CASE STUDY

Fatal intestinal torsion in two captive fur-seals

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Two Australian Fur-seals (*Arctocephalus pusillus doriferus*) died from intestinal torsion. Remarkable similarities in the two cases suggest possible predisposing factors for this condition.

Case 1: An adult male fur-seal (13 years old) was found dead in the display pool. The animal had been feeding normally, eating 8 kg of mullet, whiting and yellowtail daily, until two days before its death on November 3, 1985. In fact, it had been particularly active, chasing a young male fur-seal round and round a small holding pool area. Inappetance and lethargy for the two days before death coincided with a period of hot weather and at the time were not regarded as clinical signs of disease. Post mortem examination, however, revealed a torsion of the small intestine.

Case 2: An adult male fur-seal (14 years old) was seen with signs of acute abdominal distress on the morning of December 8, 1986. It had been apparently normal the day before, eating its usual 7 kg ration of mullet and whiting, and was particularly active the day before, chasing two yearling male fur-seals around a small holding pond. The animal displayed apparent abdominal discomfort, holding its belly with its flippers, assuming a head-down position in the water and rolling unusually. Considerable abdominal swelling was seen and scant amounts of fluid; bloody faeces were passed. It was anaesthetised with intramuscular ketomine (1 000 mg) and diazepam (10 mg) and transported to the zoo's veterinary hospital where anaesthesia was maintained with halothane and oxygen. Radiography revealed total intestinal stasis with considerable gas dilation. No normal gut sounds were auscultated and palpation was not remarkable. Haematology showed only mild neutrophilia with left shift (total leukocyte count 22×10^3/ml). Abdominal paracentesis yielded a small amount of brownish turbid fluid. Differential diagnoses considered were acute intestinal accident or severe enteritis with secondary stasis. In either case loss of integrity of the gut wall was suspected. The animal died before any treatment could be instituted, about 45 minutes after the initial ketamine/valium injection. At post mortem, the whole of the small intestine was found to be twisted three times around the root of the mesentery.

DISCUSSION

Intestinal accidents, apart from those associated with foreign bodies, are not often reported in pinnipeds. The two cases reported above involved adult male Australian Fur-seals, otherwise in excellent health. Both cases occurred at similar times of the year, early summer at the start of the breeding season, and in both cases similar levels of high activity, with much rapid turning in small areas were observed.

It is recommended that adult male fur-seals not be housed in small areas with smaller seals during the breeding season, when territorial behaviour may lead to considerable vigorous turning movements while chasing the smaller animals.