Testing anti-bacterial agents

Health & Medicine



Introduction: Quinolone carboxylic antibacterial agent is considerably lethal against gram-negative bacteria, especially Chlamydia trachomatis that have complicated intracellular structure. On the other hand, Anti C. trachomatis infection agent should be having specific proprieties such as being able to penetrate eukaryotic cells in bacteria

Method:

The efficiency of quinolones can show in vitro by two ways. Firstly, the infected cell may be exposed to different types of quinolone antibacterial. Secondly, McCoy cell monolayers should inoculate with 103 (IFU) OF C. trachomatis then incubate with or without ofloxacin.

Result:

The main results of testing anti-bacterial agents will show in this paragraph. The effects of four types of antibacterial (Ofloxacin, Ciprofloxacin, Enoxacin and Norfloxacin) in McCoy cell are different. The results may refer to the different abilities for each antibacterial to penetrate the eukaryotic cell. Moreover, the infected cell may not increase the time of incubation after the removal of anti-bacterial agents creating a little different between MIC and MLC for each antibacterial agent.

On the other hand, Ofloxacin antibacterial agent may act contrary to some enzymes that are important for the survival of non-replicating intracellular chlamydia. As such, Ofloxacin has a responsibility of treating determined and calm infection.

Conclusion:

This study derives and presents four important points. Firstly, quinolone antibacterial agent acts quickly against chlamydia. Secondly, Ofloxacin considers suitable antimicrobial agent against chlamydia infection. Thirdly, https://assignbuster.com/testing-anti-bacterial-agents/ humans can achieve and maintain 1mg/l of Ofloxacin in serum. Therefore, the clinical experiment against chlamydia infection will be of interest. Finally, Ofloxacin may give us a tool to show the importance of DNA metabolism in non-replicating intracellular chlamydia organized by topoisomerases.