Stomatitis and periodontal disease are the most common disease in the human oral cavity, which can also occur in nonhuman primates. Stomatitis is an inflammation of the lining of any of the soft-tissue structures of the oral cavity. This inflammation involves the cheeks, gums, tongue, lips, and roof or floor of the mouth. It can be caused by conditions in the mouth itself, such as poor oral hygiene, poorly fitted dentures, or from mouth burns from hot food or drinks, or by conditions that affect the entire body, such as medications, allergic reactions, infections, foreign bodies, chemicals, burns, or immune-related conditions. Kissing ulcer occur where the buccal mucosa touches a large tooth surface such as the upper canine tooth. Stomatitis is usually a painful condition, associated with redness, swelling, and occasional bleeding from the affected area. Bad breath (halitosis) may also accompany the condition.

Periodontal disease is divided into two categories depending upon whether or not attachment loss occurs. Gingivitis is inflammation of the gingival tissue without any loss attachment. Accumulation of plaque along the gingival margin and in dental sulcus leads to inflammation of the gingival. If gingivitis is not treated, periodontitis is likely to develop.

Stomatitis and periodontal disease are based on the problem causing it. Local cleansing and good oral hygiene were basic prevention of the problem. In Primate Research Center, Bogor Agricultural University, Bogor Indonesia surrounding Way Kambas National Park, Indonesia [report], Ohio: The Ohio State University.

Material and Method

During 2007 we found several cases of stomatitis and periodontal disease in cynomolgus monkey at holding animals facility in Primate Research Center, IPB, Bogor. A physical examination was done to evaluate the oral lesions and other skin problems around the mouth area. Treatment had been performed for these cases.

Discussion

Clinical diagnosis of stomatitis in nonhuman primate was difficult to be done without anesthetized. The treatment of stomatitis was based on the problem causing it. Local cleansing and good oral hygiene were basic prevention of oral disease. The goal of treatment is to eliminate the primary cause of periodontal disease and to arrest disease progression.

Figure 1, 2. Local stomatitis

Chronic problems with aphthous stomatitis were treated by first correcting any vitamin B12, iron, or folate deficiencies. If those therapies were unsuccessful, medication might be prescribed which was applied to each aphthous ulcer with a cotton-tipped applicator. Alternate treatment of stomatitis mainly only involved prevention of the problem. Periodontal disease was diagnosed with a thorough periodontal exam. Gingivitis was inflammation of the gingival tissue without any loss attachment. Gingivitis was treated with removing the plaque and calculus on teeth. Accumulation of plaque along the gingival margin and in dental sulcus leads to inflammation of the gingival. If gingivitis was not treated, periodontitis might be likely to develop.

Figure 3, 4. Severe, local extensive periodontitis.

A small, blunt probe was used to measure the depth of the gum pockets around every tooth in the mouth. Measurements were taken at six sites on each tooth. This depth gave an objective gauge of the health of the gums. If the pockets bled easily during probing this was noted as well. This bleeding was a sign of inflammation of the pocket. The appearance of the gums was also noted; infected gums showed red and puffy. The amount of tartar, or calculus, was determined. The mobility of all
teeth was checked and the bite was evaluated. X-rays of all teeth were needed to evaluate the condition of the bone around each tooth and show calculus deposits below the gums. Scaling and root planning are procedures to remove dental deposit supra and sub gingival. Root planning involves the removal of superficial layer of toxin under cementum from the root surface. Teeth affected by severe periodontal disease are usually extracted. In some case, spontaneous pathological fracture may develop because several bones lose. Systemic antibiotic can be used for periodontal disease are usually extracted. In Company. Philadelphia.

References


Antibodies to H5 subtype of avian influenza in Macaca fascicularis in Indonesia

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Introduction
Avian influenza (AI) is a highly contagious viral disease affecting several species of food producing birds (chickens, turkeys, quails, guinea fowl, etc.), as well as pet birds and wild birds (OIE, 2008a). According to WHO, AI refers to a large group of different influenza viruses that primarily affect birds. On rare occasions, these bird viruses can infect other species, including pigs and humans. The vast majority of avian influenza viruses do not infect humans. An influenza pandemic happens when a new subtype emerges that has not previously circulated in humans. For this reason, avian [H5N1] is a strain with pandemic potential, since it might ultimately adapt into a strain that is contagious among humans (WHO, 2005).

Despite of the information on their susceptibility to the highly pathogenic AI virus by experimental infections (Kuiken, 2001; Rimmelzwaan, 2001), very little is known about its natural infection in long tail macaques (Macaca fascicularis). A report by O'Brien and Tauraos (1973) described the high incidence of antibodies to H2 and H3 subtypes of type A influenza virus in African non-human primate species.

The objective of the study was to trace and confirm the indication of AI virus natural infection in long tail macaques by antibody detection against the H5 antigen of the AIV.

Materials and Methods
This study utilized 132 serum samples from long tail macaques that are in the archive collection of Microbiology and Immunology Laboratory at IPB Primate Research Center (IPB PRC). Serum samples were grouped based on the type of breeding colony from which they were taken from. Three types of breeding colony were categorized as type A breeding colony for one managed as semi-free breeding colony on an island, type B breeding colony is outdoor captive breeding colony managed on area with the presence of poultry farms within the radius of two kilometers, while type C breeding colony is outdoor captive breeding colony managed an area with the absence of poultry farm within five kilometers range and direct contact with wild bird. The detection of anti- virus was b. Hemagglutination by OIE with min using inactivated purchased from Penetarian Vete standard virus.

Results
The results natural infection long tail macaque serum samples positive by HI, tested negative type A, serum samples v breeding type C, serum samples v breeding colony, and 89.4.

The summary of Table 1.

BREEDING H1 source panel type
A 44
B 21
C 59
Total 124

Discussion
The high p results indicates subtype of AI naturally in long tested in the study the archive col Immunology Lab period al Nov. Interestingly, all groups based on from which they obtained from colony situated i farms within th showed 100% in samples from 2 breeding shower test, and same breeding colony.