Pediculus humanus*
- Very common. Preschool and elementary-age children, 3 to 11 years of age are infested most often. Females are infested more often than males.
- Transmission occurs by direct head to head contact. Contact is common during play (sports activities, playgrounds, at camp, and slumber parties) at school and at home. Indirect spread through contact with personal belongings of an infested individual (combs, brushes, hats) is much less likely to occur.
- Symptoms:
 - The majority of head lice infestations are asymptomatic.
 - When symptoms are noted they may include a tickling feeling of something moving in the hair, itching, caused by an allergic reaction to louse saliva, and irritability

Head Lice



- What to do:
 - Send note home to family and recommend treatment
 - There is no law in Texas that addresses *excluding* children with head lice from school. Lice are not a public health threat. They do not carry disease. It is up to each school district to create head lice policies and procedures, if they so choose and some do.
 - According to a research article published by the American Academy of Pediatrics (AAP) in 2015, "No healthy child should be excluded from or allowed to miss school time because of head lice or nits. Pediatricians may educate school communities that no-nit policies for return to school should be abandoned."
- Treatment:
 - If a person is identified with head lice, all household members should be checked for head lice
 - 1% permethrin (Nix) or pyrethrins (Rid) are a reasonable first choice for primary treatment of active infestations. Important to apply the product at least twice, at proper intervals.
 - Occlusive method (such as petroleum jelly or Cetaphil cleanser). Technique: applied to the hair, dried on with a handheld hair dryer, left on overnight, and washed out the next morning and repeated once per week for 3 weeks

Head Lice



- **Prevention:**
 - Ask children to avoid head-to-head contact with classmates during play and other activities.
 - Instruct children not to share personal belongings such as hats, scarves, coats, combs, brushes, hair accessories and headphones.
 - Preventative shampoos and sprays: A number of small studies have shown that ingredients in some of these products — mostly plant oils such as rosemary, citronella, eucalyptus, tea tree and lemon grass — may work to repel lice. However, these products are classified as "natural," so they aren't regulated by the Food and Drug Administration (FDA), and they haven't been tested to FDA standards.

Case #5



Scabies: Should Go



Hurwitz 2016

Scabies



- Infestation caused by a mite known as the *Sarcoptes scabiei*.
- Scabies usually is passed by direct, prolonged skin-to-skin contact with an infested person.
- Symptoms:
 - Very itchy red papules and burrows, often appearing in a linear format.
 - Areas often affected include the folds between the child's fingers and toes.
 - Intense itching especially at night.

Scabies



- **What to do:**
 - Highly contagious: send patient home
 - Request family to see provider as soon as possible so treatment can be started.
 - Patient can return to school once treatment is started.
- **Treatment:**
 - Scabies treatment usually is recommended for members of the same household, particularly for those who have had prolonged skin-to-skin contact. All household members should be treated at the same time as the infested person to prevent possible re-exposure and re-infestation.
 - Permethrin cream 5%/Elimite is drug of choice for treatment of scabies. Approved for persons who are at least 2 months of age. Permethrin kills the scabies mite and eggs. Two (or more) applications, each about a week apart, may be necessary to eliminate all mites.
 - Bedding, clothing, and towels used by infested persons or their household, sexual, and close contacts anytime during the three days before treatment should be decontaminated by washing in hot water and drying in a hot dryer, by dry-cleaning, or by sealing in a plastic bag for at least 72 hours. Scabies mites generally do not survive more than 2 to 3 days away from human skin.

Scabies



- **Prevention:**
 - Avoid having direct skin-to-skin contact with someone who has scabies.
 - A person can have scabies for up to two months before they get the telltale itchy rash. During this time they can pass it along to others, before even knowing they have the condition themselves.
 - Scabies passes quickly throughout places where there are lots of people living in close physical contact with one another. Daycare centers and schools are other places where scabies can thrive. Please let parents know that if they are infected to alert school as soon as possible

Case #6



Tinea Corporis: Should Stay

Tinea Corporis



- Common skin infection that is caused by a fungus.
- The fungi that cause this infection can live on skin, surfaces, and on household items such as clothing, towels, and bedding.
- Symptoms:
 - Ring-shaped rash-hence the name “ringworm”
 - Red, scaly, cracked skin
 - Hair loss if on scalp
 - Other names for ringworm are based on its location on the body – for example, ringworm on the feet is also called “athlete’s foot.”, ringworm on the scalp is called tinea capitis.

