

Hand-Foot-And-Mouth Disease

Definition

- Hand-Foot-And-Mouth Disease (HFMD) is a viral infection
- Small red spots and tiny water blisters. Seen on the palms, fingers, soles and toes. The diagnosis cannot be made without these.
- It also causes small painful ulcers (sores) in the mouth

Health Information

Symptoms

- Small, thick-walled water blisters OR red spots on the hands and feet. Occurs on palms, soles, fingers and toes. The rash that's on the hands and feet is what makes this diagnosis.
- 1 to 5 red spots or water blisters per hand or foot
- Also, small blisters or red spots on the buttocks (bottom) in 30%
- Small painful ulcers in the mouth. Look for them on the tongue and sides of mouth. Most children with HFMD have these. Sometimes they are too small to see, but the child complains of mouth pain.
- Low-grade fever less than 102° F (39° C). It lasts 2-3 days.
- Mainly occurs in children age 6 months to 4 years
- Being exposed to HFMD within the last 7 days helps make the diagnosis.

Severe Type of Hand Foot and Mouth Disease (HFMD)

- Since 2012, a severe form of HFMD has occurred in much of the world. It's caused by a new Coxsackie A6 virus.
- The rash spreads to the arms, legs and face. Sometimes, the trunk is involved. The rash is made up of many small blisters.
- Treatment is the same. Drink enough fluids to prevent dehydration.
- Peeling of the fingers and toes is common. It looks bad but is harmless. It happens at 1 to 2 weeks. Use a moisturizing cream on the raw skin.
- Some fingernails and toenails may fall off. It occurs in 4% of severe cases. It happens at 3 to 6 weeks out. Trim them if they catch on things.
- Fingernails grow back by 3 to 6 months and toenails by 9 to 12 months. They will look normal.

Cause

- Coxsackie A-16 virus
- Not related to animal disease

Prevention of Spread to Others

- Careful hand washing may reduce the spread.

Care Advice

1. Overview:

- Most often, hand-foot-and-mouth disease (HFMD) is a rash.
- It is caused by a virus called Coxsackie.
- The disease is usually harmless.
- Here is some care advice that should help.

2. **Liquid Antacid for Mouth Pain:**
 - For mouth pain, use a liquid antacid such as Mylanta or the store brand. Give 4 times per day as needed. After meals often is a good time. Age: Use for children over 1 year old.
 - Age 1 to 5 years: Put a few drops in the mouth. Can also put it on mouth sores with a cotton swab.
 - Age 6 years and older: Use 1 teaspoon (5 ml) as a mouth wash. Keep it on the ulcers as long as possible. Then can spit it out or swallow it.
 - Caution: Do not use regular mouth washes, because they sting.
3. **Fluids and Soft Diet:**
 - Try to get your child to drink adequate fluids.
 - Goal: Keep your child well hydrated.
 - Cold drinks, milk shakes, popsicles, slushes, and sherbet are good choices.
 - **Solid Foods.** Offer a soft diet. Good ones are mac and cheese, mashed potatoes, cereals with milk and ice cream. Also avoid foods that need much chewing. Do not give citrus, salty, or spicy foods.
 - Note: Fluid intake is more important than eating any solids.
 - For babies, you may need to stop the bottle. Give fluids by cup, spoon or syringe instead. Reason: The nipple can increase the pain.
4. **Pain Medicine:**
 - Mouth ulcers are painful.
 - Blisters also may be painful, especially on the feet.
 - To help with the pain, give acetaminophen (such as Tylenol) or ibuprofen. Use as needed.
5. **Fever Medicine:**
 - For fevers above 102° F (39° C), give acetaminophen (such as Tylenol) or ibuprofen. Note: Lower fevers are important for fighting infections.
 - For ALL fevers: Keep your child well hydrated. Give lots of cold fluids.
6. **Blisters on the Skin:**
 - Blisters don't need any special treatment. You can wash them like normal skin.
 - Blisters on the palms and soles do not open.
 - Those on arms and elsewhere sometimes open. The fluid is contagious to other people. Open blisters do not need to be covered. They quickly dry over.
7. **What to Expect:**
 - Fever lasts 2 or 3 days.
 - Mouth ulcers should go away by 7 days.
 - Rash on the hands and feet lasts 10 days. The rash on the hands and feet may then peel.
8. **Return to School:**
 - HFMD is easily spread to others.
 - However, it's a mild and harmless illness.
 - After contact with HFMD, children come down with symptoms in 3-6 days.
 - Can return to child care or school after the fever is gone. Most often, this takes 2 to 3 days.
 - **Severe Type.** Children with widespread blisters may need to stay home until the blisters dry up. That may take 7 days.

Call Your Doctor If

- Signs of dehydration occur
- Fever lasts more than 3 days
- You think your child needs to be seen
- Your child becomes worse

Pediatric Care Advice

Author: Barton Schmitt MD, FAAP

Copyright 2000-2023 Schmitt Pediatric Guidelines LLC

Disclaimer: This health information is for educational purposes only. You the reader assume full responsibility for how you choose to use it. The information contained in this handout should not be used as a substitute for the medical care and advice of your pediatrician. Listing of any resources does not imply an endorsement.