Disseminated intravascular coagulation (DIC) is a complex, dynamic and hemostatic disorder which develops secondarily to a disease characterized with an imbalance in the pro-coagulant and anti-coagulant components of hemostasis. The aim of the study is to evaluate hemostatic dysfunction and the DIC syndrome in cattle with displaced abomasum (DA), with using the hematologic analyses and an extensive coagulation profile in the 96 hour-period including before and after surgery. The animal material of the study consisted of 12 dairy cows diagnosed with displaced abomasum (9 LDA and 3 RDA without volvulus) in the 2-4 week period after parturation and with no other post-partum disease. In dairy cows diagnosed with DA, hematological, coagulometric (PT, APTT, Fibrinogen) and coagulation factor analyses [D-Dimer, TAT (thrombin-anti-thrombin complex), ATIII (antithrombin III), PAI-1 (plazminogen activator inhibitor-1)] were performed in blood samples obtained before the operation as well as 30 minutes, 60 minutes and 2, 5, 7, 24, 48, 72 and 96 hours after the operation. In the DA cases, abnormalities were found in 6 of the 8 coagulation parameters. In the LDA and RDA groups, prolonged PT (sec), PT (INR) and APTT, hypofibrinogenemia, an increase in serum D-Dimer concentration at 72 and 96 hours after the operation and an increase in serum ATIII concentrations before and 30, 60 minutes and 2, 5, 72 and 96 hours after the operation was found (p<0.05). Hemostatic dysfunction and the risk of DIC developing in DA cases and continuing in the post-operative period was determined.

Key words: DIC, hemostatic dysfunction, LDA, RDA, dairy cow