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Section: Parasitology Manual	Subject Title: Collection and Laboratory Procedures for Specimens Other Than Stool or Blood	
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Lymph Nodes

PRINCIPLE

Not all parasites can be detected in the blood and stools. Several organisms find that attacking the white cells that form the immune system is an effective strategy. (The best defense is a good offence!) To detect these organisms lymph nodes can be examined for trypanosomes(African, South American), *Leishmania*, and *Toxoplasma*.

SPECIMEN

lymph node impression smears or aspirates

PROCEDURE

This is considered to be a non-routine procedure therefore it should only be performed by experienced personnel.

- 1) A portion of any fluid material can be examined under low power to check for motile organisms.
- 2) Impression smears can be prepared by sandwiching the sample between two slides and staining with Giemsa stain (5% for 30 minutes).
- 3) Smears can be allowed to air dry before they are fixed in methanol and stained in Giemsa stain (5%) for 30 minutes.
- 4) NNN culture media (see appendix) can be inoculated with any remaining material.

QUALITY CONTROL

- Include a control slide if Giemsa Stain is used. Red cells should stain grayish, white cell nuclei stain red-purple, and cytoplasm stains bluish.
- Ensure that the microscope has been calibrated in the last year or any time the optics have been changed and that the results of the calibration are displayed on the microscope base.

REPORT

Any parasites observed.

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LIMITATIONS OF PROCEDURE

- Samples may be difficult to observe if material is too thick.
- Culture of specimens may take several days for organisms to be detectable.
- Reference material should be consulted before a definitive diagnosis is made since these organisms are infrequently seen in Canadian laboratories.

AUTHOR

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REFERENCES

Garcia LS, Bruckner DA. Diagnostic Medical Parasitology. 3rd Edition. ASM Press, Washington DC. Pp676-688 1997.

Gillespie, S.H. and Hawkey, P.M. Medical Parasitology: A Practical Approach. IRL Press New York 1994 pp151-176