Lymphadenopathy is a commonly encountered problem in canine practice. It is important to identify whether it is primary or secondary in nature to attempt the treatment. Apart from the neoplastic conditions some of the infectious agents also can cause lymph node enlargement in dogs as detailed in this study. This is a record of cytological observations made in lymphadenopathies.

Materials and Methods

One hundred and twenty six Fine Needle Aspiration Biopsy (FNAB) samples were collected from dogs with lymphadenopathies and 9 FNAB samples were collected from apparently healthy dogs. Samples were air dried and stained with either Leishman-Giemsa (LG) or Wright-Giemsa (WRG).

Results and Discussion

*Ehrlichia sp* were observed in the lymphocytes of six dogs. Elementary bodies were seen in one case. All the 6 cases showed a reactive hyperplastic change. Mitotic figures and mott cells were high. In one each case of gastritis, PUO and bacterial dermatitis the cytology smear showed bacterial rods. One of the two dogs with trypanosomiasis showed the *Trypanosoma sp* in the FNAB smears. One dog infected with *H.canis* and *Ehrlichia sp* showed free and intracellular *H.canis* gamonts in the neutrophils and *Ehrlichia sp* morula in the cytoplasm of the lymphocytes in the cytology smear. All these cases showed a reactive hyperplastic change (Duncan, 1993). Generalized reactions could occur with rickettsial diseases (RMSF, Ehrlichiosis / Anaplasmosis), FeLV and FIV or any systemic inflammatory condition (Jennifer Neel and Jaime Tarigo, 2012).

In the cytology smears of two cases with generalised alopecia and pruritus, heavy bacterial infection with bacilli were observed and they showed a neutrophilic lymphadenitis. Lymph nodes draining inflammatory lesions also served

\[\text{Fig 1. } \text{Ehrlichia sp. morula in the lymphocyte - Reactive hyperplasia - LG x 1000}\]

\[\text{Fig 2. } \text{Ehrlichia sp. morula (Thin arrow) H. canis gamonts (Thick arrow) - WRG x 800}\]
Bacteria were small, uniform, coccoid, rod or filament shaped bodies that stained bluish purple with Romanowsky’s stains as could be observed in this study in the cases of gastritis, PUO and bacterial dermatitis.

*T. evansi* seen in the lymph node cytology smears (Fig 3) could be due to heavy trypanosomiasis. Morula and elementary bodies of *Ehrlichia* sp. within the lymphocytic cytoplasm (Fig 1&2) and extracellular and intra neutrophilic *H.canis* gamonts were found in the lymph node cytology smears.

References