**Classic case:** Adult dairy cows, wt loss, ↓ milk, off feed, +/- ext. masses. Bov. Leukemia virus + (BLV)

**PRESENTATION:**
- **2 syndromes** – Sporadic and Enzootic leukosis / lymphosarcoma / leukemia

  1. **SPORADIC** = RARE (BLV) negative  Juvenile (<6 Mos), Thymic (6-24 mos), Cutaneous (1-3 yrs)

  2. **ENZOOTIC** – all are (BLV) positive
     - MOST subclinical; < 5% develop illness or tumors
     - No infection – genetic resistance
     - Infection + positive Ab titer + no signs (carriers)
     - Infection + benign persistent lymphocytosis (PL)
     - **Multicentric lymphosarcoma** (LS) +/- PL

  - Adult cattle > 2 yrs; Dairy >> Beef
  - **Clinical signs, lymphosarcoma** – often vague at first
    - Weight loss, ↓ appetite, ↓ production, NO fever
    - Enlarged peripheral LNs ↑ in 75-90% cases
  - Survival short, once C/S apparent – weeks, months

**Test(s) of choice:** Serologic tests – diagnostic for BLV infection

- ★★ AGID - First test used; not positive till 3-12 wks of age
- ★★ ELISA - Can ID infection in herds with low prevalence. Has replaced AGID in most labs

**Rx:** BLV is a retrovirus; infection is permanent. NO treatment for BLV; cull/slaughter in most cases.

**Prevention:** ID infected cows/calves and remove

- Use **colostrum from BLV-negative cows only**
- Feed calves pasteurized milk or milk replacer

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**Zuku Review FlashNotes™

Classic Question(s)**

A valuable breeding Holstein bull has tested positive for bovine leukemia as part of routine testing prior to shipment to Canada from the United States. What is the most appropriate action to take?

What is the treatment of choice for a cow that is positive for bovine leukemia virus (BLV)?

What percentage of BLV positive cows will go on to develop clinical diseases due to their infection?

What is the most common clinical sign in cows with lymphosarcoma?

What age group of cattle presents with the thymic form of lymphosarcoma?