

## Lymph Nodes Cytology in Cats and Dogs (Part 1)

Peripheral lymphadenopathy, whether involving one or several nodes is commonly encountered in small animal practice, with diseases encompassing inflammation, lymphoid neoplasia and metastatic disease.

### Aspirating the Node

Lymphocytes are fragile cells and rupture easily, so collection technique is extremely important in guaranteeing enough intact cells for cytological examination and interpretation. Lymphocytes are mobile, non-attached cells that can be collected without the need for aspiration. Try a non-aspiration technique first by simply introducing a needle into the node and moving it around within the node. If this doesn't provide a sample then move to aspiration, remembering to use gentle suction with a 3 mL or smaller syringe.

### Making Smears

As mentioned above, lymphocytes are fragile easily damaged if pressure is placed on the spreader slide during preparation. Allow the spreader to rest on the sample slide rather than creating down-ward pressure. Spread all samples even if only a small amount of material appears to be collected because lymphocytes are most easily examined when they are well spread. Make several smears and sample several sites if more than one node is enlarged.

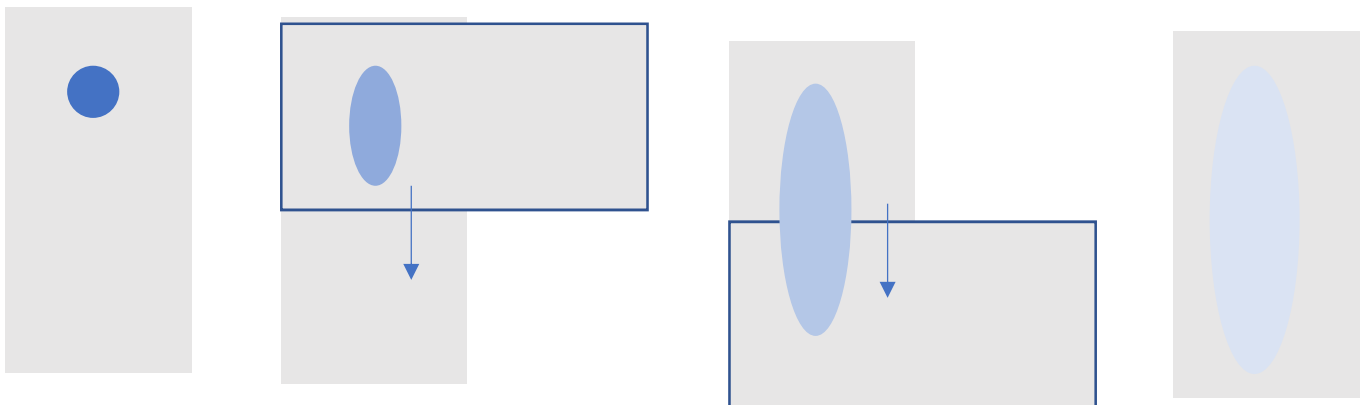


Figure 1. Spreading a cytology sample.

### Staining Smears from Lymph Nodes

Diff Quik can be useful for examining lymphocytes because cytoplasm and nuclear material are clearly seen and nuclear features are easy to examine. Diff Quik should not be considered when assessing a node for metastatic mast cells because granules stain poorly and can be missed.