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The results of cultivation of strain *Chlamydia psittaci* in cell culture

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Chlamydia infection is a classic anthropozoonosis widespread all over the world and representing a constant threat to humans and animals due to polyphagia and expressed plasticity of the disease agent. According to some researchers infection among agricultural animals in the farms where the disease is registered is up to 40 % and more In 1950 Stamp et al was the first to reveal chlamydial etiology of abortion in sheep. His findings allowed other researchers to diagnose the disease in sheep in Europe, USA, Asia, Africa and Australia. Abortions of chlamydial etiology in farm animals are often registered in many countries, including Kazakhstan and neighboring republics such as Uzbekistan, Kyrgyzstan and Tajikistan. Therefore, a study on the agricultural animals' chlamydiosis' agent is very important in the Republic of Kazakhstan. In our research we used continuous cell lineM-Hella (epithelial cervix carcinoma) to obtain Chlamydia-containing cultural suspension. In a laminar box 20 ml of Chlamydia-containing cultural suspension from previous passage and 20 ml of IglaMEM medium was added in 250 ml mattresses containing 3- day M-Hella cell culture. Then, mattresses were placed in a thermostat at 37 °C and left for 1 hour for contacting. After one hour the medium was replaced by the growth medium with 10% of bovine serum. Mattresses with infected cell culture were incubated at 370C and cultured without medium exchange during 6-7 hours. At the end of the period after the cytopathic effect and the partial destruction of the monolayer mattresses containing cell culture were frozen and thawed. Furthermore subsequent passaging ofChl. psittaciisolates in M-Hellacell culture *in vitro* was conducted. Accumulation of Chlamydia-containing suspension was done during the passaging of Chlamydia. For purification and concentration of Chlamydia in Chlamydia-containing suspension we used the method of ultrafiltration in a cassette system Pellicon- 2 with a pore size of 300 kDa. Electron microscopic studies on the detection of Chlamydia presence in the infected M-Hellacell culture were conducted. After cytopathiceffect in M-Hella cell culture the cells were removed with a scraper and re-suspended in a small amount of medium. The obtained suspension was centrifuged at 1300 rpm/min for 10 minutes. The supernatant was discarded and the pellet was re-suspended in a solution of glutaraldehyde. After the material fixation we prepared semi-thin and ultrathin sections that were used for electron microscopy.

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