DETECTION GENE CODING CAPSULE TYPE A OF Pasteurella multocida FROM CASES OF FOWL CHOLERA

BY POLYMERASE CHAIN REACTION

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ABSTRACT

The aim of this study was to identify the presence of gene capsule type A of Pasteurella multocida from cases of fowl cholera by Polymerase Chain Reaction. The ability of Pasteurella multocida to invade and multiply in its host is enhanced by the presence of the capsule, one of the most important virulence factors for this bacterium. Capsular typing methods are often used in epidemiological and pathogenesis studies of this agent. However, such tests are laborious, and agglutination of homologous antiserum may fail. The samples taken from visceral organs such as liver and heart blood of birds that succumb to the acute bacteraemic form of the disease. Thirty sample organs were used in this study. First, The samples for the isolation of P. multocida were macerated and plated on 5% sheep blood agar and MacConkey agar, incubated at 37°C for 48 hours in aerobiosis, followed by the morphological and biochemical characterization. PCR based on the Pasteurella multocida gene Capsular was done to confirm the isolate as previously described. The result showed that 2 of 30 samples were positive Pasteurella multocida. By PCR assay there was no positive samples confirmed as gene coding Capsular.

Keyword : Pasteurella multocida, fowl cholera, capsule type A, Polymerase Chain Reaction.