



PAEDIATRIC SKIN DISORDERS

WERE .E.



BACTERIAL SKIN CONDITONS

1. IMPETIGO

IMPETIGO

- Impetigo is one of the most common skin infections in children. It can occur in adults but is seen far more often in children.
- Impetigo is contagious and can be spread to others through close contact or by sharing towels, sheets, clothing, toys, or other items. Scratching can also spread the sores to other parts of the body.

DEFINITION

- Impetigo is a bacterial skin infection.
- It causes red sores that can break open, ooze fluid, and develop a yellow-brown crust.
- These sores can occur anywhere on the body.

ETIOLOGY

- Impetigo is caused by group of bacteria-streptococcus pyogenes , staphylococcus aureus or Group A beta-hemolytic streptococcus.
- Often these bacteria enter the body when the skin has already been irritated or injured because of other skin problems such as eczema , insect bites, burns, animal bites or cuts.
- Children may get impetigo after they have had a cold or allergies.
- skin-to-skin contact.

RISK FACTORS

- **Age.** Impetigo most commonly occurs in children ages 2 to 5.
- **Crowded conditions.** Impetigo spreads easily in schools and child care settings.
- **Warm, humid weather.** Impetigo infections are more common in summer.
- **Certain sports.** Participation in sports that involve skin-to-skin contact, such as football or wrestling, increases your risk of developing impetigo.
- **Broken skin.** The bacteria that cause impetigo often enter your skin through a small skin injury, insect bite or rash.
- **poor hygiene**
- **Other skin conditions,** such as scabies or eczema

TYPES OF IMPETIGO

Impetigo contagiosa

- This may also be called nonbullous impetigo, and is the most common type of impetigo in children. It is very contagious. This type of impetigo usually begins with red sores around the nose and mouth.
- The blisters burst, leaving a weeping, red rash that becomes crusted.
- This rash may be itchy but is not painful. Swollen lymph nodes may also occur with impetigo contagiosa.

Bullous impetigo

- This form of impetigo is most common in children under age two. Blisters usually appear first on the torso, arms, and legs.
- These blisters may initially appear clear and then turn cloudy.
- Blisters tend to last longer than blisters caused by other types of impetigo. The areas around the blisters may be red and itchy.

Ecthyma

- This is the most serious form of impetigo because it affects the epidermis and dermis layers of the skin, rather than just the top layer.
- Blisters tend to be painful and may turn into ulcers, or aggravated, open sores. Swollen lymph nodes and scars may also occur.

SYMPTOMS

- red sores that pop easily and leave a yellow crust
- fluid-filled blisters
- itchy rash
- Red bumps
- Sores that are filled with fluid, draining fluid, or crusted over
- Areas that are red, swollen, and may itch
- Swelling of nearby lymph glands (nodes)

MEDICAL MANAGEMENT

- **Topical Antibiotic Cream:** mupirocin & fusidic acid.
- **Oral Antibiotics:** broad-spectrum penicillins, cephalosporins & cefuroxime.
- **Topical Disinfectants:** hexachlorophene
- **Cleaning and bandaging:** The affected area should be cleaned several times per day, using either water or an antibacterial wash.

COMPLICATIONS

- Worsening or spreading of the infection
- Cellulitis
- Guttate psoriasis
- Scarlet fever
- Bacteremia or sepsis
- Post-streptococcal glomerulonephritis
- rheumatic fever



PREVENTION

- Wash the affected areas with a neutral soap and running water
- Then cover the area lightly with gauze
- Do not touch the sores and encourage the patient not to touch the sores
- The patient's clothes, bedding, towels, and other toiletries should be washed daily
- The patient's clothes must not be shared or worn by other people
- When applying antibiotic ointment, gloves should be worn, washing hands thoroughly afterward
- Keep the patient's nails short to reduce scratching
- Wash hands and the patient's hands often
- Isolate the patient until they are not contagious

FOLLICULITIS

- Folliculitis occurs when the skin depressions that hold hair follicles become inflamed. In most cases, bacteria are the cause behind this skin problem.
- One bacteria in particular, *Staphylococcus aureus*, causes the most harm.

