Prevalence of Bovine Cysticercosis in Egypt and the Cysticidal Effect of Two Extracts Obtained from Balanites Aegyptiaca and Moringa Oleifera on Mice Model Affected with T. Saginata Cysticerci

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Abstract : The aim of the present study was to determine the prevalence of bovine cysticercosis in both cattle and buffaloes in Egypt and to assess the cysticidal efficacy of Balanites aegyptiacafruits (B. aegyptiaca) and Moringa oleiferaseeds (M. oleifera) extracts in experimentally infected mice. The study detected the level of tumor necrosis factor (TNF- α) to monitor the immune and inflammatory responses of experimentally infected mice. Through meat inspection, a total number of 2125 male bovines, 2 to 5 years old (1125 cattle and 1000 buffaloes) were examined at official abattoirs in Cairo Governorate. The prevalence of the disease among bovine was 7.8%, (6.31% of cattle and 9.5% of buffaloes). A decrease in the number of cysticerci was found in all treated mice groups, and up to 88% reduction was achieved in the B. aegyptiaca-treated group; higher than that was recorded in both M. oleifera (72.23%) and albendazole-treated ones (80.56%). Postmortem findings proved that M. oleifera and B. aegyptiaca reduced cysticerci numbers comparable to a commercial anthelmintic. The study showed a significant decrease (P<0.001) in TNF- α levels after treatment with Balanites and Moringa extracts, compared with the untreated control and the albendazole-treated groups.

Keywords : prevalence, bovine cysticercossis, extracts, mice

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