

# A Case Study On Hand, Foot And Mouth Diseases Among Children

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Hand-foot-and-mouth disease is an illness that causes sores in or on the mouth and on the hands, feet, and sometimes the buttocks and legs. The sores may be painful. The illness usually doesn't last more than a week or so.

Hand-foot-and-mouth disease is common in children but can also occur in adults. It can occur at any time of year but is most common in the summer and fall. Hand-foot-and-mouth disease is caused by a virus called an enterovirus.

## *Case Study Of Master X*

Master x, 5 years old male, presented with a history of fever, sore throat, blisters on hand, legs and in mouth by physical examination master x is diagnosed as hand, foot and mouth disease.

## *Definition*

Hand-foot-and-mouth disease — a mild, contagious viral infection common in young children — is characterized by sores in the mouth and a rash on the hands and feet. Hand-foot-and-mouth disease is most commonly caused by a coxsackievirus.

## *Incidence*

This hand, foot and mouth disease occur in childhood, under 5 years .

## *Pathophysiology*

The infection occurs when a susceptible person is exposed to the virus by means of direct contact with nose and throat discharges, saliva, vesicle fluid, or faecal material from an infected person. The virus may persist in faecal material for up to 1 month. After contact, the virus spreads to regional lymph nodes within 24 hours and viraemia rapidly follows, with spread of the virus to the oral mucosa and skin causing the vesicular rash. The incubation period is 4 to 7 days; however, there may be a prodromal period of 3 to 4 days. Lesions in the mouth heal within 1 week, and lesions on the hands and feet may last for up to 10 days.

*Etiology*

<b>Book picture</b>	<b>Patient picture</b>
<ul style="list-style-type: none"> <li>▪ caused by <u>coxsackievirus</u> A-16 which is a member of the <u>enterovirus</u> family.</li> <li>▪ fecal-oral pattern</li> <li>▪ exposure to infected fecal material or oral secretions (nasal discharge, saliva, etc.)</li> </ul>	<p>Not known</p> <p>Not known</p>

*Clinical Manifestation*

<b>Book picture</b>	<b>Patient picture</b>
<ul style="list-style-type: none"> <li>➤ Tired</li> <li>➤ Itching</li> <li>➤ Sore throat</li> <li>➤ Fever of 101F -103F</li> <li>➤ Sores or blisters (mouth, hands, feet and some times on buttocks)</li> <li>➤ Skin rashes before the appearance of blister</li> </ul>	<p>Present</p> <p>Present</p> <p>Fever 101F</p> <p>Present</p> <p>Absent</p>

*Diagnostic Evaluation*

<b>Book picture</b>	<b>Patient picture</b>
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<ul style="list-style-type: none"> <li>◆ A doctor can tell if your child has hand-foot-and-mouth disease by the symptoms you describe and by looking at the sores and blisters. Tests usually aren't needed.</li> <li>◆ Serologic testing (eg, acute and convalescent antibody levels) may be obtained</li> <li>◆ Differentiating coxsackievirus-associated HFMD from EV-71-associated HFMD may have prognostic significance</li> <li>◆ PCR and microarray technology are among the various ways of identifying the causative virus<sup>1</sup></li> </ul>	<p>Master x had fever(101F), blisters on palms of hand, knees and legs and few blisters in mouth.</p> <p>Complains of sore throat.</p> <p>Not done</p>
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#### *Management*

- ◆ Antibiotic therapy
- ◆ Rest
- ◆ Analgesic
- ◆ antipyretic
- ◆ Tab.antihistamin
- ◆ Lotion lacto
- ◆ Topical lidocaine gel(inside mouth)

#### *Management For Master X*

- ◆ Antibiotic
- ◆ Tab.paracetamol
- ◆ Lotion lactocalamine(skin)
- ◆ Topical lidocaine gel(inside mouth)

#### *Nursing Intervention*

##### *Hyperthermia(101F) related to infection*

- Complete bed rest was provided with proper position and provided good ventilation and adequate fluid .prescribed medication-tab paracetamol.
- Provided plenty of water.

##### *Imbalanced nutrition less than body requirements related to sore throat*

- Provided soft and semiliquid diet. Avoided food with acidic in nature ex;orangejuice,lemon juice etc.
- Provided nutritive diet in small quantity in frequent interval of time.

#### *Summary*

Master x was cooperated with health personel.Although his symptoms were well responding to treatment,it was recurring.He did not develop any complication during hospital stay.

## **CONCLUSION**

Prevention of disease is very important. when correct and accurate treatment will not taken then complication may proceed. The nurse must include family members and other support system when planning a patient care.

## **REFERENCE**

- [1] Terrikyle and susancarman “essential of pediatric nursing” ,2<sup>nd</sup> edition editor William and Wilkins.
- [2] Wongs “Essential of PediatricNursing,US editors Marilnj,Hockenberry,David Wilson.
- [3] Balu H Athreya “Pediatric physical Diagnosis” second edition, CBS publisher and distributer.
- [4] Ghai, O.P., (2001), “Essential Pediatrics”, 4th edition, Mehta Offset Works, New Delhi.
- [5] Achar’s, (1995) “Text book of paediatrics”. 4th edition, Orient Longman Limited.