ETIOLOGY

- Staphylococcus aureus
- Friction from tight clothing
- A pre-existing skin condition such as eczema, acne, or other inflammation of the skin (dermatitis)
- Injuries to the skin such as surface scrapes (abrasions)
- Prolonged contact with plastic bandages or adhesive tape
- Irritation from shaving

Risk Factors

- Skin conditions such as eczema, acne, or another dermatitis
- Excessive sweating due to regular exercise
- Living in a warm, humid climate
- Diabetes
- Obesity
- Weakened immune system due to HIV/AIDS, organ transplantation, or cancer
- Frequent shaving

TYPES

- **Superficial folliculitis:** This type is that affects individuals predisposed by lack of cleanliness. The lesion begins as a small dom-shaped pustule where it may rupture, exuding yellowish exudate.
- **Deep folliculitis:** The lesion in deep folliculitis is spreading deep into the follicles and causing perifolliculitis. The condition may be extensive involving a wide area especially the scalp in infants and young children.



The most common locations for folliculitis in children include:

- Scalp
- Face
- Buttocks
- Arms and legs

SYMPTOMS

- Pus-filled lesions on hair follicles surrounded by inflamed skin.
- Itchiness
- Tenderness
- Pain
- Scarring
- Permanent hair loss

SYMPTOMS

The lesions may be:

- Red
- Warm
- Swollen
- Painful
- Leaking fluid (Weeping pus)

Symptoms that affect the whole body can include:

- Fever and chills
- Fast heart beat
- Low blood pressure

MANAGEMENT

- Warm cloths (compresses) may help ease symptoms and speed healing.
- Incision and drainage
- **antibacterial wash:** hexachlorophene
- **Topical antibiotic** lotion or gel such as erythromycin or clindamycin
- **Oral antibiotic** pills or syrups such as cephalexin
- **A combination** of 2 different oral antibiotics, including trimethoprim-sulfamethoxazole, clindamycin, amoxicillin or tetracycline



PREVENTION

- Avoid tight clothing
- Maintain personal hygiene
- Wash towels, washcloths, and bed linens frequently
- Keep the skin dry
- Use antibacterial soap to clean the affected area
- Apply some corticosteroid lotion to get relief from itchy skin

FURUNCLE

Furuncles (boils) are skin abscesses caused by staphylococcal infection, which involve hair follicles. Furuncles are common on the neck, breasts, face, and buttocks.

They are uncomfortable and may be painful when closely attached to underlying structures (eg. on the nose, ear, or fingers).

Appearance is a nodule or pustule that discharges necrotic tissue and sanguineous (blood+pus). Furuncles may be accompanied by fever and prostration(fatigue).

ETIOLOGY

- Most Furuncles are caused by Methicillin-resistant *Staphylococcus aureus* (MRSA) bacteria, which inhabit the skin surface, throat, and nasal passages.
- These bacteria can cause infection by entering the skin through a hair follicle, small scrape, or puncture, although sometimes there is no obvious point of entry.

CLINICAL MANIFESTATION


- The skin around the boil becomes infected. It turns red, painful, warm, and swollen.
- More boils may appear around the original one.
- A fever may develop.
- swollen lymph nodes.
- The skin around the boil turns red or red streaks appear.
- Severe pain .
- The boil does not drain.

