**SHUMEYKO, OLESYA** **ORAL PATHOLOGY**

**DEN 2311/E632**

**HERPANGINA**

**Brief explanation of disease/lesion**

Herpangina is an infection caused by human enterovirus. Human enteroviruses have been classified into echoviruses, coxsackieviruses and polio viruses. Beginning in the 1960s, newly discovered enteroviruses have been assigned a numeric designation. It is acute febrile illness that occurs in the summer and fall in temperate climates. It is characterized by papular, vesicular and ulcerative lesions on the anterior tonsillar pillars, soft palate, tonsils, pharynx and posterior buccal mucosa.

**Etiology**

Herpangina usually is produced by coxsackievirus A1 to A6, A8, A10, or A22. It also may represent infection by coxsackievirus A7, A9, or A16.

Most cases arise in the summer or early fall in non-tropical areas, with crowding and poor hygiene aiding their spread. The fecal-oral route is considered the major path of transmission, and frequent hand washing is emphasized in an attempt to diminish spread during epidemics. During the acute phase, the virus also can be transmitted through saliva or respiratory droplets.

**Clinical presentation**

The onset of herpangina is typical of most enteroviral infections and is characterized by the sudden awareness of fever. No characteristic prodrome usually exists. The initial temperature can range from normal to 41C (106F). In general, higher temperature tends to be in younger patients.  Begins with an acute onset of significant sore throat, dysphagia, occasionally accompanied by

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cough, rhinorrhea, anorexia, vomiting, diarrhea, myalgia, and headache. Most cases, however, are mild or subclinical. A small number of oral lesions, usually two to six, develop in the posterior areas of the mouth, usually the soft palate or tonsillar pillars. The affected areas begin as red macules, which form fragile vesicles that rapidly ulcerate. The ulcerations average 2 to 4

mm in diameter. Each vesicular and ulcerative lesion is surrounded by an erythematous ring that varies in size up to 10 mm.

**Age**

These infections may arise at any age, but mostly occur in infants or young children. In those, older than 20, females are infected more frequently, most likely because of exposure as the primary caregivers to infected young children.

**Histology**

The areas of affected epithelium exhibit intracellular edema, which leads to the formation of intraepithelial vesicle. The vesicle enlarges and ruptures through the epithelial basal cell layer, with the resultant formation of a subepithelial vesicle. Epithelial necrosis and ulceration soon follow.

**Treatment**

In most instances the infection is self limiting and without significant complications. Nonaspirin antipyretics and topical anesthetics are beneficial.

**Prognosis**

The systemic symptoms resolve within a few days. The ulcerations usually take 7-10 days to heal. Occasionally certain strains can produce number of significant complications such as fever

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for longer than 3 days, serious vomiting, pneumonia, pulmonary edema, encephalitis, cardiac abnormalities.

**Differential diagnosis**

The classic appearance of the oropharynx in herpangina make the diagnosis easy. The follicular lesions of adenoviral infections can be confused with it, but they frequently are exudative, not ulcerative, and associated with more marked, generalized, erythematous pharyngitis than is herpangina. However, Herpes simplex virus also can cause a clinical picture suggestive of herpangina. It was noted that the cause of poliomyelitis also could be etiologic in herpangina because the similar rash (enanthem) had been observed in poliomyelitis.

**Why this disease is relevant to us as dental hygienists?**

This disease is definitely relevant to us as future dental hygienists. We are ambassadors of oral health and we must know the diseases that might occur in oral cavity. It is important not to miss it as it is highly contagious viral disease. It is very crucial to know pediatric diseases especially when we work in pedo offices. Additionally, some of us already have children and it is necessary to know this infection and know what to expect.

**REFERENCES**

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