

Observations on Tracheal Collapse in Cattle:

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Tracheal collapse is a condition that has been infrequently reported in cattle but has been well recognized in horses and in toy breeds of dogs. Animals affected with this condition have a tracheal lumen which is reduced in diameter because of a change in the normal architecture in the tracheal rings.

Three cases of tracheal collapse were observed at Kansas State University ranging in age from two weeks to four months with the following breeds being involved: Simmental, Limousine, and Maine-Anjou Shorthorn Cross. All calves had exhibited clinical signs of respiratory difficulty shortly following birth, and the condition was unresponsive to antibiotic therapy, other respiratory supportive drugs, and a tracheotomy. Inspiratory dyspnea was the main clinical sign present when the area of tracheal collapse was in the cervical area anterior to the thoracic cavity, and both inspiratory and expiratory dyspnea were found when the collapse was located in the

thoracic cavity. A sporadic harsh cough or honking sound was heard. The rectal temperature in all calves was normal. Clinical examination of the trachea of these calves under general anesthesia with a fiberoptic scope revealed the area of tracheal collapse. Radiographic examination was also very helpful in making the diagnosis on these animals. An endotracheal tube passed proximal to the point of collapse was quite dramatic in its benefit in improving the respiratory distress, but this was not considered a permanent treatment. All calves were necropsied, and the following pathological findings were made: Upon formalin fixation the trachea was observed to be primarily collapsed laterally; no histopathological changes were observed in the tracheal cartilaginous rings.

Question: Were the tracheal rings underdeveloped?

Answer: That is probably true, but histologically we have not found any defect.

