



TO ASSESS KNOWLEDGE AND AWARENESS AMONG THE DENTAL STUDENTS ABOUT THE ORAL MANIFESTATION ARISING IN HAND FOOT AND MOUTH DISEASE

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ARTICLE INFO

Article History:

Received 8th January, 2017

Received in revised form 10th February, 2017

Accepted 22nd March, 2017

Published online 28th April, 2017

Key words:

Manifestation Arising, Hand Foot And Mouth Disease

ABSTRACT

Aim: To do a survey among the dental students and bring out the oral manifestation arising in hand foot and mouth diet

Background: Hand foot and mouth disease is a common viral illness Characterised by fever and vesicles in the mouth and distal extremities. It is caused by coxsackie A virus and less commonly by coxsackie B and enterovirus 71. It usually affects children's under 10 years of age.

Materials and Methods: A survey was conducted among 100 dental students. Questionnaire survey was done. The questionnaire consists of 10 questions and it was distributed. Their answers were taken and represented in the form of pie charts.

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INTRODUCTION

Hand foot and mouth disease (HFMD) is caused by human enteroviruses. It is coxsackie A 16 virus. Coxsackievirus A16 was first identified next year in 1958 in Canada. HEV71 was discovered much later in 1969 in California from the stool of an infant who was suffering from non-HFMD encephalitis. Some cases are caused by a different but related virus called enterovirus 71, more predominant in children particularly under age group of 10 years although it affects older children and the adults but its not as virulent. It highly contagious infection. The viruses that cause HFMD are spread through close personal contact, through the air from coughing, and feces of an infected person. other strains of coxsackievirus and enterovirus can also be responsible. HFMD occurs in all areas of the world. some people, particularly adults, can pass the virus with our showing any symptoms of the disease. It can occur at any time of year but is most common in the summer and fall. There's no specific treatment for hand -foot and mouth disease. you can reduce your child's risk of infection from hand foot and mouth disease by practicing good hygiene and teaching your child how to keep clean.

The typical clinical manifestations of HFMD are fever, stomatitis with oral ulcers, and an exanthem affecting the palms, soles, and other parts of the body. These last less than 7 to 10 days, usually occur during the spring to fall months, and have a benign course.

The incubation period is 3 to 5 days, with a prodrome that may include fever, malaise, abdominal pain, and myalgia before the onset of oral and cutaneous findings. Painful oral ulcers may precede the exanthem and can result in dehydration.

The cutaneous manifestation of HFMD is typically a papulovesicular rash affecting the palms, soles, and buttocks. Other sites may include the knees, elbows, and the dorsal surfaces of the hands and feet. The lesions may be maculopapular and can be either asymptomatic or tender and painful. Desquamation can follow the exanthem, and lesions usually resolve without scarring or secondary infection.

Laboratory testing

In mild cases of HFMD, particularly in patients with a high probability of having the disease based on their clinical characteristics and sick contacts, laboratory testing is not necessary. Testing is usually reserved for severe cases and public health investigation of outbreaks.

Viral culture is the gold standard for diagnosing HFMD, but the final results can take nearly a week.

Polymerase chain reaction testing is faster, with a turnaround time of less than 1 day. It identifies viral RNA and is highly sensitive for detecting central nervous system infection.

Where should samples be collected? Serum viremia precedes invasion of the skin and mucous membranes, so plasma can be tested. Inside the body, enteroviruses initially replicate in the gastrointestinal tract, although collecting a rectal swab or a stool sample is somewhat invasive. Further, in an

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enterovirus 71 epidemic in Taiwan, 93% of the patients had positive throat swabs, but only 30% tested positive by rectal swabs or analysis of the feces.²⁷ At present, throat and vesicle specimens are considered to be the most useful sources for diagnostic purposes.

ELISAs. Newly developed IgM-capture enzyme-linked immunosorbent assays (ELISAs) for coxsackievirus A16 and enterovirus 71 appear quite promising for diagnosing HFMD. These tests are inexpensive and detect IgM antibodies early and in a high percentage of patients. In the first week of the disease, the IgM detection rate was found to be 90.2% for enterovirus 71 and 68% for coxsackievirus A16.

Cross-reactivity between these two viruses was a problem with ELISA testing in the past, causing false-positive results for enterovirus 71 in patients who in fact had coxsackievirus A16. The problem appears to be resolved in new versions that use specific enterovirus 71 proteins, eg, VP1.

DISCUSSION

Hand, foot and mouth disease is a common infection that causes mouth ulcers and spots on the hands and feet. It's most common in young children - particularly those under 10 -but can affect older children and adults as well. Hand, foot and mouth disease is contagiousness can cleared by itself with proper management and treating the symptoms. The infection can be spread by close person to person contact and contact with contaminated surfaces. The infection is caused by a number of different viruses, so it's possible to get it more than once. Most people develop immunity to these viruses as they get older. The fever can be high, but often is mild. Blisters on the hands and feet, and ulcers or blisters in the mouth appear 1-2 days after the first symptoms and may last for 2 - 7 days. The blisters often appear in the nappy (genital) area and sometimes also on the upper arms, upper legs and bottoms of children. Aseptic" (also called "viral") meningitis (rare): Symptoms of meningitis are moderate-severe headache, discomfort when bending the head forward (classically tested by trying to touch the chin to the chest), and nausea and vomiting. Meningitis is an infection of the tissues and spinal fluid that surrounds the brain and the spinal cord. The diagnosis is confirmed by a lumbar puncture (also known as a "spinal tap"). Depending upon severity of the patient's symptoms, they may need to be hospitalized. No vaccine yet exists against the EV71 virus.

CONCLUSION

Fortunately 76% dental students are aware of this disease and the virus causing it. There are no vaccine for this disease. HFMD, that was once considered a disease of cattle, has been emerging as a common human childhood disease in the last few years. The incidence of this disease increase every year. Though in most of the cases, it is nonfatal, there are some reported cases of complications seen in HFMD patients, all dentists, paediatricians and dermatologists should be aware of the clinical features of this disease and possible complications. The awareness of HFMD is good among the dental students

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How to cite this article:

Saranya S (2017) ' To Assess Knowledge And Awareness Among The Dental Students About The Oral Manifestation Arising In Hand Foot And Mouth Disease', *International Journal of Current Advanced Research*, 06(04), pp. 3459-3461.
DOI: <http://dx.doi.org/10.24327/ijcar.2017.3461.0293>
