Bovine Enzootic Leukosis (BEL), also known as Viral Bovine Leukosis (VBL), is a viral, oncornaivus type C (retroviridae), neoplastic disease which occurs with or without neoplasic nodules. The disease has been clinically and morphologically diagnosed as suspicious cases in Venezuela since lab serological tests were not performed. Macroscopic and microscopic changes have been described in a few cases with neoplastic nodules and referred as a Bovine leukemia (BL), but none has been published. Bovine leucosis has also been referred in milking cows with or without neoplastic nodules, most cases have not been diagnosed by blood serum analysis and considered to be only suspicious cases. There are four distinct forms of BL (adult multicentric, juvenile uncommon, thymic and cutaneous) have been reported in the literature around the world, this classification is based upon the presence of neoplastic nodules composed of anaplastic lymphoid tissue. This work reports a case of multicentric form of bovine lymphoma which could be suspicious of BL, in a 10 years old female water buffalo in Mérida State, Venezuela. This report of one case of lymphosarcoma is supported by macroscopic and microscopic changes described. Additionally, a frequency of 2% of positive cases diagnosed by ELISA and AGID tests is reported in the herd (300 buffaloes) of similar procedence of the described case.

**Keywords**

Bovine leukemia, multicentric lymphosarcoma, water buffalo, neoplastic nodules.