

Getting the most out of Companion Animal Liver biopsies.

Investigating the cause for a hepatopathy can be challenging and biopsies of the liver may help provide much needed information.

Liver biopsy is indicated in the following cases:

- Abnormal serum enzymes & function tests for >30 days
- Hepatomegaly of undetermined cause
- Hepatic involvement in systemic disease
- Staging of neoplasia
- Evaluation of response to therapy or progression of disease

Samples can be taken as transcutaneous needle (Tru-Cut) biopsies or collected via laparoscopy or laparotomy. Regardless of which method you choose here are a few tips to keep in mind.

Biopsy tips:

- Always collect from several lobes as regional variation commonly occurs
 - Samples should be collected from at least 2 different liver lobes, but 3 are preferred, especially if the liver has a heterogeneous appearance
- Place the biopsy immediately into formalin. Do NOT allow it to sit under the surgical lamps while you are closing as the sample will deteriorate
- Place Tru-Cut biopsies into a cassette, as free-floating biopsies often fracture during transport
- Avoid biopsying the edge of a liver lobe as this area often has age-related increases in fibrous connective tissue

Tru-Cut Biopsies:

- A minimum of 3 biopsies, at least 10mm long are needed to evaluate the liver histomorphology
- In general, more are better and experienced clinicians often try to submit 5 Tru-Cut biopsies

Also Consider submitting fresh tissue for:

- Copper analysis
- Culture
- PCR assays

For more information on liver sampling techniques:

<https://onlinelibrary.wiley.com/doi/full/10.1111/jvim.12508>

