Wild Tiger Health Centre Information Sheet

Disease threat: Congenital diaphragmatic hernia

Hazard description: A defect in the continuity of the diaphragm that permits protrusion of abdominal viscera into the thorax.

Host species: Mammals. Reported from captive Siberian tiger cubs – two females out of a litter of four affected. One with congenital (corrected) umbilical hernia also (Brodey and Ratcliffe 1956). Also reported in a captive Sumatran tiger (Lewis – pers. Comm.)

Pathogenesis: Presentation with clinical signs may depend on the size of the hernia. Animals with congenital diaphragmatic hernias may be asymptomatic in early life, particularly prior to weaning, but once food intake increases and is more solid in nature, the likelihood of associated prolapse of gastro-intestinal organs into the thorax increases. Once this occurs, without surgical correction, fatal strangulation or bloat of GI viscera and/or pulmonary compromise are almost inevitable.

Diagnosis: Clinical signs of increased respiratory rate and dyspnoea, paradoxical movement of chest and abdominal wall (normally they move in & out together, but with a diaphragmatic hernia they move in opposite directions), vomiting, regurgitation, inappetence, death. Definitive diagnosis on radiography.

Vaccination: Not applicable.

Free-ranging tiger occurrence: Reported from two free-ranging orphaned Amur tiger cubs from a litter of four in 1993 in RFE (Kerley – pers. Comm.), and from a single orphaned free-ranging Amur tiger cub in RFE in 2016 (Gonchuruk – pers. Comm.).

Distribution: Not applicable.

Assumptions: Assumed congenital in the absence of evidence of trauma.

Limitations: Not applicable.