PARTICULARITIES OF CERTAIN BIOCHEMICAL INDICES IN SHEEP INFESTED WITH *Dicrocoelium dendriticum* (Rudolphi, 1819)

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Abstract

The obtained results highlight notable alterations in biochemical parameters in sheep infested with Dicrocoelium spp. Compared to the control group, total protein levels decreased by 11.22% ($p > 0.05$), primarily due to a 12.23% reduction in albumin concentration ($p > 0.05$). In contrast, globulin levels increased by 6.12% ($p > 0.05$), suggesting a compensatory response in protein fractions. Analysis of hepatic enzymes revealed elevated activities in infested sheep, indicating potential liver dysfunction. Specifically, alanine aminotransferase (ALT) activity was 24.63% higher ($p > 0.05$), while gamma-glutamyl transferase (GGT) increased by 21.31% ($p > 0.05$) relative to the control group. Additionally, aspartate aminotransferase (AST), an enzyme present in multiple tissues, showed an 11.77% increase ($p > 0.05$) in the infested animals. These biochemical alterations reflect disturbances in protein metabolism and hepatic function associated with dicroceliosis. Although the differences did not reach statistical significance, the observed trends suggest subclinical effects of the parasite on liver health and systemic metabolism in affected sheep.

Key words*: sheep, Dicrocoelium dendriticum, biochemical parameters, liver enzymes, protein metabolism.*