Preliminary report of a stranded Indo-Pacific bottlenose dolphin (*Tursiops aduncus*) with Lobomycosis-like skin lesion, in Kinko-wan, Kagoshima, Kyushu, Japan.

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In addition to the well-known resident populations of Indo-Pacific bottlenose dolphins (*Tursiops aduncus*) in Mikura Island (Kakuda *et al.* 2002, Kogi *et al.* 2004) and Amakusa (Shirakinara *et al.* 2002), smaller populations in Kagoshima Bay (ca 50) and Noto Peninsula (8) have been reported from the mainland of Japan. Recently a dolphin was found stranded probably live about 11:00 on 15 May 2013 in Kinko-wan, Kagoshima, Kyushu. When one of the authors (KS or NK) arrived the animal was identified as *T. aduncus* and it had already died. It was a large male, with total body length of 2.7m. The animal was known that a member of Kinko-wan populations. Serious skin lesions were found on the top of melon, around blow hole, both flippers and the area caudal to the anal-genital region. The appearance of these skin lesions made us suspect Lobomycosis. Lobomycosis (lacoziosis) is a chronic disease of the skin and subcutaneous tissues that ocuurs only in dolphins especially *Tursiops truncatus* and T. *aduncus* in various parts of the world and humans under natural conditions. This skin disease in dolphins is characterized by grayish, whitish to slightly pink, [verrucuous] lesions, often in pronounced relief that may ulcerate (Migaki *et al.*, 1971). The etiologic agent, *Lacazia loboi*, is a yeast-like organism that is found richly within lesions (Taborda *et.al.*, 1999. *Loboa loboi*; Caldwell *et al.* 1975), but in the Kagoshima dolphin we have not been cultured the organism to date.

About 30hours after death, the animal was examined pathologically at National Museum of Nature and Science, about 80km northeast to Tokyo, transported by a refrigerating truck with +4℃. During the necropsy, the skin lesions were found to be only in the cutaneous and subcutaneous areas of the skin. Nearly all of the lymph nodi such as the superficial cervical, pulmonary marginal, pancreatic and around the rectum were severely swollen and edematous. The lungs, especially right one demonstrated severely edematous and adhered to the pleura, and had many nodi, which was yellowish white in color and various in size, the largest one was 20 cm in diameter. The rest of organs showed no significant changes. Microscopically, the skin

showed granulomatous reaction, hyperkeratosis that is similar to that of the references of Lobomycosis, however the fungus organism was not found in HE stain. The lung demonstrated severe suppurative pneumonia that was consisted with numerous neutrophils, macrophages and lymphocytes surrounding the necrotic parenchyma with many the lump of bacteria. The infectious route of severe bacterial suppurative pneumonia was Lobomycosis-like skin lesion. Using PCR we are checking for viral infection such as Pox virus and Papilloma virus and bacterial analysis, and these tests to diagnosis the skin lesions are underway. Further examinations such as PAS stain and Gomori methenamine silver stain, and PCR analysis are needed to confirm the fungus organism in skin lesions. If the skin lesions of this dolphin are confirmed to be lobomycosis, it is recommended the additional field work and examination of existing photographs from the various photo-ID programs be conducted to better understand the extent of this skin problem in the Indo-Pacific bottlenose dolphins living in Kagoshima Bay and to determine the skin condition/disease, if any, in the these dolphins and the nearby population of these dolphins around Amakusa-Shimoshima Island.

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