Tinea Corporis



- **What to do:**
 - Recommend to cover lesions if possible and send note home to parent
 - Children with fungal infections should be permitted to attend school but encouraged to receive treatment to decrease the risk of spreading to others. Can return to school 24 hours after treatment is started
- **Treatment:**
 - Topical antifungal creams such as lotrimin OTC are effective when administered BID but require ongoing treatment for 4 to 6 weeks even though the rash may be resolved within 2 weeks.
 - Children with tinea capitis are treated with selenium sulfide shampoo to decrease spreading the infection to others and oral antifungal therapy to eradicate the infection (Griseofulvin or Terbinafine)

Tinea Corporis



- **Prevention:**

- Avoiding direct contact with lesions. If you are infected, cover lesions if possible with waterproof bandage.
- Don't share clothing, towels, sheets, or other personal items with someone who has ringworm.
- Don't walk barefoot in areas like locker rooms or public showers.
- If you're an athlete involved in close contact sports, shower immediately after your practice session or match, and keep all of your sports gear and uniform clean. Don't share sports gear (helmet, etc.) with other players.
- Require shower shoes (e.g., flip-flops or water sandals) be worn in locker rooms or showers or on pool decks.
- Disinfect showers and dressing rooms daily with an EPA-approved disinfectant.

Case #7



Bologna 2018

Impetigo: Should Stay

Impetigo



- Skin infection, caused by the bacteria-
Staphylococcus Aureus, especially common in young children.
- Spread by direct contact
- Symptoms:
 - Erosions with golden yellow crusts, possible blisters
 - Asymptomatic or symptomatic (pain, tenderness, itchiness)

Impetigo



- **What to do:**
 - Recommend to cover lesions if possible and send note home to parent
 - Can safely return to school 24 hours after beginning treatment
- **Treatment:**
 - Localized impetigo infections may be treated with topical mupirocin ointment, while multiple lesions require treatment with oral antibiotics.

Impetigo



- **Prevention:**

- Avoiding direct contact with lesions. If you are infected, cover lesions if possible with waterproof bandage.
- If the rash has any fluid or pus coming from it, child must remain out of school until the rash has been treated and a doctor's note states it is ok to return to school, or until the rash is gone, dried, or scabbed over with no new spots.

Case #8



Hurwitz 2016

Atopic Dermatitis:
Should Stay

Atopic Dermatitis



- Chronic inflammatory skin condition
- Symptoms:
 - Itchy red plaques
 - Can be anywhere but in school age children concentrated more in flexural areas-inner arms and behind knees
- What to do:
 - Can safely stay at school and participate in all normal activities
 - Provide emotional support
 - Provide symptomatic relief
 - ✦ Moisturizers
 - ✦ Antihistamines if okayed by parents (Avoid drowsy medications)

Case #9



Psoriasis:
Should Stay

Hurwitz 2016

Psoriasis



- Chronic inflammatory skin condition
- Symptoms:
 - Itchy red plaques with characteristic overlying grey silver scale
 - Can be anywhere
- What to do:
 - Can safely stay at school and participate in all normal activities
 - Provide emotional support
 - Provide symptomatic relief
 - ✦ Moisturizers
 - ✦ Antihistamines if okayed by parents (Avoid drowsy medications)

Atopic Dermatitis and Psoriasis



- AD and psoriasis can deeply affect a child's self esteem
- Important for care providers, school nurses included, to lift these children up and to provide emotional support during their flares.
- Involve them with school activities so that they can feel like every other child, no need to exclude them



Thank you!

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