MULTIMODAL APPROACH TO REGURGITATION IN A CALIFORNIA SEA LION (Zalophus californianus)

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ABSTRACT

Regurgitation is infrequently seen in pinnipeds, but is noted to occur in Pacific walruses (Odobenus rosmarus) and California sea lions (Zalophus californianus).1 Occasionally, as in this case, there is significant weight loss due to conspecifics ingesting the regurgitated material. We successfully treated, Sidney, a 3 year old female California sea lion that started having bouts of regurgitation in her exhibit pool and associated weight loss. A full exam that included a complete blood count, serum chemistry, thyroid panel, orthogonal and barium study radiographs showed no abnormalities. Therefore, a multimodal approach was then employed to correct the aberrant behavior. First, all the fish offered to this sea lion were cut into smaller pieces. We also substituted Mazuri fish analog gel diet (PMI Nutrition International LLC, Saint Louis, Missouri, 63144, USA) in place of 1 out of the 10 pounds of fish offered to the sea lion. Both diet changes were done to increase the ease of digestibility and to make it harder to regurgitate to conspecifics. To further aid digestion, one teaspoon of pancreatic enzymes (PancreVed Powder, Vedco, St. Joseph, Missouri, 64507, USA) was added to speed up food digestion and decrease the time the sea lion would have to regurgitate her food. Increased training, interaction, and enrichment were also continued with this sea lion. We also started the animal on 1mg of haloperidol twice a day, which she handled well. Haloperidol is an antipsychotic drug in the butyrophenone family, structurally related to the phenothiazines. In low doses it has been a very effective antiemetic in humans.1,2 Serenin Vet™ (Animal Necessity, LLC, New York, New York 10011, USA) at 800mg once a day was also added into the diet. Serenin Vet™ is a unique combination of natural vitamins and extracts, including Vitamin B-9, Vitamin B-12, Griffonia simplicifolia, Eleutherococcus senticosus and St. John’s Wort, that may help reduce anxiety and inappropriate behaviors and was given to enact a change in Sidney’s regurgitating behavior.3 After 10 days of medication and diet changes, Sidney decreased her regurgitating from several times a day to one time a week. After one month, regurgitation was noted rarely if at all. At this point, the haloperidol was weaned, followed by the pancreatic enzymes. The diet changes and Serenin Vet™ were then continued long-term to maintain the normal behavior of the animal. Training sessions returned to the normal structure of three times a day and enrichment was changed back to a normal level that all sea lions received. Currently, once every several months a regurgitation episode will be noted by keepers. Sidney was able to return to a good body condition and appropriate weight for her age and sex. We successfully resolved the aberrant regurgitation through the addition of medications, calming agents, diet changes, and behavioral enrichment. In the future, a multimodal approach is recommended over a single treatment method.

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