SOP No: ATT 06

SUBJECT: Passage of a Stomach Tube – Rumen Fluid Collection in Cattle (May 2015)

POLICY: This procedure may only be performed by, or under the supervision of operators skilled in the technique.

PRECAUTIONS: Restraint of the head is required for the procedure. It is preferable to have the animal in a crush with its head restrained in the head bail. Regurgitation and aspiration of rumen fluid into the lungs may occur if the animal is forced to elevate its head. The presence of horns often requires modification of the procedure to ensure operator safety. Stomach tubes should be checked after passage to ensure all surfaces are smooth.

EQUIPMENT: Stomach tube and pump
Stainless steel Frick speculum (or similar)
Lubricant (paraffin oil, or similar)

PROCEDURE: The procedure may require an assistant to restrain the animal and open the mouth. Several techniques may be used. Facing forward and standing tight beside the animal’s head in the crush, the assistant wraps one arm around the head to reach the opposite lip. The lip is grasped firmly and the mouth opened using the same or the other hand. Alternatively once the lip is held firmly, either nose pliers or the thumb and index finger may be placed into the cow’s nostrils and the nose pulled upward. The mouth will open. Alternatively, the operator may stand tight to the side of the animal’s head and then place the speculum into the mouth and over the base of the tongue. Lubricant is applied topically onto the tube either before or as it is passed into the animal. The beveled end of the tube is inserted through the speculum and down the esophagus as the animal swallows. The other end of the stomach tube may be held in the operator’s mouth so the operator may blow into the tube dilating the esophagus as the tube passes down the esophagus and into the rumen. Placement of the tube into the rumen may be confirmed by auscultation of the left paralumbar fossae as air is simultaneously blown into the tube or by the distinctive odor of fermented gas detected from the end of the tube. Fluid may be collected or medications may be administered by use of a pump. At the completion of the procedure, the tube is occluded (‘kinked’) and
withdrawn from the animal using a downward motion. The head should be held such that the nose points downward to minimize the risk of accidental aspiration of rumen content as the tube is withdrawn. The speculum is removed from the mouth and the restraint released.

RECOMMENDATIONS:

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REFERENCES