Identification of Locally Isolated *Clostridium difficile* from Rabbits.

Taha MM, El-Helw HA, El-Sergany EF, El Sawy H, Abdella YA and El-Meneisy AA.


ABSTRACT
Clostridium difficile is one of the most important pathogens causing diarrhea and enteritis in rabbits as it causes pseudomembranous colitis that leads to intestinal damage and deaths. In this study, screening of rabbit farms from different localities in Egypt had shown rabbits suffered from diarrhea and enteritis to detect *Clostridium difficile* by ELISA, it revealed that five out of 50 samples (10%) were positive for it. These samples were further identification by cultivation and culture characters, microscopical examination, agglutination test, pathogenicity test and Polymerase Chain Reaction (PCR) by using specific primers for toxins genes (tcdA and tcdB). The results showing that three out of five isolates were confirmed as *Clostridium difficile* and concluded that these isolates causing pseudomembranous enterocolitis in rabbits and this disease unable to be treated by antibiotics, so it used for preparation of vaccine against the disease in rabbits.

**Keywords:** *Clostridiunm difficile*, Rabbits, Enteritis

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**Research Paper**

**Foodborne Diseases Related to the Consumption of Flesh Foods in Morocco (2010-2016).**

Boukili M, Filali FR, Benlarabi S, Hmimou R, Soulaymani-Bencheikh R and Sefiani M.
The current study aimed to determine the epidemiological profile of foodborne diseases associated with flesh foods during 2010-2016 in Morocco. A retrospective study of foodborne diseases caused by flesh foods recorded by the Moroccan anti-poison and pharmacovigilance center during 2010-2016. During this period, 2963 foodborne diseases related to flesh foods were declared to the center, in which 24.83% were registered in 2015, and 20.75% in 2013. Diseases occurred mostly in urban areas (67.06%). The major affected group’s ages were adults (33.81%) and children (14.44%). The average patient's age was 25.09 ± 15.37 years. Male were the most vulnerable to infection (54.80%) with a sex ratio (male / female) of 1.72. The most incriminate flesh foods were respectively chicken (47.35%), aquatic products (30.94%) and red meat (16.57%). The high incidence rate was related to chicken skewers (3.55 per 100000 people), while the high fatality rate was associated with giblets (3.33%). Diseases due to the restauration outside home accounted for 58.15%. The majority of cases were collective (84.27%) and occurred significantly in spring (18.49%) and summer (14.51%). clinical symptoms were present in 67.19 % of cases, mostly moderate (81.77%) with four death cases corresponding to fatal condition. The high incidence rates were recorded in the regions of Sahara. Foodborne diseases are spreading progressively in Morocco, especially in summer and hot climates. The majority of these diseases are due to the consumption of contaminated flesh foods. Therefore, the responsible of food safety in Morocco must ensure the quality control of these foodstuffs.

Keywords: Epidemiology, Foodborne diseases, Meat, Morocco
ABSTRACT

A total number of 25 New Zealand White pregnant rabbit does were used, to assess the changes in blood serum hormones, which are not received a great attention in rabbit. Therefore, a total number of six hormones were determined. Concentrations of the six hormones during the second half of pregnancy ranged from 39.2 ng/ml for thyroxine (T4) and 1.9 to 2.2 ng/ml for triiodothyronine (T3). The corresponding values on kindling day were 1.6 ng/ml, 26.8 pg/ml, 4.6 ng/ml, 131.6 ng/ml, 37.4 ng/ml and 0.9 ng/ml for prolactin (PRL), 114.5 to 136.8 ng/ml for insulin like growth factor-I (IGF-I), 36.0 to 48.0 pg/ml for progesterone (P4), 5.6 to 11.4 pg/ml for estradiol (E2), and 4.8 to 8.0 ng/ml for thyroid stimulatory hormone (TSH). At day 14, maternal P4, E2, PRL, T4 and T3 were the lowest, whereas IGF-I was the highest in comparison with days 14 and 21 of pregnancy. On kindling day, P4 trends. The average of total milk yield (129.9 g/d) was negatively correlated with both P4 and E2, and positively associated with the PRL, IGF-I, T4 and T3 hormones. Furthermore, litter size and weight, in addition to average of weekly and total milk yield were negatively correlated with both P4 and E2, and positively associated with the PRL, IGF-I, T4 and T3 hormones. We recommend giving more attention to the role of hormones during pregnancy and lactation in rabbit.
A female Asian palm civet (*Paradoxurus hermaphroditus*), three years old, was carried for a medical checkup to Ruddy animal's clinic in Sidoarjo, East Java, Indonesia. The civet suffers enlargement of abdominal mammary glands, painless lump, asymmetric size (4.1 and 8.4 cm in diameter), and lacerated wound on the large one with severe haemorrhage. The unilateral mastectomy was conducted under anaesthesia to handle both haemorrhage and tumour mass. Following the surgery, the tumour mass was stored in 10% neutral buffer formalin for histopathology using Hematoxylin & Eosin (H&E) staining and immunohistochemistry against antibody, anti-CD4+ and CD8+. Further, a blood sample collected before and after surgery (on days: 0, 7, 30, and 60) for representing the healing progress. The chemotherapy was given using the combination of oral cyclophosphamide and intravenous injection of vincristine. According to laboratory results, the final diagnosis was mixed mammary carcinosarcoma with minimal expression of CD8+. Notwithstanding, it showed the better prognosis after surgery and chemotherapy.

Keywords: Asian palm civet, CD4+, CD8+, Mixed mammary carcinosarcoma, Therapy