عنوان مقاله:

Prevalence of Clostridium novyi in slaughterhouses of Alborz province using traditional methods and Polymerase Chain Reaction

محل انتشار:

بیستمین کنگره بین المللی میکروب شناسی ایران (سال: 1398)

تعداد صفحات اصل مقاله: 1

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خلاصه مقاله:

Introduction and Objectives: Clostridium oedematiens or novyi is classified into several types which are pathogenic for human and animals. C. novyi type B is the causative agent of black disease in ovine and occasionaily in bovine. Bacteria produce a large amount of toxin such as alpha, beta, gamma, delta, epsilon and zeta toxins. Therefore, the detection of toxin and isolation of bacteria from gastrointestinal contents are used to diagnose of disease. In order to effective control of disease, the frequency of C. novyi isolates from infected animals is essential in IRAN. The aim of this study was to determine the prevalence of C. novyi in slaughterhouses of Alborz province. Materials & Methods: In this study, 386 liver samples were collected from the slaughterhouses, then the bacteriological test (including culture in Blood agar and special medium, motility and gram staining) and biochemical tests (including Fermentation of sugars, lecithinase, lipase, gelatinase, Indol, milk digestion and catalase) were used for characterisation and typing, the samples were confirmed using PCR. So, the Forward and Revers primers were designed using toxin-alpha sequences. Result: The results of this study showed that prevalence of C. novyi in the slaughterhouses was 37 (9.5%) that 33 cases (89.18%) had concurrent contamination with C. novyi and Fasciola, and were identified only in 3 cases without Fasciola infection. Conclusion: Due to the heavily economic losses, vaccination is very urgent for prevention of disease.

کلمات کلیدی:

Clostridium novyi, PCR, Diagnosis, toxin-alpha, Vaccination

لینک ثابت مقاله در پایگاه سیویلیکا: