Diagnosis for Umbilical Masses

External palpation of the umbilical region will define the hernial ring, the size of the hernia, the reducibility of the hernia and possibly the contents. In uncomplicated cases the hernia should be completely reducible and have a discrete circumferential hernial ring. Edema, cellulitis, heat or pain on palpation or daring are not present in an uncomplicated case.

MINIMUM DATABASE UMBILICAL SWELLING Previous calvings History Physical exam Visual inspection Present at birth Intercurrent disease Discharge Progression Failure to thrive Urine Pus Serous Palpation Abdominal wall Swelling Intact Ring Intra-Abdominal Pain Consistency Temperature Reducible Umbilical Umbilical Bladder Other Urachus artery vein Diagnosis Treatment ANCILLARY TESTS DIAGNOSTIC TESTS Fluid evaluation Probe draining tracts Imaging Ultrasound Blind Patent. Swelling Abdominal Aspirate from mass Abdominocentesis Urachus Liver Bladder Umbilical Umbilical artery vein

Flow Diagram showing the work up for analysis of diagnosis of umbilical masses

Evaluation of diagnostic findings

Hot, hard, painful non-reducible masses of the umbilicus are typically associated with abscesses

If the swelling is reducible and the hernial ring can easily be palpated then the hernia is ,most likely uncomplicated. However this is not always the case and in no way rules out the possibility that there may be an infection internally in one ore more remnants of the umbilical structures, internal organs in the hernial sac , adhesions of internal organs to the hernial sac.

Signs suggestive that the hernia is complicated by infection include purulent discharge from the swelling, a scab, or a "soft spot" at the ventral aspect of the swelling suggesting that it has or is about to drain. The inability to palpate the external umbilical remnants , external vessel remnants palpably enlarged, heat or pain upon palpation is also indicative of an umbilical hernia complicated with infection

Urine dribbling from a swelling especially evident when the animal is urinating is suggestive that the umbilical problem is complicated by a patent urachus . Pollakuria in the absence of the urine dripping from the swelling may suggest the presence of a non patent urachal remnant

Diagnostic Imaging

Ultrasonographic examination of affected animals provide information that will help alter the clinican's interpretation. Ultrasonographic examination may :

- 1. Detect or rule out infection status of the internal umbilical remnants
- 2. Clarify the extent to which the internal umbilical structures are distended / infected
- 3. Determine the viscera present in the hernial sac