عنوان مقاله:

ECOR phylotyping and determination of virulence genes in Escherichia coli isolates from pathological conditions of broiler chickens in poultry slaughter-houses of southeast of Iran

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خلاصه مقاله:

Avian pathogenic Escherichia coli (APEC) are responsible for wide ranges of extra-intestinal diseases in poultry including colibacillosis, cellulitis, coligranuloma and yolk sac infection. Numbers of virulence are considered important in the pathogenicity of these diseases. The aims of the present study were phylogenetic typing and virulence genes detection in Escherichia coli isolates from colibacillosis and cellulitis of broiler chickens in poultry slaughterhouses of Shahrbabak region, Kerman, Iran. A total number of eighty three E. coli isolates were taken from broiler chickens with colibacillosis and thirty four isolates were taken from carcasses with cellulitis in the industrial slaughterhouses. Biochemically confirmed E. coli isolates were subjected to polymerase chain reaction assay to determine phylogenetic groups and presence of pap C, sfa/focDE, iucD, afalB-C, hlyA, fimH and crl virulence genes. Colibacillosis isolates were belonged to A (۵۴.۲1%), B1 (۷.۲۲%), B1 (۶.۰%) and D (۳۲.۵۳%) phylogroups. Whereas, the isolates from cellulitis cases were belonged to three main phylogroups; A (۵۵.۸۸%), B1 (۵.۸۸%) and D (۳۸.۲۴%). Statistical analysis showed a specific association between the presence of crl virulence gene and phylogroups of A and D in colibacillosis isolates. The results showed that the isolates from both diseases in broiler chickens could be assigned to various phylogenetic groups (mainly A(. Also, the virulence genes profile of cellulitis E. coli is completely different from that of .colibacillosis in this region

كلمات كليدى:

Cellulitis, Colibacillosis, Escherichia coli, Phylogenetic group, Virulence genes

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