

- SOP No:** AHP 85
- SUBJECT:** Liver Biopsy in Cattle
- POLICY:** This procedure may only be performed by operators skilled in the technique
- PRECAUTIONS:** Restraint of the animal is necessary for the procedure. Ideally the animal would be restrained in a crush with a headlock.
- EQUIPMENT:** 2% lignocaine / lidocaine (local anaesthetic)
#11 scalpel blade (or similar)
Animal Clippers
Surgical preparation solutions (iodine or chlorhexidine based)
Sterile dry cotton gauze 8 cm x 8 cm squares (or similar)
Sterile surgical gloves
Small sterile drape for working surface (tray, table or similar)
Non-sterile working surface (tray, table, or similar)
Liver biopsy instrument (14 gauge Tru-Cut™ biopsy needle, or similar)
Sample container(s)
- PROCEDURE:**
- 1. Restraint:** Restrain the animal in a crush.
 - 2. Site Identification and Preparation:** The preferred site is the on the right side of the animal at the intersection of the 11th intercostal space with a line drawn horizontally from the middle of the right paralumbar fossa. Clip an area approximately 10 cm by 10 cm around the site is and prepare as for aseptic surgery (scrubbed with either the iodine or chlorhexidine preparation solutions and rinsed appropriately). Infiltrate local anesthetic subcutaneously and deep into the intercostal muscles.
 - 3. Sample Collection:** Wearing sterile gloves, a stab incision is made through the skin at the biopsy site. The biopsy instrument is tested to ensure it functions correctly. During instrument insertion the biopsy needle should be kept close to the cranial border of the caudal rib to avoid the vessels which lie along the caudal border of the cranial rib. Insert the instrument through the stab incision and direct towards the opposite olecranon (left elbow). Increased resistance is felt as the needle enters the liver. Open and close the biopsy needle rapidly (see package directions) to obtain a liver sample. Withdraw the needle and check to ensure an adequate sample was obtained. Multiple samples may be safely obtained from the liver using the same instrument.
 - 4. Sample Processing:** Samples may be removed from the biopsy instrument using a sterile hypodermic needle and transferred to the appropriate sample container(s) for delivery to the laboratory.
- RECOMMENDATIONS:** Results of sample analysis will determine the recommendations.

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REVISED:

REFERENCES

1. **Chapter 17. Clinical Examination of the Alimentary System.** T.J. Phillips, and P.M. Dixon. In: *Veterinary Clinical Examination and Diagnosis*. O.M. Radostits, I.G. Joe Mayhew, Doreen M. Houston (editors). WB Saunders 2000. ISBN 0-7020-2476-7