LYMPHADENOPATHY IN DOGS

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LYMPHADENOPATHY

SINGLE OR REGIONAL ENLARGED LYMPH NODE(S)

INVESTIGATION
Perform physical examination

Clinically well, no other abnormalities

Abnormality in anatomic location drained by the affected lymph node (eg, periodontal disease, focal dermatitis or infection, wounds)

Clinically unwell or other abnormalities (eg, fever, organomegaly)

INVESTIGATION

Thoracic/abdominal imaging
Testing for tick-borne disease
CBC, serum chemistry profile, urinalysis
Ancillary testing for geographic setting/travel history

DIFFERENTIAL

Cytologically normal lymphoid tissue

Nonmalignant lymphadenopathy
Lymphoid hyperplasia
Reactive lymphadenopathy
Lymphadenitis

No other regional lymph nodes enlarged, no abdominal organomegaly

Malignant lymphadenopathy
Metastatic neoplasia
Stage I lymphoma

Thoracic/abdominal lymph node enlargement, abdominal organomegaly (spleen and/or liver)

DIFFERENTIAL

Skin infections
Foreign bodies
Rarely, fungal infections
Periodontal disease

Biopsy +/- diagnostic tests to identify primary tumor and implement therapy +/- referral

TREATMENT

Observation
Reassess in 7-10 days
Treat underlying condition

Lymphadenopathy persists

INVESTIGATION

Biopsy and histopathology
Immunohistochemistry
PARR
+/- Flow cytometry

PARR = PCR for antigen receptor rearrangement
PCR = polymerase chain reaction
WHO = World Health Organization

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WHO = World Health Organization
Chronic dermatitis

- Clinically well, no other abnormalities
- Clinically unwell or other abnormalities (e.g., fever, organomegaly)

**INVESTIGATION**
- Perform physical examination
- Thoracic and abdominal imaging
- Testing for tick-borne disease
- CBC, serum chemistry profile, urinalysis
- Ancillary testing for geographic setting/travel history (e.g., fungal, plague, tularemia)

**DIFFERENTIAL**
- Regional lymphadenopathy with metastatic solid neoplasm

**TREATMENT**
- Biopsy +/- diagnostic tests to identify primary tumor and implement therapy +/- referral

**MULTIPLE ENLARGED LYMPH NODES**

**INVESTIGATION**
- Fine-needle aspiration + cytology of >2 representative lymph nodes
- Thoracic and abdominal imaging
- Testing for tick-borne disease
- CBC, serum chemistry profile, urinalysis
- Ancillary testing for geographic setting/travel history (e.g., fungal, plague, tularemia)

**DIFFERENTIAL**
- Nonmalignant lymphadenopathy
  - Lymphoid hyperplasia
  - Reactive lymphadenopathy
  - Lymphadenitis

**DIFFERENTIAL**
- Stage II-V lymphoid neoplasia
- Lymphoid leukemia
- Nonlymphoid leukemia

**INVESTIGATION**
- Fine-needle aspiration + cytology of >2 representative lymph nodes
- Thoracic/abdominal lymph node enlargement, abdominal organomegaly (spleen and/or liver)
- No thoracic/abdominal lymph nodes enlarged, abdominal organomegaly (spleen and/or liver)

**DIFFERENTIAL**
- Viral, bacterial, rickettsial, fungal, or protozoal infections
- Autoimmune diseases (e.g., systemic lupus erythematosus, juvenile cellulitis)
- Idiosyncratic drug reactions (e.g., to cyclosporine)

**DIFFERENTIAL**
- Stage II-V lymphoid neoplasia
- Lymphoid leukemia
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**INVESTIGATION**
- Biopsy, histopathology, immunohistochemistry for subtyping according to WHO classification
- +/- PARR, flow cytometry, molecular diagnostics for treatment and prognosis

**NOTE:** Staging important for prognosis and monitoring for remission/relapse

**RESULTS**
- Inconclusive

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References

LOOK FOR THESE ARTICLES IN A FUTURE ISSUE
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- Pulmonary Disease in Cats
- Top 5 Diseases of Ferrets
- Zinc-Responsive Dermatoses

References