Bovine neonatal pancytopenia in calves in Poland

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Abstract

Bovine neonatal pancytopenia (BNP), a newly emerged syndrome of discussed etiology in calves, has been diagnosed since 2006. Here we describe first cases of BNP in Poland. Between September 2008 and April 2011, 62 cases of BNP were diagnosed in dairy calves. Bleeding skin lesions were mostly pronounced in summer and early autumn. Severe thrombocytopenia was observed in all sick animals. Substitution of colostrum from dams of BNP positive calves with colostrum from dams from herds free of BNP was the only effective measure to avoid new cases in affected herds.

Key words: bovine neonatal pancytopenia, bleeding, diathesis, thrombocytopenia, ecchymosis

Introduction

Bovine neonatal pancytopenia (BNP) is a newly emerged calf syndrome of unknown cause, found in Europe since 2006 (Bell et al. 2009, Doll 2012). While morbidity is low, the case fatality rate is very high. Typical symptoms of cutaneous bleeding, petechiae and/or melena are accompanied by severe leucopenia and thrombocytopenia. Animals die shortly after the clinical onset (Pardon et al. 2010). The aim of the study was to describe cases of BNP diagnosed in years 2008-2011 in Poland.

Materials and Methods

In herds affected with BNP newborn calves were separated from dams on the 1st day of life. They were fed mother’s colostrum 3x/d within 24h after birth and then until the 10th day, regular milk. Laboratory diagnosis included: CBC; blood chemistry; RT-PCR of blood serum for genetic material of BVDV type 1 and 2, BTV; PCR for PCV2.