MEDICAL MANAGEMENT

- Topical antibiotics : applying liquid soap containing either chlorhexidine gluconate with isopropyl alcohol or 2 to 3% chloroxylonol
- Oral or intravenous (IV) antibiotics (to treat the infection): for 5 to 10 days; choices include trimethoprim/ sulfamethoxazole 160/400 mg.
- A warm compress to help promote drainage of the lesion (for carbuncles and boils)
- Possible removal of the boils

PREVENTIVE MEASURES

- Avoid squeezing, irritation and trauma to the lesions.
- Topical antibacterial cream such as Mupercin cream applied twice daily .
- Using a suitable anti septic soap as
- Avoiding much hyperhidrosis(hyper or excessive sweat) and occlusion of the crural (between thighs)area.

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- Care of the crural areas especially in new born and small children by frequent aeration and changing diapers repeatedly should be taken into consideration.
 - Washing the hands especially when blowing the nose and using non perfumed smooth tissue papers as cotton ones for cleaning the nose.
 - Care of both the ears and nostrils is very important and should not be neglected.
 - Long cotton underwear is better used and changed daily if possible

CARBUNCLE

- A carbuncle is a red, swollen, and painful cluster of boils that are connected to each other under the skin.
- Usually single, a carbuncle is most likely to occur on a hairy area of the body such as the back or nape of the neck. But a carbuncle also can develop in other areas of the body such as the buttocks, thighs, groin, and armpits.
- This condition can cause permanent skin scarring.

ETIOLOGY

- Most carbuncles are caused by *Staphylococcus aureus* bacteria.
- Friction from clothing or shaving
- Poor hygiene
- Poor overall health
- Persons with diabetes, dermatitis, and a weakened immune system are more likely to develop this infections that can cause carbuncles.

CLINICAL MANIFESTATION

- Itching before the lump appears
- Bodily aches
- Fatigue
- Fever
- skin crustiness or oozing
- The carbuncle fills with pus and develops white or yellow tips that weep, ooze, or crust.
- Over a period of several days, many untreated carbuncles rupture, discharging a creamy white or pink fluid.
- Swelling may occur in nearby tissue and lymph nodes

MANAGEMENTS

- The cardinal rule is to avoid squeezing or irritating a carbuncle, which increases the risk of complications and severe scarring.
- Warm compresses may promote the drainage and healing of carbuncles.
- clean, dry cloth and gently applying a heating pad for 20 minutes several times per day.
- Cloths should be washed in hot water and dried at a high temperature.
- covering the area with a sterile bandage

MEDICAL MANAGEMENT

- Medications such as acetaminophen or ibuprofen can help relieve the pain
- Antibacterial soaps .
- A carbuncle may be drained with a scalpel or needle.
- Topical antibiotics : applying liquid soap containing either chlorhexidine gluconate with isopropyl alcohol or 2 to 3% chloroxylenol
- Oral or intravenous (IV) antibiotics
- A warm compress to help promote drainage of the lesion (for carbuncles and boils)
- Possible removal of the boils

PREVENTION

- Wash your hands before eating and after using the bathroom.
- Shower often to keep your skin free of bacteria.
- Avoid squeezing boils or rubbing any broken skin.
- Wash clothes, sheets, and towels regularly in hot water.
- TREAT chronic illness or other skin issues that cause breaks in the skin.



FUNGAL INFECTIONS

Dermatomycosis

- The term dermatomycosis means fungal infections of the skin and mucous membranes.
- **Mode of Transmission**
- Fungal infections are usually spread by direct and indirect contact.
- Genital infections such as vulvovaginitis may be spread during sexual intercourse.

Ringworms

- Ringworm manifestations are described in Latin after the areas of the body they commonly affect:
- Tinea capitis (ringworm of the scalp)
- Tinea corporis (ringworm of the body)
- Tinea pedis (ringworm of the foot)
- Tinea unguium (ringworm of the nails)
- Tinea versicolor or pityriasis

TREATMENT

- Topical : Antifungal creams
 - Griseofulvin
 - Itraconazole
 - Fluconazole
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- Treatment: 2- 4 weeks
 - Treatment to continue for atleast one week after the clearing of infection.

NEXT LESSON

- Herpes simplex, zoster
- Vitiligo
- Malignancies