## A Case of Dairy Cattle Severely Affected with Liver Fluke

Seogjin Kang<sup>\*</sup>, <u>Heewoon Lee</u>, Taiyoung Hur, Younghun Jeong, Yoonjung Do, Hyeonshup Kim and Kwangsoo Baek

Dairy Science Division, Department of Animal Resources Development, Rural Development

Administration, Cheonan, Korea

**Signalment.** A Holstein (6-year-old, female) was presented with severe brisket edema and distended jugular vein. Physical and laboratory examinations were performed.

**Results.** Moderate anemia, and elevated serum GGT and globulin levels were significant abnormalities on laboratory examinations. FNA of brisket edema was classified as transudate, and no nucleated cell was found. No remarkable finding on urinalysis, and eggs of *Fasciola hepatica* were found in fecal examination. The final diagnosis was liver fluke infestation. Eprinomectin (Eprinex<sup>38</sup>, Merial) and fenbendazole (Fendendazole 4%, Dongwon phama) were used for treatments of liver fluke. The RBC and serum GGT levels were recovered at two and thirty six days after treatments within reference ranges, but globulin level was not recovered until fifty days after treatments.

Clinical relevance. Eprinomectin and fenbendazole are able to be used without milk withdrawal period and tetratogenic effect, but the application of these drugs are extra-label drug use to treat of liver fluke. In this case, these drugs were used successfully for treatments of severe liver fluke patient.

Key words: Liver fluke, Fasciola hepatica, anemia, GGT, holstein

<sup>\*</sup>Corresponding author: hikang@rda.go.kr